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THE NEWS

1811

No. 101 Boston, Mass. May 1951

DEPARTMENT OF PATHOLOGY AND BACTERIOLOGY

A most important development in hospital medicine the world over, during the last sixty years, has been the steadily increasing role of hospital laboratories in facilitating the diagnosis of disease and the selection of therapeutic measures, and in serving as the centers of research activities on which medical progress depends. Since no one could possibly have foreseen the rapidity or degree of expansion needed, hospital laboratories of the last century were inevitably planned on a scale inadequate to the needs of today; and the Massachusetts General Hospital offers no exception to the general rule. As has been pointed out in brochures circulated to hoped-for donors, the Allen Street building, constructed in 1895 to cover all the laboratory needs of the entire hospital, was hopelessly inadequate within five years of its opening; and, as new wards were added, basements and attics all over our five acres of grounds were converted into laboratories for special purposes. Within the last few years plans were formulated for a building capacious enough to house both diagnostic and research laboratories, but the funds collected proved insufficient to carry out this double project, and a divorce of the two functions was granted to permit the erection of the Research Building on the far side of the compound. Some economies in its construction and the accretion of further financial aid now make it possible to hope that the denizens of the incredibly crowded Allen Street laboratories may in time attain new quarters, also. Plans now on paper again hold out promise of more space and improved arrangements of a sort that would permit development of our own research program and would, to the encouragement of the whole hospital staff, facilitate the reporting of material sent us for diagnostic work.

In the meantime we cling to the belief (not merely fostered by necessity but one which we have long held) that neither the daily job nor the production of research depends primarily upon *Lebensraum.* The current research activities of the staff include Dr. Castleman's work with Dr. David Kahn on muscle biopsies from hypertensive patients under a Massachusetts Commonwealth grant, Dr. Burt's study of histologic changes in the endocrines in neoplastic disease with reference to hormone therapy under a U. S. Public Service grant, Dr. Vickery's work on the pathology of the thyroid in conjunction with the Thyroid Clinic, Dr. Scully's collaboration with Dr. Morris on functioning ovarian tumors, and Dr. Kubik's study of the brain in carbon monoxide poisoning and his review, with the help of Dr. E. P. Richardson, of the brain abscess cases.

In the Bacteriology Laboratory, Dr. Dienes, in collaboration with the Arthritis Group, has continued his studies on the pleuropneumonia group of organisms and their role in genito-urinary infections. He is also studying the influence of cortisone on the development of specific immunity response, and attempts have been continued to produce autosensitization and to assess the possible role of this process in the collagen diseases by skin tests and serological studies.

Two new functions of the laboratory extend the scope of its services to the hospital. A department of Histochemistry has been instituted, manned by Dr. Agustin Roque of Havana, and the Cytology Laboratory, under Mrs. Graham, has now become an integral part of the Pathology organization.

The persistent vigor of the laboratory is attested by calls which its recent members have received to positions of importance in Pathology elsewhere. It is particularly gratifying to observe that an increasing number of those who receive their training here elect to remain in this professional field. Dr. Gall, now Professor of Pathology in the University at Cincinnati, has been joined in that city by Dr. Freiman and Dr. Capps. Dr. Sniffen is Pathologist at the Memorial Hospital in Worcester but still continues his association with this laboratory. Dr. Kulka is devoting his time to the pathology of joint disease with Dr. Bauer. Dr. Fennell is Assistant Professor of Pathology at the University of Tennessee in Memphis, Dr. MacMillan is associated with the Albany Medical College, and Dr. Buttles with the University of Vermont. Dr. Morgan leaves this summer to spend a year at Oxford University, England, in their cytochemical laboratory.

In these disturbed times it is pleasant to see the Pathology Laboratory as a positive, even if small, factor in international relations. Now working in it are doctors from the Philippines, New Zealand, Cuba, and Canada. A little reciprocity was realized in the invitations to Dr. Castleman to lecture at the University of Brazil in Rio de Janeiro last summer and, more recently, in Cuba.

Our relations with the Medical Examiner's Office have always been very cordial and cooperative. Recently the Trustees voted to appoint as Consultants to the laboratory Dr. William J. Brickley and Dr. Michael A. Luongo, one of our former residents. Their advice in medico-legal problems will be very helpful.

Tracy B. Mallory, M.D.,
Chief of Pathology and Bacteriology

Dr. Benjamin Castleman, Pathologist on our Staff, recently spent a week as Visiting Professor of Pathology at the University of Havana, under the auspices of the Cuban Ministry of Health. He gave a series of three lectures and conducted three clinicopathological conferences. Dr. Agustin Roque, a graduate of the University of Havana and a Research Fellow in Pathology in charge of our histochemical laboratory, accompanied Dr. and Mrs. Castleman and helped make their visit a thoroughly enjoyable one.

"Cuban hospitality is really something!" says Dr. Castleman.

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Dr. Joseph C. Aub, Physician on our Staff and Director of the Medical Laboratories of the Collis P. Huntington Memorial Hospital of Harvard University, which laboratories are located at M.G.H., received the 1951 citation of the Massachusetts Division of the American Cancer Society.

The presentation of a bronze medal, for "distinguished service in cancer control", was made by Dr. Ernest M. Daland, President of the Massachusetts group and Visiting Surgeon at M.G.H. The award was made at the "kick-off" luncheon of the Society on April 2, when the 1951 drive for $530,166 for cancer research got off to a rousing start.

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An interesting conference on aphasia, conducted by Dr. Edwin M. Cole, Director of the Language Clinic at Massachusetts General Hospital, was held in the Upper Out-Patient Amphitheatre on March 30. The conference was organized at the request of the Eastern Speech Association, which was meeting in Boston at that time. The MGH conference was addressed by Dr. Charles S. Kubik, Chief of our Neurology Service; Miss Ellen K. Donohue, Area Consultant in Aphasia to the Veterans Administration; Dr. Arthur L. Watkins, Chief of Physical Medicine at M.G.H.; Dr. Roland Gasser, Manager of Cushing VA Hospital; and Mrs. Samuel T. Orton, Director of the Graylyn Language Clinic of the Bowman-Gray School of Medicine in Winston-Salem, North Carolina. The meeting was well attended—about 200 being present. Many stimulating points were brought forward during the discussion.

The Board of Trustees, at their meetings on March 9 and 23, voted:

To accept with regret the resignation of Mrs. Elizabeth Howland Andrews from the Advisory Committee of the School of Nursing;
To accept the resignation of Dr. Robert B. Dodd, Assistant Anesthetist, effective April 1;
To promote Dr. Arthur B. French from Clinical and Research Fellow in Medicine to Assistant in Medicine;
To award the Dalton Scholarship of $1,000 to Dr. Charles H. DuToit for the year beginning September 1;
To grant leave of absence to Dr. John B. Stanbury, to conduct a series of studies on the problem of iodine deficiency in the Province of Mendoza, Argentina, from June 1 to September 1;
To grant Baker Memorial and Phillips House privileges to Dr. Solomon H. Rubin, who retired as Associate Physician to the Children's Medical Service in 1945;
To allow the Anesthesia Service four anesthetists from among researchers, who shall be given the title of Assistant Anesthetist;
To permit the use of B-8 for private patients, this to be the responsibility of the Psychiatric Service; professional fees may be charged and deposited in the Professional Fee Fund;
To allow the Children's Medical Service, on July 1, to take on six interns instead of the authorized five, it being understood that such an increase would be accompanied by a corresponding decrease in the authorized number of assistant residents.

To appoint:

Dr. Ransom J. Arthur as Intern on the Children's Medical Service, beginning July 1;
Dr. Anthony A. Arzimanoglou as an extra Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. William Berenberg as Clinical Associate to the Children's Medical Service;
Dr. Richard D. Bush to the Courtesy Staff of Phillips House;
Dr. Evan Calkins as Chief Resident in Medicine, beginning January 1, 1952;
Dr. Leon I. Charash as Assistant Resident on the Children's Medical Service for one year, beginning October 1;
Dr. John C. Coolidge as Assistant in Psychiatry;
Dr. Shepard C. Ginandes as Intern on the Children's Medical Service, beginning July 1;
Dr. Marion T. Jenkins as Associate Anesthetist, beginning date indefinite;
Dr. Arthur S. Keats as Assistant Anesthetist, beginning October 1;
Dr. Jan J. Kukral as Assistant Resident in Anesthesia, beginning July 1;
Dr. Edward A. Mason as Assistant in Psychiatry;
Dr. Nils Normann as Assistant Anesthetist, beginning April 1;
Dr. Thomas C. Peebles as Intern on the Children's Medical Service, beginning July 1;
Dr. Stanley C. Ulick as Intern on the Children's Medical Service, beginning July 1;
Dr. Richard H. Watson as Intern on the Children's Medical Service, beginning July 1;

The following Medical Interns for the term beginning July 1:
Dr. Elizabeth F. Aub
Dr. Albert Damon
Dr. James B. Field
Dr. Gerald S. Foster
Dr. Brian Kiely
Dr. John H. Knowles
Dr. Stephen M. Krane
Dr. Avrum B. Organick
Dr. John C. Rowe
Dr. Madan M. Singh
Dr. William A. Tisdale
Dr. Elbert P. Tuttle

The following Surgical Interns for the term beginning July 1:
Dr. John F. Burke
Dr. Walter M. Haynes, Jr.
Dr. Clement A. Hiebert
Dr. Richard N. Kleaveland
Dr. George B. Murphy, Jr.
Dr. Frederick G. Shaffer
Dr. Jack E. Tetirick
Dr. Giles D. Toll

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At their meetings on March 14, 21, and 28, the General Executive Committee voted to promote the following from Assistant Resident to Resident in Medicine:

Dr. Nathaniel J. Ehrenkranz, effective July 1
Dr. Carl W. Gottschalk, effective July 1
Dr. William R. Owen, effective January 1, 1952
Dr. Walter T. St. Goar, effective January 1, 1952

The General Executive Committee also voted to appoint:

Dr. Pierre H. Blanchot as Clinical and Research Fellow in Medicine, assigned to Cardiology, for a period of ten months, effective as of January 1;
Dr. Charles M. Butters as Graduate Student Assistant in Surgery, effective immediately;
Dr. Leon I. Charash as Clinical Fellow to the Children's Medical Service for the period July 1 through September 30;
Dr. Charles V. duB. Lovell as Clinical Fellow in Psychiatry for six months, beginning July 1;
Dr. Ruth E. Reuting as Clinical and Research Fellow in Medicine, assigned to Cardiology, for the period March 1 to October 1;
Dr. Kathleen A. Swallow as Clinical and Research Fellow to the Children's Medical Service, effective March 1;
Dr. Consuelo K. Tagiuri as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. P. E. P. Vandevelde as Clinical and Research Fellow in Surgery, assigned to Gynecology, for the period of one year, beginning January 1, 1952;
Dr. Charles W. Wahl as Clinical Fellow in Psychiatry for a period of six months, beginning July 1.

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THE ANEMIA CLINIC AND RELATED HEMATOLOGIC ACTIVITIES

Since its inception in the spring of 1948, the Anemia Clinic has continued to expand in several directions. The number of patients followed, and received for consultation, has increased severalfold, and, in fact, just about balances the capacity of the present available personnel—the doctors, the nurses, and the technicians. The able secretarial services contributed by Mrs. Genevieve Daley are matched by the efficient nursing help and scientific interest of Mrs. May Brannigan and her student nurses. During the past year Drs. Louis Kunian and Richard Howard, graduate students, have rendered valuable assistance, and, in turn, have rounded out their training in internal medicine. The clinic has been fortunate in a succession of residents from the Medical Service; Dr. Hugh Chaplin was followed by Dr. John Littlefield, and the latter's place is now filled by Dr. W. D. Sohier. It is hoped that this tradition will be continued by one of the residents interested in the problems which we encounter.

What are some of the questions that are put to us? At random, the following examples come to mind. A 24-year-old housewife is sent to us from Fall River for our opinion of her persistent anemia. She apparently had suffered repeated bouts of jaundice, abdominal pains, and persistent hemolytic anemia for several years, and six months previously was subjected to splenectomy, with no ensuing benefit. This was indeed a challenging problem, but the solution was sooner at hand than might have been predicted. The blood smear and quantitative data indicated a moderately severe anemia, with a macrocytic, normochromic erythrocyte picture, and with a normal reticulocyte level. The strong suspicion of pernicious anemia was readily corroborated by the megaloblastic bone marrow aspirate, and the demonstration of prompt response to liver extract "sewed up" the diagnosis of pernicious anemia with previous hemolytic crises. Less spectacular, however, is the more commonly referred patient, from one of our own clinics, bearing a name of Mediterranean origin, and sent to us for explanation of the patient's hypochromic anemia that has been utterly irresponsive to adequate doses of iron. Our approach to the diagnosis consisted of a high degree of suspiciousness of the Mediterranean origin of this anemia, followed by a demonstration of the *decreased* osmotic fragility (*increased* resistance) of the patient's erythrocytes. The failure to respond to iron can also be considered a significant diagnostic sign. Thus, this patient, one of from five to ten percent of our population of Italian origin, was classified as a case of mild Mediterranean anemia (a more inclusive term is Mediterranean hemopathic syndrome), the patient was reassured concerning the benign nature of the anemia with which she had come into this world, the referring physician was reacquainted with the condition, and the overburdened O.P.D. Pharmacy was relieved of dispensing to one more patient ferrous sulfate, 0.26, etc. Or, as illustrative of the principle that better treatment can follow more accurate diagnosis, is the six-year-old boy who was recently sent to us by a hospital in Worcester as an instance of that rare condition termed "pseudohemophilia", due to the patient's bleeding tendency of almost lifetime duration, his presumably normal number of platelets, and his markedly prolonged bleeding time. In the Anemia Clinic the latter finding was corroborated, but a careful examination of what were present of the child's platelets demonstrated qualitatively marked thrombopenia, a platelet count of only about 4,000 per cu. mm. (instead of a normal value of 500,000 to 1,000,000), an ample number of non-functioning megakaryocytes in the bone marrow—in short, all of the criteria for the diagnosis of idiopathic thrombopenic purpura. So, back to the Worcester hospital went the patient with our therapeutic recommendation for splenectomy.

The Anemia Clinic plays a most important role in the other hematologic activities throughout the hospital, from the points of view of consultative service, investigation, and teaching. For many years we have been engaged in the assay in patients with pernicious anemia of various purified liver extracts and in recent years we have studied the quantitative details of the therapeutic potency of vitamin B12. From our long-term quantitative studies has come the conclusion that the total hematopoietic activity of vitamin B12 alone involves far larger doses than were formerly considered adequate, and there still remains doubt whether even large amounts of this purified material is therapeutically equal in potency to commercial liver extract. Patients on this long-term therapeutic investigation are being followed in the clinic. For the past one year our interest in two forms of hemorrhagic states has been pursued actively and has begun to yield interesting results. With improved methods of estimation of blood platelets we have studied a number of cases of thrombopenic purpura and in two thoroughly investigated patients in clinical and hematologic relapse, some years after splenectomy, we have demonstrated dramatic rises in platelets from virtually none in the circulating blood to values as high as 2 million per cu. mm. of blood following the administration of ACTH and of cortisone. With omission of the hormone the higher platelet levels have been maintained from days to weeks before relapse set in. These observations suggest the great usefulness of this therapeutic aid in order to tide the purpuric patient over a bleeding or traumatic crisis, and also suggest the use of this method in preoperative preparation before splenectomy. The principle other hemorrhagic state under investigation is the bleeding time defect known in the literature as pseudohemophilia. In active collaboration with the members of the Gynecology Service we have been able to focus attention on a significant number of young women suffering from severe menorrhagia, and by a process of exclusion of uterine and of ovarian causes of the menorrhagia, and by exclusion of other hemorrhagic states, have been able to characterize these individuals as suffering from a bleeding time defect (pseudohemophilia). Some eight females and two males under study comprise a wealth of clinical material. It is noteworthy that the incidence of this bleeding time defect among patients in this hospital appears to be three or four times as great as the incidence of idiopathic thrombopenic purpura. This, of course, is an incidence that is weighted by the contributions of the Gynecology Service. It is planned to apply to the studies of these individuals all available methods for the elucidation of the pathogenesis and adequate treatment. Also, with the Blood Bank we have enjoyed the closest of cooperation and have under way a study of the integrity of platelets in transfused blood.

The demands for our consultative services throughout the hospital have increased manyfold; during the past one year we have received approximately 100 requests for consultation on the ward services alone.

Finally, there has been a great expansion of hematologic teaching throughout the hospital. To the house staff and to the clinical clerks we have rendered frequent informal instruction. Shortly after the arrival of each incoming group of clinical clerks on the Medical Service, every two months, instruction is furnished in practical hematologic techniques, and the teaching of fourth year students has been further extended to full-time work for one man per month, as "Medicine XIV, Hematology, Massachusetts General Hospital". Hematologic teaching has been included for several years in Dr. Adams's well-known course in internal medicine in the summer, and is to be included in the course in gynecology given by Dr. Meigs and his associates in the autumn.

The well-situated, but outgrown space long occupied by our activities in Medical Laboratory A on the ground floor of the Bulfinch Building has recently been a willing victim to the erection of the new Research Building and the consequent projected use of Medical Laboratory A by the Metabolic Ward. Our hematologic activities are now adequately housed on the fifth floor (or rather, the four and one-halfth floor) of the Domestic Building. There is no necessary correlation between the adequacy of laboratory space and the quality of medical investigation, but we hope that, despite this handicap, the activities of the hematologic group will continue at a productive level.

Bernard M. Jacobson, M.D.,
Head of Anemia Clinic

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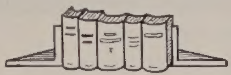
The Summer School of Clinical Pastoral Training, sponsored by the Institute of Pastoral Care, will begin its first session for 1951 at Massachusetts General Hospital on June 4 and end on July 13. The second session will run from July 16 through August 24. For information concerning the courses, address Chaplain James H. Burns, here at the hospital.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would remember to include that information.

The deadline date for each issue of The News is the 12th of the preceding month.

All requests for reprints are to go directly to the individual authors, and *not* to Treadwell Library nor to The News.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Department of Anesthesia, Massachusetts General Hospital.
M.G.H. News No. 99, 1-3.

Culver, G. A., Makel, H. P., and Beecher, H. K.
Frequency of aspiration of gastric contents by the lungs during anesthesia and surgery.
Ann. Surg. 133:289-292.

General Medicine

Leith, W., Graham, M. J., and Burrage, W. S.
The effect of ACTH on the immediate skin reaction and passive transfer test in man.
J. Allergy 22:99-105.

General Surgery

Taylor, G. W.
The management of regional lymph node metastases.
New York State J. Med. 51:376-378.

Laboratory Science

Klein, H. P.
Relation of coenzyme A to steroid and total lipid synthesis in yeast. (Abstract)
Federation Proc. 10:209.

Lever, W.F., Gurd, F. R. N., Uroma, E., Brown, R. K., Barnes, B. A., Schmid, K., and Schultz, E. L.
Chemical, clinical, and immunological studies on the products of human plasma fractionation. XL. Quantitative separation and determination of the protein components in small amounts of normal human plasma.
J. Clin. Investigation 30:99-111.

Lipmann, F., and DuToit, C. H.
The effect of thyroidectomy on the incorporation of C^{14}-labeled dl-alanine in rat liver slices. (Abstract)
In Abstracts of papers—119th Meeting, American Chemical Society, Washington, D.C., American Chemical Society, p. 30 C.

Niemeyer, H., Crane, R. K., Kennedy, E. P., and Lipmann, F.
Observations on respiration and phosphorylation with liver mitochondria of normal, hypo-, and hyperthyroid rats. (Abstract)
Federation Proc. 10:229.

Novelli, G. D., Gregory, J. D., Flynn, R. M., and Schmetz, F. J., Jr.
Structure of coenzyme A. (Abstract)
Federation Proc. 10:229.

Soodak, M.
An inhibition of the acetylation of arylamines in pigeon liver extracts by penicillin G and benzylpenicilloic acid. (Abstract)
In Abstracts of papers—119th Meeting, American Chemical Society, Washington, D.C., American Chemical Society, p. 18 C.

Tosteson, D. C., DeFriez, A. I. C., Abrams, M., Gottschalk, C. W., and Landis, E.M.
The effects of adrenalectomy, desoxycorticosterone acetate and increased fluid intake on intake of sodium chloride and bicarbonate by hypertensive and normal rats.
Am. J. Physiol. 164:369-379.

Neurology, Neurosurgery, and Psychiatry

Brazier, M. A. B.
A study of the electrical fields at the surface of the head.
Proc. 2d Internat. Electroenceph. Congress, 38-52.

Weisman, A. D., and Warthin, T. A.
The organization and function of a psychosomatic service in a general hospital.
Veterans Administration Information Bulletin, Jan., p. 5.

Ophthalmology

Cole, E. M.
Specific reading disability: A problem in integration and adaptation.
Am. J. Ophth. 34:226-232.

Oto-Laryngology

Schall, L. A., Lurie, M. H., and Kelemen, G.
Embryonic hearing organs after maternal rubella.
Laryngoscope 61:99-112.

Books

Talbott, J. H., Gottschalk, C. W., Henry, C. B., Blair, J. R., and Kolovos, E. R.
Report of Cold Injury Research Team. (Special report)
Washington, D.C., Medical Research and Development Board, Office of the Surgeon General, Department of the Army.

The Nurses' Alumnae Association announce May 15 as M.G.H. Night at the "Pops", Symphony Hall. Tickets—$2.50 per person or $12.50 per table for five—are on sale in the hospital corridors and in the Alumnae Office in Walcott House. Proceeds will be for the benefit of the Massachusetts General Hospital Nurses' Alumnae Association, Inc.

At a tea given in their honor on March 13, Dr. Clark welcomed the first student attendant nurses to affiliate with the Massachusetts General Hospital. These young women are students at the Household Nursing Association for Attendant Nursing, on Newbury Street. This was the first school for practical nursing in the country, established by Mrs. Katharine Shepard Dodge in 1912. The students are on duty in the Baker Memorial and in the Burnham Building. They are Mrs. Eleanor De Veau, Mrs. Marion Stidstone, and the Misses Phyllis Brophy, Evangeline Cyr, Bridget Dalton, Theresa Ricci, Josephine Scanlon, and Helen Woods.

The coordinator and instructor for the student attendants is Mrs. Ruby Johnson, a graduate of the University of Washington School of Nursing (Harborview Division), recently appointed Supervisor in the Baker Memorial. Mrs. Johnson was formerly coordinator with the Edison Technical School practical nurse students at the Doctors Hospital in Seattle, Washington.

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New addresses:—

Dr. Richard D. Bush (*WS* 1943), 203 Commonwealth Ave., Boston, Mass.
Dr. David S. Dann (*h.p. R* 1922), 410 Professional Bldg., Kansas City 6, Mo.
Dr. Joseph A. Elliott, Jr. (*M* 1945), 7-A Doctors Bldg., 1012 Kings Drive, Charlotte 7, N. C.
Dr. Harold E. Elrick (*M* 1944), Royal Victoria Hospital, Montreal, Canada.
Dr. Joseph A. Holmes (*P* 1936 & *ES* 1938), 49 Russell St., Waltham 54, Mass.
Dr. Lewis L. Huston (*Or.* 1937), 67 Converse St., Longmeadow 6, Mass.
Dr. Walter R. MacLaren (*CM* 1939), 127 North Madison Ave., Pasadena 1, Calif.
Dr. Langdon Parsons (*WS* 1929), 203 Commonwealth Ave., Boston, Mass.
Dr. Maurice M. Pike (*Or.* 1929), 85 Jefferson St., Hartford 6, Conn.
Dr. Thomas S. Risley (*ES* 1942), Beverly Hospital, Beverly, Mass.
Dr. Keith A. Shangraw (*a. dn. s.*), 96 Bay State Road, Boston, Mass.
Dr. Warren Whitford (*Or.* 1931), 22 Roosevelt Ave., Poughkeepsie, N. Y.

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary regretfully accepted the resignation of Dr. Josiah E. Quincy as Associate Surgeon in Oto-Laryngology. Dr. Quincy continues his association with the Infirmary as a Consulting Surgeon.

Dr. Harrell Pierce, from the Wilmer Institute, Johns Hopkins Hospital, has come to the Infirmary for six months of study under Dr. Charles L. Schepens, Director of the Retina Service.

Dr. George T. Meurman, Professor of Oto-Laryngology at the University of Helsinki, Finland, visited the Infirmary during his stay in Boston from March 25 to April 2. Professor Meurman is touring United States medical centers. He is particularly interested in audiology and was, therefore, eager to see the work of the Mosher Laboratory.

Mrs. Eunice Wilson, Director of Social Service, and Miss Pauline Moor, Preschool Consultant for the Foundation for Vision, attended a four-day workshop, April 16-19, at the American Foundation for the Blind, New York City, on problems of blind children of preschool age. Participants worked on developing standards for professional workers in this field, on evaluating existing programs, considering needs for research, and outlining goals for future programs.

At the Annual Conference of the National Society for the Prevention of Blindness, held in New York City on March 28-30, the Infirmary was represented by Miss Eileen Gilmartin, instructor in nursing, Miss Oleta Allen, head nurse of the Eye Clinic, and Miss Mary Love of the Social Service Department.

The Conference was attended by doctors, nurses, social workers, representatives from state divisions of the blind and of government agencies, industry representatives, and interested lay people. Delegates came from all parts of the United States and from several foreign countries, allowing for a wide exchange of information on the diverse medical and social problems in the prevention of blindness.

The American Board Examinations in Oto-Laryngology will be held this year on May 1-5 in Richmond, Virginia. Dr. LeRoy A. Schall, Chief of Oto-Laryngology, and Dr. Werner Mueller, Director of the Mosher Laboratory, are on the examining board and will be in Virginia for the examinations.

The Parents' Group of the Winthrop Foundation Children met on April 6 at the Sewell Avenue Nursery School to hear Dr. Wilbert Pronovost of Boston University speak on "Speech in the public schools as related to the hard of hearing child".

The profits from the Annual Spring Rummage Sale conducted by the Ladies' Visiting Committee of the Infirmary amounted to more than $1200. As in past years, this money will be used for the benefit of the Infirmary. The sale was held on April 2 and 3 in Horticultural Hall.

BIOGLET

Dr. Wilma J. Canada, Assistant Resident in Pathology—born in Monaville, West Virginia, January 21, 1926; B.S. in Medical Technology, University of Kentucky, 1946; M.D., Duke University School of Medicine, 1949; Intern, Medical Service, Duke Hospital, 1950.

Miss Holbrook, our News editor, has suggested that a short note about my recent trip to Japan might be of some general interest.

Because of the large number of frostbite casualties in the current Korean conflict, the Surgeon General of the Army decided to send a frostbite research team to the Far East Command in an attempt to discover the reason for the large number of cases and to make recommendations for their treatment and management. The team consisted of three Army medical officers interested in various aspects of the problem and two civilian consultants. We were fortunate in having as the leader of the team Dr. John H. Talbott, formerly Assistant Physician at M.G.H. and now Professor of Medicine at the University of Buffalo. I was included as the other civilian.

We started off by visiting Percy Jones Army Hospital, Battle Creek, Michigan, where most of the frostbite evacuees in this country are hospitalized, and from there flew to San Francisco and Letterman Army Hospital. After various processings and many injections we flew via the Pacific air-lift to Japan. Fortunately, a record snowfall was accumulating at the time at Haneda Airport, Tokyo, so we stopped in Honolulu for a couple of days. Needless to say, the weather and the islands were lovely, and one couldn't help but feel sorry for the unfortunates back in Boston in the middle of the winter. We stopped at Wake Island just long enough to realize why the President and General MacArthur stayed there for such a short time, and in twelve hours we were in Tokyo.

Most of our time in Japan was spent in Osaka where all the frostbite cases were assembled and we had the opportunity to see and examine many hundreds of them. We studied in detail a smaller group, started them on various types of treatment, and were able to follow them personally for several weeks. This latter group is to be evacuated to this country and followed for one or more years.

The morale of the casualties was strikingly high, and one could not talk with them without soon realizing that they had been fighting under the most difficult circumstances and that they had done a magnificent job—facts too poorly known and appreciated here at home. We were also impressed by the type of medical care the men received and the caliber of the medical officers. The group in charge of the frostbite cases could not have been more interested in their work. The reports of needless amputations have been much exaggerated, and any that did occur came very early in the winter when frostbite was first encountered. The degree of recovery following frostbite is amazing and in only a small percentage of cases has any type of surgery been required. There can be no doubt that frostbite is a medical disease.

We found Osaka and the surrounding area much more interesting than Tokyo, and were able to visit the shrine and university cities of Kyoto and Nara. We all spent a good many yen shopping for presents for our wives in Kyoto. Before returning to Tokyo we visited Hiroshima and the Atomic Bomb Casualty Commission installation there. Hiroshima is almost completely rebuilt and repopulated, and shows few scars of the catastrophe that struck it. The hypocenter is a miniature carnival and we, like the other tourists, purchased pieces of irradiated and heat-scarred tile.

The trip back to this country was also by air and is best remembered as a succession of in-flight box lunches which must include a few ripe olives for breakfast—usually consumed around 4 A.M.

In the two months we had had a most pleasant, interesting, and instructive trip and one that will not soon be forgotten. I only hope that before I leave the M.G.H. at least one case of frostbite will come to the Emergency Ward.

Carl W. Gottschalk, M.D.,
Assistant Resident in Medicine

The Ladies' Visiting Committee realized the nice sum of $804.60 from their sale of the old Meissen ware onion pattern and Wedgwood china which had formerly been used in the hospital. The Ladies' recommendation that the proceeds from their sale be deposited to the credit of the Archives Department received the approval of our Board of Trustees. We of the Archives are most grateful for the donation.

Before the sale, the Ladies selected three pieces of the china—a platter, a soup dish, and a gravy-boat— for our Archives collection of hospital memorabilia.

Ever since we first saw it, several years ago, we have been interested in the Charles Street Jail—solely because of its architecture, we hasten to add, lest our attraction to the building be held suspect; and when we became associated with M.G.H. and were within daily sight of the structure, we found our interest steadily waxing stronger.

On one point, however, we were completely baffled. Why was it that we felt a Bulfinch influence in this building, when its cross-like massed effects should in no way suggest the H-shaped horizontal edifices with their pillared porticoes, so typical of much of Bulfinch's work? Besides, Bulfinch had died four years before the ground was even broken for the jail. But the impression persisted, and in an attempt to find a possible explanation we visited the Boston Athenaeum one day and ran upon some interesting information, even though we failed to convince ourselves that our findings furnished a satisfactory foundation for our impression. For months we have wanted to pass these data on to you, but felt there was really no logical reason to be discussing the jail, except for the frail excuse that it is within our immediate environs, nor were we at all sure that anybody else shared our interest in the building. Now, however, when the possibility of the hospital's acquiring the jail is under discussion we are seizing upon the opportunity to tell you what we discovered regarding the jail's architect.

From *Boston after Bulfinch,* a book by Walter H. Kilham (1946) in the Athenaeum, we found that Gridley J. F. Bryant was the designer of the jail. He also planned many other buildings in and near Boston, including our City Hall, the original City Hospital, part of the old Parker House, our State Prison, the penal institution on Deer Island, the city halls in Lynn and Gloucester, many schools, and over 100 buildings in the burnt district after the great fire in Boston.

Bryant was born in Boston in 1816. He received his training in architecture in the office of Alexander Parris— and there lies the frail explanation, perhaps, as to why we think of Bulfinch when we study the jail, for it was Alexander Parris who acted as Bulfinch's superintendent during the erection of our Bulfinch Building. Bryant, like Bulfinch, made use of granite and other materials that were at hand. Kilham says it was Bryant who stabilized the architecture of the Back Bay and the business quarter in Boston at the rebuilding after the fire. He was a pioneer in the idea of fireproofing, and proved the efficacy of his technique when one of his buildings successfully cut off a spreading fire on Milk Street.

From the Athenaeum we went to the jail itself and had a very pleasant visit, although we were disappointed to learn that no detailed account of the history of the jail was available there. However, the Jail Officer at the desk took us out to see the metal tablet on the outside wall of the original building—now in the south yard. Among other data, the tablet says that the jail was "commenced" on October 20, 1848, that Josiah Quincy, Jr. was Mayor of Boston, and that the building was designed by Louis Dwight and Gridley J. F. Bryant, with Bryant as architect—the Bryant who got his training in the office of Parris, who was Bulfinch's superintendent of construction here at M.G.H.

A genealogical chart would show no closer professional relationship between Bulfinch and Bryant than that of cousins once or twice removed—sufficiently removed in this instance, one might conclude, to obviate any real kinship. However, right or wrong, we still feel that the spirit of Bulfinch, through Parris, may have breathed upon the hand of Bryant as he drew his plans for the Charles Street Jail, for the Bulfinch impression still remains, though wraith-like and elusive.

* * *

Brief bits:—

Dr. Cecil F. Baxter (*WS* 1944) paid us a surprise visit not long ago. Everybody was delighted to see him. For the first time we learned about his association with many interesting and exciting activities on both sides of the Atlantic since he left M.G.H. When we heard the story we chid him for not having kept us informed during this period. He says he'll do better in the future. We wonder—and hope. His address is 2025 Shore Blvd., Astoria, Long Island.

Dr. Walter S. Burrage, Head of our Allergy Clinic, was elected Vice President of the Aesculapian Club on January 13. Also, he was Moderator at the American College of Physicians' panel on Bacterial Allergy in St. Louis on April 12.

Dr. Means received this very interesting letter from Dr. Hugh Chaplin, Jr. (*M* 1948), written from 28A Keswick Road, East Putney, London SW 15, England.

I won't bore you with details of our crossing and the first few weeks over here. I have written all this to Bob Berg and to Nan and Walt St. Goar. Suffice it to say that we found traveling with a 2½-year-old child quite a different matter from our previous trip in 1947 when we were on our own and out for pleasure only. We weathered the rough seas satisfactorily, however, and after a week of misery in a cold, damp, dreadfully respectable London hotel we moved into our present flat—the ground floor of a Victorian house, with a pleasant garden in back, and an extraordinary collection of heterogeneous bits of furniture. If you can picture it, the "reception room" sports a mixed collection of traditional family portraits, mid-19th century caricatures, and five Van Gogh reproductions. The dining room is replete with grandfather clock, old wood cuts, refectory table, and a somewhat battered tapestry. In other words, it is a quaint old place, with inadequate heating,

No. 32 in a series of Staff photographs
Dr. Charles L. Clay, First Assistant Director

plumbing, and kitchen facilities, but with great compensations in atmosphere, size, and location, and we are really very happily settled at last. Our little English car (we finally decided on a Hillman) is in hand, and having finally acquired a nursemaid to help around the house and give us some freedom from our beloved little Kate, we feel ready to launch on many pleasant explorations of this lovable, shabby old city and the rolling country that surrounds it.

Thus far, our recreation has been limited by the weather, which continues to be very cold, damp, foggy, and windy. We have been to the theatre several times, and managed to get to one of the final performances of the opera season at Covent Garden two weeks ago. My, what an appealing old place that is, with its ornate decorations, its colorful audience, and its beautifully trained company.

One extremely pleasant evening was spent with the Bywaterses, who very kindly invited us to their home for dinner. They are so very appreciative of the hospitality shown them in the U.S.A., and they couldn't have been more cordial and generous to us. They even went so far as to serve us *ham*, a rare delicacy over here now—this one being a canned product Dr. Bywaters had brought back with him from the States.

I don't know whether you have ever actually visited the Hammersmith Hospital, but when I first saw it I confess to a brief moment of uncertainty at the rashness of my having come all the way to England. It is certainly an ancient old place, most unprepossessing on the outside, and pretty grim and drafty on the inside. But any despair I may have experienced vanished very quickly, for the unit with which I am working couldn't be more to my liking. Mollison himself is charming, stimulating, extremely competent, and most generous with his time as a teacher and a friend. The group is small enough (only five of us) so that I really feel intimately in touch with what is going on. I am sure I can acquire much experience in techniques and new experimental approaches in the field of hematology while I am here. Also, I am not losing complete touch with clinical medicine, since I go on ward rounds with Dr. McMichael once weekly and attend the medical staff rounds every Wednesday.

Mollison has been most kind in including me in all general research functions which are going on here in London. In particular, he has arranged for me to attend all the meetings of the Royal Society of Medicine (research division) and the Medical Research Society. The latter is particularly good fun, since it is held each time at a different hospital. The first meeting was at St. Thomas's, and last night another one at Guy's. The membership of this group is a most impressive one. I have been privileged to meet and chat with Dr. Pickering, Dr. Grant, Dr. Sharpey-Schaffer, and Dr. Himsworth. All these people speak most happily of their visits in America and are most cordial and friendly to me, which has greatly enriched my time spent here.

Alice and I plan to be in Paris for four days over Easter, and are praying that spring may have come a little closer by then. Our major vacation will be a four- to five-weeks' motor trip through France, Switzerland, Italy, and possibly Austria during May and June. We also plan to spend a week with close friends of mine in Scotland during early October, and there are plans for many weekend jaunts to such spots as Windsor, Oxford, Cambridge, the country areas of Kent, Surrey, Cornwall, and many other spots.

As you can see, we are at last well-settled and are finding this year a most fascinating and pleasant one. The rationing, the cold, and the other minor disadvantages are being well-compensated by the new people we are meeting and the experiences we are having. We both miss Boston dreadfully, and I cannot put into words how hard it is for me to realize that my residency at the M.G.H. is actually over. All the time spent in that grand place was unfailingly happy for me, and my appreciation to all those with whom I had the pleasure to work is unbounded. Please give my warmest regards to everyone there.

In the March issue of The News we published a letter from Dr. Anthony T. Licciardello (*M* 1948) saying he had just received orders to report at Fort Devens, Ayer, Mass. Later, from the U. S. Army Hospital at Devens came this letter.

I am now here, working as a ward officer on the Medical Service, and can be reached by mail at the above address or at 60 Haverhill Street, Lawrence, Mass.

There is not a great deal of interest to report since I have been in the Army only six days at this writing. I arrived here in the midst of the flu epidemic and my duties have largely been confined to treating same, but when this present state subsides I shall be in charge of a general medical ward. As far as I can tell, this should represent a reasonably good job—for the Army.

We are living in a rented 4-room cottage in Shaker Village, Harvard, Mass. It is pleasant, even if somewhat isolated, and should be perfect if we are here to enjoy the spring and summer. Our house is 125 years old. It was the tailor shop in the original Shaker community here.

I am looking forward to meeting many of my MGH colleagues in the Service and following the rest in The News.

With a hope for more normal times.

This letter from Dr. Benjamin F. Miller (*assoc. p. CM* 1949-51) carries the salutation "Dear Colleagues" and reads:

I am leaving the General to take a position at the Peter Bent Brigham, where my work will be to coordinate the research on the kidney transplantation project there.

It's been a perfectly wonderful stay at the M.G.H., and it offered me an exceptional opportunity to get back into research again while convalescing from a long siege of Boeck's sarcoid. With Dr. Chester Jones keeping an eye on me from the hospital end and adjusting my work hours, and Dr. Allan Butler very kindly making arrangements for my research in his laboratory, I have been a very lucky patient and research worker.

With the help of Drs. Alexander Leaf, Audley Mamby, and Zelma Miller I have been able to complete clearance studies evaluating both allantoin and endogenous creatinine as measures of glomerular filtration rate in the diseased kidney. Also, Mrs. Miller and I have shown that a chemical method for the specific estimation of serum creatinine can be substituted for the more exacting enzymatic method.

THE NEWS

No. 102 Boston, Mass. JUNE 1951

RESEARCH BUILDING DEDICATION

Our new Research Building was formally opened on May 16. Exercises in honor of the event covered the entire day from 9 A.M. through the afternoon. The program of the scientific lectures, which took place in the Moseley Rotunda during the morning, was given in the April issue of THE NEWS. Following these lectures, a buffet luncheon was served on the Bulfinch Lawn, during which time the Harvard Glee Club sang several of their best songs in their usual excellent style.

The afternoon exercises, on the Lawn, began at 2:30. Mr. Francis C. Gray, Chairman of our Board of Trustees, greeted the guests and introduced the speakers. One very important interpolation made by Mr. Gray was the announcement that the hospital has at last acquired from the City of Boston the deed to that part of Fruit Street extending from North Grove to Blossom.

The first speaker was Dr. Francis P. McCarthy, a member of our Board of Trustees. Dr. McCarthy, substituting for Governor Dever who was unable to attend, spoke of the founding of the hospital. Then followed the addresses scheduled for the afternoon.

The Research Building was open for inspection all day. Guides were on hand to take groups through the building, and all the members of the Research Building personnel were most gracious and eager to explain the functions of the various pieces of equipment. The huge bowls of ice-cold punch on each floor were much appreciated, for the temperature had risen to a sizzling 91° in the shade by early afternoon.

Because we felt that many of you would appreciate having copies of the afternoon addresses for your files, we decided to publish the speeches in THE NEWS. We include in this issue as many as space allows, and will publish the rest in the next number.

Sir Charles R. Harington, Director of the National Institute for Medical Research in England, was the principal speaker, therefore we give you his address first.

A book has recently been published by the English historian A. L. Rowse, entitled *The England of Elizabeth*. Not unnaturally, this has been something of a best-seller at home because the Elizabethan Age is one to which many of us in England look back to as a golden period of our history. We think of it in this way because for us it was an age of expansion, of victorious war, and of intellectual and literary activity unparalleled in our development as a nation. Rowse, however, puts the emphasis on a different point. He says, "The final achievement of the Elizabethan Age, its most enduring monument—the decisive factor in the history of the modern world—is the English expansion overseas, the fact that North America is inhabited by English-speaking stock. What could be of more immediate impact upon every English man and woman alive today, for to it we owe our very survival twice over in the course of one generation."

This was to me a new and very impressive thought, and the more that I have dwelt upon it the more I have felt its relevance to the present time, when we forget all the difficulties and misunderstandings that have arisen between us during our histories in the knowledge that now we stand or fall together. It makes us realize that the ties that unite us today are much more than the manifestation of the instinct of self-preservation in those facing a common danger; they are indeed the natural and proper outcome of community in the reality as well as the sentiment of tradition.

Community of tradition between nations, however, does not and should not imply identity of thought. Ethical and political ideals will differ and each nation will evolve its own civilization according to its own genius. Indeed, the one respect in which the sharing of a common language between nations may be a danger is that it can lead to forgetfulness of this fact. However much national civilizations may diverge there remain, nevertheless, some realms of human activity in which they can share with undivided mind; of these the greatest should be the pursuit of knowledge. The fact that this cannot be said to be truly so is a sad reflection on the failure of the human race today. There is, however, one branch of the pursuit of knowledge that is, in the manifestations that we are thinking of today, free from all considerations of race, religion, or politics, and that is medical research. I am encouraged to think that you share the thoughts I have expressed by the fact that you have done me the great honor of inviting me to speak to you today, at the dedication of an institute which is destined to extend your own scope for medical investigation. There is, of course, a more particular ground on which I am glad to take part in this occasion, and that is the link that has existed between this hospital and University College Hospital in London, in the Medical School of which I worked for nearly twenty years and to which I owe more than I can ever express. When I speak of this link I am not only thinking of the discovery of ether anaesthesia, though this was the beginning of it. It is of this beginning that we are both constantly reminded by the bells, cast in duplicate from the railings of the operating theatre at University College Hospital where Liston did the first operation under ether in England, which now stand in the Board Rooms of the two institutions. (In your case, I believe the bell is rung at the celebrations of the ether anniversary; in ours, who were only the followers of your discovery, the bell, in my experience, properly remains mute.) [For a detailed story of the bells, *see* Nos. 44 and 47 of your M.G.H. NEWS.] I am thinking now rather of a more subtle link in what seems to me to be a community of outlook between the two hospitals. In both, the investigative aspects of medical work have been kept in the forefront. In both, the great names that we think of are those of pioneers, interested not only in the care of their patients but in the scientific advance of medicine.

You will have in mind the doctors who began the work of your hospital and those later members of the staff, such as Reginald H. Fitz, F. C. Shattuck, and James Homer Wright who, by their influence and their personal contributions kept interest in research in the forefront. Then, with the modern establishment of clinical research on a systematic basis, in which so great a part was played by David L. Edsall, you can dwell with pride on the use that has been made of the greater opportunities for investigation by such men as Means, Newburgh, Palmer, Gamble, Aub, and Bauer. These men and many others who have worked and are still working here are known throughout the world, and it is largely on their contributions to medical science that the international reputation of your hospital rests.

We, in our turn, remember Liston himself, eager to try ether anaesthesia as soon as he heard of it, albeit with a cynical aside before the experiment about "this Yankee dodge", and receptive enough to be so overcome with enthusiasm at the first successful result that he could hardly stammer the words, "This Yankee dodge beats mesmerism hollow." We think also of Sidney Ringer, of Victor Horsley, of Rose Bradford, and in more recent years of T. R. Elliott, A. E. Boycott, and Thomas Lewis, all of them men whose names will live in the history of natural science as well as medicine.

In my last few sentences I have found myself speaking of University College Hospital in a way that I have no right to do, as if I still belonged to it. It has come naturally to me to do so because of the affection that I have for that institution and the debt that I owe to it. Perhaps I may be allowed a brief personal reminiscence to amplify this, since it is relevant to what I wish to say to you. In the early days of my work on the thyroid I found that I needed what seemed at that time a large sum of money to make any progress. With some diffidence I approached two or three senior members of the staff and asked for their support. Although I was then a young and relatively untried research worker the support was given, and without any hesitation whatever the governing body granted me the money that I needed. Now, there were at that time few universities and probably no other medical school in my country where that could have happened; I do believe, however, that it would have happened here. The whole thing has meant so much to me that I could hardly say more to show you my admiration for the way in which your institution has made it possible for your men to advance medical research. So you will see that it is not presumption which leads me to speak as if U. C. H. and M. G. H. were sister institutions, but a conviction that they share the ideals that seem to me to matter.

For nearly nine years now it has been my task to direct the largest institute for medical research in Great Britain, and indeed one of the largest in the world, and this experience gives one a rather different view of the problem of medical research as a whole. In this country a great part of the most active medical research is done in large institutes that form parts of or are closely attached to hospitals; in Great Britain the plan is different. There, so far at least as the Medical Research Council is concerned, and that means nowadays the greater part of the medical research in the country, an effort has been made to build up one central institute that shall have the staff and facilities to undertake investigations in any of the laboratory aspects of the subject, whilst clinical research is done for the most part in small units established by the Council in teaching hospitals. The central institute has no direct responsibility for clinical work, although naturally clinical contacts are available for the development of discoveries made in the laboratories; and in occasional special cases, such as the current research on the common cold, medical members of the institute staff may themselves undertake a clinical investigation.

I think it is impossible to say which is the better of these two systems. Each has its evident virtues and defects; there are those in England who think that you have chosen the better way, and I dare say the converse may be true. In favour of the large institute is the fact that the field of laboratory research in medicine is now so wide that the help of almost any branch of science may be required. For this reason the facilities for covering the field adequately can more readily be provided in a large institute staffed by both medical and non-medical scientists, and it is perhaps easier for these men and women to work together on a footing of equality if the institution is not closely concerned with clinical work. On the other hand, there is always the danger that the laboratory research institute becomes for the individual worker an ivory tower in which he is completely divorced from reality and loses himself in abstractions. The hospital research institute has the great advantage in this respect, for the workers can never lose sight of the urgent medical problems; their chief danger indeed is that their sense of urgency may cause them to take too short a view; they will probably also be less well provided with facilities to extend their work in any direction in which it may lead them.

Probably the real answer is that one system will suit the natural genius of one country better than another. The fact that in this country and in England the evolution of medical research is following different lines need be no more than an example of those natural divergencies of nations which I have spoken of. In any case, by your record you have shown that the way you have chosen is without any doubt a good one.

After all, the things that really matter are, first and foremost, the desire of men and women to do the work of medical research, and, secondly, the convictions and the policy of those on whom they depend for their living and their opportunity. We who work for the Medical Research Council in England are indeed fortunate in the wisdom with which their policy was framed and has been maintained. The policy is summarized in a few sentences that I would like to quote from the first report that they issued in 1914:

"The object of the research is the extension of medical knowledge with the view of increasing our powers of preserving health and preventing or combating disease. But otherwise than that, this is to be the guiding aim: The actual field of research is not limited and is to be wide enough to include, so far as may from time to time be found desirable, all researches bearing on health or disease, whether or not such researches have any direct or immediate bearing on any particular disease or class of diseases, provided that they are judged to be useful in promoting the attainment of the above object."

It is comparatively easy to live up to the ideals of such a charter of freedom in an institute for laboratory research; it is not so easy, perhaps, in a hospital. But I know from my own experience that it can be done at home and you have shown that it can be done here. Indeed, you can match the policy of the Medical Research Council with your determination, in face of competing claims, to give first priority to a Research Building, in the belief that a firm and unshakable anchor in science is the first and necessary step in the advance of medicine.

Today, in the opening of this fine new building, we have, in impressive form, the physical evidence of this faith and determination. The laboratories and equipment will provide the greater scope that is demanded by the ever-increasing complexity of medical research. It is only too easy for research workers to feel frustration in the thought that all the simple problems have been solved and that as time goes on they become more and more bogged in complexities. This is not a true thought; complexities resolve themselves when the new light is seen, and now as ever the new light will shine for those with trained and receptive minds. It is true of modern research, however, that a new idea is likely to require for its development wider scientific and technical resources. These you have now provided, and in the knowledge that there is no lack of men to make good use of them you may indeed feel that the future is full of promise.

The opening of this institute is no new departure for you; it falls naturally into the pattern of your development. It is, however, a landmark in the history of an institution from which the world has learned to expect much. It marks a great stride along the road that you have planned out for yourselves—a road that will lead, as it has led in the past, to a new knowledge that will benefit the sick not only in your own famous hospital but throughout the world. May your future journey by this road be a long and a happy adventure. This will be the wish for you today of colleagues of all nations who have the true progress of medicine at heart.

Dr. George P. Berry, Dean of the Harvard Medical School, spoke first of the close family relationship that has existed through the years between the Harvard Medical School and the Massachusetts General Hospital, and then went on to show the applicability of the ancient Chinese proverb "Ask and ye shall receive, seek and ye shall find, knock and it shall be opened unto you" to the research fields of today. We regret that we cannot give you the text of this address. Dean Berry spoke extemporaneously.

A transcription of the speech given by Dr. James R. Killian, Jr., President of Massachusetts Institute of Technology, follows.

THE GOOD NEIGHBOR POLICY IN RESEARCH

I speak today not as a specialist, which I am not, but as a layman—a layman whose chief qualification is my enthusiasm and admiration for this great medical institution and the men and women who make it so. In this sense I am an expert, with my *bona fides* well attested.

I am something of an expert in another sense. As the executive officer of a sister institution just across the river, I know how good a neighbor the Massachusetts General Hospital is, and how effective are the relationships it has developed with its neighbors. I know from experience how powerful has been the good neighbor policy which prevails in this community and which links together in close bonds our scientific and educational institutions. The physiologists have a name for it—synergism, or working together. We have here in this community a synergistic relationship among our institutions and communities of workers, a commonwealth of science and research, prodigious in its potential for good.

For these reasons the research laboratory which you dedicate today strengthens not only the Massachusetts General Hospital but all of its neighbors, and we in its sister institutions can rejoice with you in its availability.

Many other reasons lead me to share in this program with enthusiasm and with faith. I believe, for example, that in our hospitals and research institutions we are in the midst of scientific advances unprecedented in their promise for human welfare. The swift scientific advance which we are witnessing today represents a crescendo in the immense acceleration of scientific understanding which has been occurring during the past half century or more. Roentgen discovered X-rays in 1895; Becquerel, radioactivity in 1896; the Curies, radium in 1898; while J. J. Thompson in 1897 laid the basis for our modern theories of atomic structure; and Einstein in 1905 published his relativity theory. As a result of these great discoveries, the twentieth century has witnessed the opening up of wholly new interpretations of nature not previously dreampt of, a new era of scientific advance when scientific knowledge is increasing, as we say, exponentially. More has happened, in fact, in physical science in the past decade than occurred in the preceding half century.

Not the least of the scientific achievements of recent years has been the interlocking of the basic sciences in biological and medical research, the application of physics and chemistry and technology to the life sciences, including medicine, with a consequent deeper penetration into the structure of living matter. This mobilization of all of the sciences in combatting disease and defending health has brought a new era in the field of medicine, and as a result the medical sciences, too, are now experiencing a floodtide of advance.

Along with the integration and mobilization of all of the sciences in medical research has come the fruitful partnership of the investigator, the clinician, and the practising physician. This triple alliance, I venture to suggest, is analogous to the alliance that we find in the non-medical sciences as they range from theoretical investigations in the laboratory through engineering in all of its applied ramifications. The position of the research hospital, in fact, is not essentially different in its research aspects from that of the institute of technology. These institutions have discovered and demonstrated that engineering and the applied sciences, which are analogous to medicine, flourish best when they are taught and developed in association with basic science; that applied and basic science interact upon each other to the marked advantages of both. This does not mean that pure or basic science is in any way inferior to the applied point of view, or that the applied point of view should be dominated by the pure science attitude. It means, rather, that both can exist in productive good neighborliness and that when they do so, each becomes stronger.

This desire to cultivate the whole spectrum of health science from theoretical to applied is embraced by this institution, and this research laboratory is evidence of this philosophical acceptance of the good neighbor policy in research.

I would draw another concept from the field of engineering in commenting upon the broad range of activities of this hospital. I refer to the fruitful systems concept, the fact that many problems can best be dealt with and solved not by dealing with component parts but rather with the functioning and dynamic aspects of a system as a whole, as, for example, a communications or a telephone system. The system has characteristics of its own and a logic of its own that need to be studied. Incidentally, the communications engineers, animated by the concepts of cybernetics, are giving increasing attention to the human being as a component of a given system, and this is bringing about an interesting new relationship between the engineer, the physiologist, the psychologist, and even the social scientist. This systems approach, which is being applied in so many interesting ways as, for example, to military problems, is greatly facilitated by the presence of the whole spectrum of activity from pure to applied in a given group. It would seem to this observer that this hospital, with its wide range of research and clinical interests, and with its close relationships with a wide variety of other research institutions, is in a particularly happy position to exploit not only research on components of a given medical problem but research on systems. It means in its broadest sense that this hospital, as I know it is, can deal with health on the widest possible environmental basis, that it can take the ecological approach as well as the approach to specialized problems. It means that it can relate the health of the individual to the health of the community and help to better both.

I would suggest that the privately controlled voluntary hospital is peculiarly well qualified to develop this broader attack. It has led the way in bringing into fruitful partnership the investigator, the clinician, and the practising physician. I wonder if we realize how fortunate we are in having evolved the form of hospital where the care of patients is associated with creative advances in medicine. Out of the integration of the basic sciences in medical research and through the mechanism of our special kinds of hospitals, is coming the flood-tide of medical discovery of which I have spoken. As illustrative of this powerful attack on disease through the collaboration of academic scientists, doctors, and industry, let me cite the application of techniques of atomic physics to problems of biology and health; the swift developments in chemical therapy and the antibiotics; and the growing understanding of the true role of hormones accompanied by the production of the astonishing drugs of the chemical family of steroids.

These hormones and the immense effort under way to produce them in adequate amounts are fine examples of the effective team play between the pure scientists in universities, the hospital clinicians, and industry.

In institutions such as the one with which I am associated, it has been interesting to observe the rapid growth of interest on the part of scientists and engineers in medical problems in recent years. Although they have no medical schools, they are engaged extensively in work on medical problems or on research which ultimately may contribute importantly to medicine. The field of medical chemistry, for example, or biochemistry, if you will, either pursued under the aegis of biology or under the aegis of chemistry, itself, is vigorously productive at the present time. The biologists, of course, have long been deeply involved in problems basic to medicine, but this interest has been enormously amplified as the results have proved steadily more exciting. This has led in recent years to the desire on the part of a growing number of young physicians to acquire the quantitative techniques developed by the pure biologist in order better to equip himself for research. A period of postdoctoral study in biology is being sought by increasing numbers of young M.D.'s, and just recently one of the foundations interested in medical research has made a large grant to a biology department to enable it to extend its postdoctoral training of M.D.'s.

The physicists are interested in further applying the resources of nuclear physics to biological and physical problems, and the engineers, notably the electrical engineers, have joined forces with the physician in applying new high-voltage techniques to the treatment of malignancies. Then, in another area we find ourselves engaged in a new program of study designed to train a new type of engineer, a combination of the chemical engineer and the biologist, who can be useful in dealing with the complex problems in the pharmaceutical industry resulting from the production requirements of the antibiotics and chemical drugs. In these and other ways medicine has metastasized through our non-medical, scientific institutions, and I am sure that we will find it increasingly drawing upon the resources of science and technology to further its own development. I see this new laboratory as a center of stimulation and coordination of this growing system of research on medical problems.

The dedication of this laboratory prompts two other observations. The first is that research institutions must squarely face the problem of how to give adequate incentives and rewards to the basic scientist, the free investigator who prefers to follow no foreordained objective. The problem of the independent investigator is made more difficult by the greater availability of funds for programmatic and development research.

The funds which are easy to obtain today are those to support research directed toward some specified end; the hardest funds to obtain are fluid funds for the support of basic research as an end in itself. What we need if science is really to flourish are enough free funds to support free minds—not minds working toward ends foreordained but minds following the strange, unorthodox, and unforeseen turns of the creative imagination.

Our research and educational institutions also must recognize the danger of the incomplete grant-in-aid, the gift which encourages taking on a new project but does not cover its full cost. Government grants which do not cover indirect expense have been increasing and to the extent that they have increased, they have laid an additional burden of expense on the non-government institutions receiving them. If the government is to maintain, as I think it should, a trustee relationship to our research institutions, it should not weaken them by encouraging new research through making grants that do not adequately cover the indirect costs of this research.

My second observation is that the aggressive exploitation of research in the field of medicine may, as many medical men have pointed out, be the chief factor in retarding the mounting costs of medical services. We have seen research bring a number of diseases under control, as for example, the effective use of antibiotics in controlling diphtheria and pneumonia. This has reduced the load on our hospitals.

In this direction may lie the remedy for the mounting demand for more hospital beds. Without this kind of advance, our hospitals are handicapped in embracing opportunities such as post-operative check-ups and other types of extension services. Without this kind of advance the cost of hospital care might force us ultimately to abandon our voluntary hospital system. I believe that this would be a set-back to medical advance. The best way to provide the maximum amount of medical care to all of our people is to make steady progress through our hospitals and medical schools in keeping them well. It may well be, as physicians have pointed out, that we are witnessing a race between our capacity to keep people out of hospitals and the building of more and more hospital capacity through federal subsidy.

I do not oppose the use of public monies for many aspects of our health and medical program, but I do fear any program that destroys the voluntary hospital or the private educational institution, or that takes away the responsibility of the local communities or the individual citizen for helping to care for their own people.

Such are some of the reflections and observations of the layman and the citizen to the addition of this fine research laboratory to the facilities of the Massachusetts General Hospital. I see it as a heartening example of a great voluntary hospital's being able through diversified support to fulfill its broadest mission and to move ahead into the marshalling of all of its resources of research and practice for the improvement of the health of the community and the nation.

Might there not be inscribed somewhere in this new structure the words of Pasteur:

"Take interest in laboratories. Demand that they be multiplied, that they be adorned. These are the temples of the future—temples of well-being and happiness. There it is that humanity grows greater, stronger, and better."

* * *

From Dr. Jerome Gross (*res. assoc. M*) we secured an explanation of the electron microscope shown on page 6 of this issue. Dr. Gross is in charge of a laboratory, working especially on molecular organization of mesenchymal tissue, in connection with Dr. Bauer's arthritis group. Here, briefly, is what Dr. Gross said:

This instrument is used to study the structure of materials whose units are too small to be resolved by the light microscope. These include biological objects such as viruses, minute structures in cells, large protein molecules, and organized groups of such molecules as are in muscle and tendon. It can also be most effectively used in the study of physical chemical reactions between large molecules, as in the formation of fibers such as collagen.

The electron microscope has a resolving power about 1,000 times greater than the light microscope and magnifications of 300,000 times are feasible, in contrast to a maximum of about 2,000 times for the ordinary microscope. The cost of this machine was about $17,000.

Miss Zelda Kaufman, a technician in the laboratory, is shown placing a specimen in the machine.

* * *

The Massachusetts General Staff Associates Committee is pleased to announce that Mr. E. Michael White joined the Hospital's administrative staff last month.

A graduate of the Harvard Law School, Mr. White will devote his entire time to continuing the study of the organizational problems involved in the formation of a professional group at the Hospital, including the provision of adequate office space and parking facilities. His office is on the first floor of the Baker Memorial, opposite the Admitting Office.

With a long background of experience in working with members of the medical profession and in dealing with problems of medical care, Mr. White will bring to bear on our problem a combination of energy and talent which make him admirably suited to undertake this important task.

The Board of Trustees, at their meetings on April 6 and 20, and May 4, voted:

To accept with regret the resignation of Dr. Benjamin F. Miller from the position of Associate Physician to the Children's Medical Service;

To grant Dr. Barr leave of absence and to appoint Dr. Klein as Acting Chief of the Orthopedic Service during this interval (May 6 – July 1);

To grant leave of absence to Dr. Gordon L. Brownell, to go to Argentina for iodine deficiency study;

To grant Phillips House privileges to Dr. Harrison E. Kennard.

To appoint:

Dr. Raymond D. Adams as Chief of the Neurological Service, effective July 1, succeeding Dr. Charles S. Kubik who is retiring;

Dr. Crawford S. Brown as Assistant Resident in Dermatology for the year beginning July 1;

Dr. Grant E. Colpitts as Resident in Pathology for one year, beginning July 1;

Dr. John G. Gibson as Assistant Resident in Psychiatry for the period July 1 – December 31;

Dr. Morten Grove-Rasmussen as Assistant Director of the Blood Bank;

Dr. Byrl J. Kennedy as Resident in Medicine, to begin on or about July 1;

Dr. Charles S. Kubik as Consultant in Neuropathology for one year, starting on or about July 1;

Dr. Farahe Maloof as Assistant Resident in Medicine for the term beginning October 1;

Dr. Harrison O'Connor as Assistant Resident in Orthopedic Surgery, beginning July 1, 1952;

Dr. Maurice M. Pechet as Assistant Resident in Medicine for the term beginning October 1;

Dr. Walter W. Theus as Dental Intern for the year beginning July 1.

At their meetings during April and on May 2, the General Executive Committee voted to promote:

Dr. Irving P. Ackerman from the position of Intern to that of Assistant Resident in Medicine for the term beginning July 1;

Dr. George Christman from the position of Intern to that of Assistant Resident on the Dental Service, beginning July 1;

Dr. Stuart Ragland, Jr. from the position of Intern to that of Assistant Resident in Medicine for the term beginning October 1.

To appoint:

Dr. John G. Bisgrove as Clinical Fellow in Physical Medicine for the year beginning August 1;

Dr. Leo Brahm as Clinical Fellow in Surgery, assigned to Endoscopy, for the term beginning May 1 and ending July 1;

Dr. Joshua B. Burnett as Clinical and Research Fellow in Medicine for the period July 1 through December 31;

Dr. Harry C. Curtis as Clinical Assistant in Surgery, with recognition as Assistant to Drs. Allen, Welch, and Donaldson in regard to visiting and prescribing for their patients in Baker Memorial and Phillips House. This appointment will become effective on or about May 7, and will continue for a period of six weeks;

Dr. John von Felsinger as Research Fellow in Anesthesia and in Psychiatry for a period of one year, beginning July 1;

Dr. Jerome Gross as Research Associate in Medicine, effective as of January 1;

Dr. Milton E. Helman as Clinical Fellow in Dermatology, to become effective immediately;

Dr. Salomao Kaiser as Graduate Student Assistant in Surgery for a period of one year, beginning March 15;

Dr. Nils Normann as Research and Clinical Fellow in Anesthesia, effective as of April 1;

Dr. Richard E. Spencer as Clinical Fellow in Anesthesia, effective as of August 15;

Dr. Carlos Tejada as Clinical Fellow in Pathology for the period of one year, beginning July 1;

Dr. Wilbur A. Thomas as Research Fellow in Pathology, beginning July 1. His appointment to the Senior Residency for one year, beginning July 1, has been cancelled. He has been granted a traineeship under the auspices of the National Cancer Institute;

Dr. Wesley G. Woll, Jr. as Clinical Fellow in Physical Medicine, beginning July 1, 1952.

* * *

WILLIAM WOODS BECKMAN

In the September 1948 issue of THE NEWS note was taken of the resignation from the staff of Dr. William Woods Beckman (*EM* 1937). On August 1, 1948 he became Assistant Dean at the College of Medicine of New York University.

In this new job he carried on in the same fine manner as he had here, being particularly occupied in helping medical students with their personal problems, and in teaching medicine, especially in its social aspects.

For many years he had struggled with the utmost courage against steadily advancing disease which, until the end, he did not allow to conquer him. His passing is at once a tragedy for those of us who lose him, and a victory, because he set a noble example. The memory of him will remain warm in the hearts of innumerable friends. They will remember the time when Bill Beckman helped them or comforted them.

J. H. M.

[J. Howard Means, M.D.]

* * *

THE TUMOR CLINIC

In 1919 Dr. George Holmes inaugurated a series of consultation conferences to consider cases referred for radiation therapy. With Dr. Guy Lane, weekly meetings were held to plan the treatment of dermatological cases, with special reference to cancer problems. Dr. Greenough soon joined the group, which extended its field to include all cancer cases referred for radiation, and later all cancer cases. In 1925 this service was expanded to a daily full-time clinic under the name of the Tumor Clinic, with Dr. Greenough as administrative head, and joint responsibility for the service was shared by the Surgical and Radiotherapy Departments. In addition to these departments, the staff of the Clinic included representatives from the departments of Medicine and Pathology, and the sections of Oto-Laryngology, Urology, Neurosurgery, and Dermatology, with consultants representing the other special fields.

Dr. Simmons succeeded Dr. Greenough as administrative head of the Clinic, and on the retirement of Dr. Simmons in 1938 the management of the Clinic was assigned to a committee with representatives of the departments of Surgery, Radiology, Medicine, and Pathology, under the chairmanship of Dr. Daland. Dr. Taylor succeeded to the chairmanship of the committee in 1946, with Dr. Nathanson as Executive Secretary.

At first the Clinic provided voluntary consultation service on cancer cases, while the members of the Clinic supervised selected groups of cases under the system of special assignment. Follow-up studies were carried out in certain groups of cases. With the addition of a full-time social worker in 1930, follow-up was extended to include all cases discharged from the hospital. At present it is the objective to see all tumor cases on admission, to recommend appropriate treatment, to provide consultation service on special problems, and to follow up all tumor cases. With the consent of the hospital staff members, many of the groups of private patients are also included in the follow-up studies. In addition, the Clinic, on request, may assume control of treatment of particular cases and groups for special study or investigation. When the Huntington Hospital closed in 1941, the Clinic and records were transferred to the Massachusetts General Hospital. Patients were notified of the transfer, and this large group of active follow-up cases was integrated with the Tumor Clinic through the efforts of Dr. Daland and Dr. Nathanson.

Although the Clinic is part of the Out-Patient Department, close relationship to Radiotherapy is essential. For this reason, the Clinic has always been housed with the X-ray Department, with which it also shares many of the ancillary personnel. Excellent equipment of the examining rooms and a small operating room were made possible in part by a grant from the American Cancer Society, Massachusetts Division, Inc. A laboratory for prosthetic appliances functions in conjunction with the Dental Department and helps greatly in rehabilitation following disfiguring operations.

The Clinic meets every morning and most afternoons. In addition to representatives of general surgery and radiotherapy constantly in attendance, consultants are available in all specialties, and groups of appropriate cases are segregated to special days, in so far as is possible, in accordance with the following schedule:

	A.M.	P.M.
Monday:	Gastrointestinal Lymphoma, etc.	Lymphoma, etc.
Tuesday:	Breast	Breast and hormones
Wednesday:	Urology Neurosurgery Ophthalmology	Thoracic
	12:00 — Conference	
Thursday:	Oto-Laryngology Dental	Gynecology
Friday:	Dermatology Sarcoma	Stomatology Semiprivate Clinic
Saturday:	General Surgery	

A Clinical Fellowship in Cancer granted by the American Cancer Society has been held by a succession of able individuals who organize the clinics and teaching, and carry out a considerable number of surgical procedures under appropriate supervision. A close liaison is maintained with the Huntington and Vincent Laboratories and with the laboratories of the Harvard School of Dental Medicine.

Weekly teaching conferences for presentation of interesting or unusual problems are well attended and provoke stimulating discussions. A month's elective course in Cancer for Harvard Fourth Year Medical Students, organized by Dr. Nathanson as coordinator, is extremely popular, and has had to be repeated four times in the current year. In addition to the formal teaching exercises, the Clinic is frequently visited by graduate observers who attend for varying periods of time.

A special subcommittee of the Tumor Clinic Committee supervises the use of radium in the hospital and restricts its use to properly trained and experienced persons.

Research in the form of clinical studies of results of treatment are constantly in progress in the Clinic. The above-mentioned close relationship with the laboratories permits intensive investigations to be carried out, with the Clinic providing an abundance of material and supervision of the patients during studies. The provision of free beds for special investigations, as described recently by Dr. Aub, greatly increases the scope and usefulness of studies inaugurated and continued in the Clinic.

The increasing incidence and importance of cancer in the community is reflected in the growth and activity of the Tumor Clinic. This was one of the first cancer clinics to be organized as a part of a general hospital and has served as a model for most of the cancer clinics now widely established throughout the country.

Grantley W. Taylor, M.D.,
Head of Tumor Clinic

* * *

MASSACHUSETTS GENERAL HOSPITAL AND CIVIL DEFENSE

Massachusetts General is one of 29 hospitals which this State has chosen to help assemble a list of possible blood donors for Civil Defense.

The job of preparing this material in a form ready for immediate use in the event of an emergency is a colossal one.

A group of volunteers has already given hundreds of hours to the project. To give you some idea of the amount of work entailed, here is the method of assembling the necessary information:

1. From our 50,000 Blood Bank donor cards of the years 1947-1950 which are numerically filed, a card list of donors is being made and alphabetically arranged. On each card must be written the name and address of the donor, his age, blood group, Rh type, date when he was typed, and his MGH donor number.
2. These cards are then checked for accuracy by another person.
3. From these cards a list is to be made for each city and town in Massachusetts where possible blood donors reside and sent to the Medical Director for Civil Defense in each respective city or town.

As you can see, the job is a prodigious one and the work is of such a nature that the highest degree of accuracy is demanded of all who help with the lists.

If you can help as a trained typist or filer, please get in touch with Mrs. Courtney here at the hospital. The telephone extension number in her office is 257. Every hour you can contribute, during the day or in the evening, will be greatly appreciated by the hospital.

FOR SALE

The Archives Department needs a specially constructed box to contain the hundreds of staff photographs recently removed from their frames, carefully wrapped in cellophane, and now arranged chronologically, from the 1820's to the present time, in a makeshift holder. Upon inquiry, we found that the type of box we need would cost much more than our budget could provide, and so we set about to find a way to finance the construction of the box.

We have assembled four complete sets of The News, to date, which we are offering for sale. At the rate of ten cents ($.10) a copy, the price is ten dollars ($10) for the hundred issues. The first number, published in October 1942, contains a picture of the members of the 6th General Hospital, assembled on the Bulfinch steps just before they left for Camp Blanding. This issue was exhausted immediately after its appearance and from that time since has literally been a collector's item. The letters which appeared in The News from our men and women in the armed services during World War II will never be forgotten by those who read them; and the accounts of activities in our various departments since the war furnish valuable source material in all fields of medical and surgical work. Items of a more personal nature have their value, too, for every MGH-er.

So—who will buy our Newses? First come, first served.

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary notes with regret the death on May 3 of Dr. Frederick L. Jack, former Aural Surgeon in Chief of this hospital.

Dr. Jack was graduated from Harvard Medical School in 1884 and joined the staff of the Infirmary the same year. At the time of his death, Dr. Jack was a Consulting Surgeon in Oto-Laryngology. He left a very generous bequest to the Infirmary and an additional grant to the Mosher Laboratory.

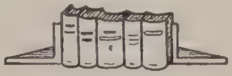
Dr. LeRoy A. Schall, Chief of Oto-Laryngology, presented a paper as part of a symposium at the meeting of the American Otological, Rhinological and Laryngological Society at Atlantic City on May 6. "Cancer of the larynx—Five-year results" was Dr. Schall's topic.

Dr. Carl C. Johnson took part recently in the postgraduate course in Ophthalmology and Oto-Laryngology at the University of Kansas. Dr. Johnson spoke on "Ptosis" and "Surgical treatment of glaucoma".

At the American Medical Association meeting at Atlantic City in June, Dr. Charles L. Schepens, Director of the Retina Service, will read a paper on "Subclinical retinal detachments". Dr. David D. Donaldson will have an exhibit of stereophotographs of human brain dissections, showing neuro-ophthalmological relationships.

Mrs. Eunice W. Wilson, who has been Director of our Social Service Department since October 1940, has submitted her resignation, effective as of June 1951. Since resigning from the Infirmary, Mrs. Wilson has been offered a position as Medical Social Consultant at the United Community Services and will assume this new position in the fall.

The Executive Committee has announced the appointment of Dr. Taylor Smith as Assistant in Ophthalmology.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would remember to include that information.

In answer to a common question which has arisen, your title should be classified with respect to the subject matter and not under the hospital department with which the author is affiliated. As an illustration —an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The deadline date for each issue of The News is the 12th of the preceding month.

All requests for reprints are to go directly to the individual authors, and *not* to Treadwell Library nor to The News.

The following new titles have been received:

Dentistry

Rounds, C. E., and Goldman, H. M.
Adenoid cystic basal cell carcinoma (adenocarcinoma): Report of a case.
Oral Surg., Oral Med., & Oral Path. 4:303-308.

General Medicine

Palmer, R. S.
"Improvement" in the hypertensive pattern of the electrocardiogram.
Ann. Int. Med. 34:712-716.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E., Farrell, M. J., and Chipman, C. E.
The inadequacy of present-day concepts of mental deficiency and mental illness in child psychiatry.
Am. J. Psychiat. 107:721-729.

Cobb, S., and Miles, H. H. W. (Editors)
Convalescence in a patient with permanent neurologic disability.
Am. J. Med. 10:386-392.

Miles, H. H. W., Barrabee, E. L., and Finesinger, J. E.
Evaluation of Psychotherapy.
Psychosom. Med. 13:83-105.

Money, J.
Observations concerning the clinical method of research, ego theory, and psychopathology.
Psychiatry 14:55-66.

Shands, H. C., Miles, H. H. W., and Cobb, S. (Editors)
The emotional significance of cancer: Psychiatric conference.
Am. Pract. & Digest Treat. 2:261-265.

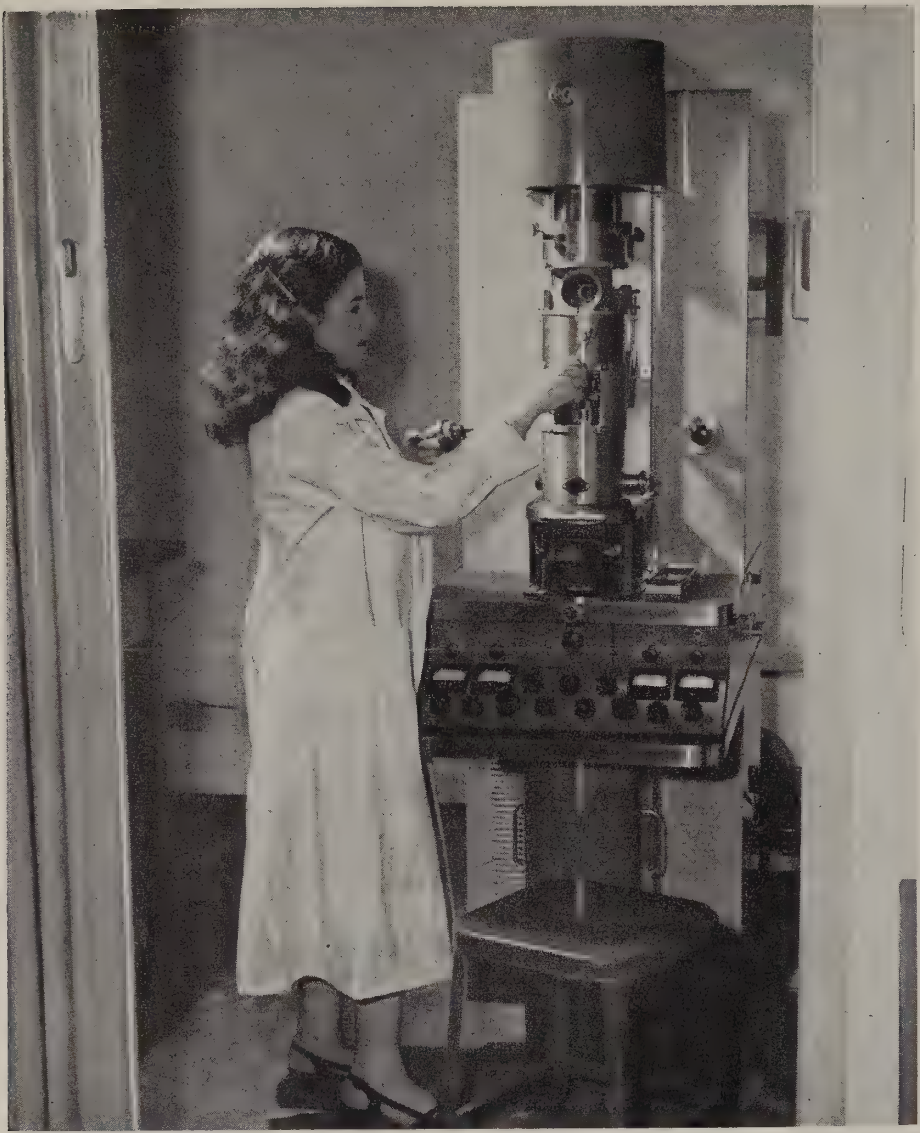
Waldfogel, S., and Guy, W.
Wechsler Bellevue subtest scatter in the affective disorders.
J. Clin. Psychol. 7:135-139.

Orthopedic Surgery

Pike, M. M.
Legg-Perthes disease: A method of conservative treatment.
J. Bone & Joint Surg. 32-A:663-670.

Pediatrics

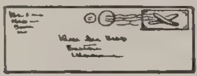
Gardner, L. I., and Reyersbach, G. C.
Brain damage in a juvenile diabetic patient associated with insulin hypoglycemia.
Pediat. 7:210-214.



The electron microscope

One of the many new pieces of equipment in the Research Building. This instrument is described briefly on another page.

Locke, W., Talbot, N. B., Jones, H. S., and Worcester, J.
Studies on the combined use of measurements of sweat electrolyte composition and rate of sweating as an index of adrenal cortical activity.
J. Clin. Investigation 30:325-337.



We were indeed glad to receive this note from Ruth Steglich, past Chief of Occupational Therapy here at Massachusetts General. Her address is Woodrow Wilson Rehabilitation Center, Fishersville, Virginia. The note reads:

> Much as I miss everyone at M.G.H., I do find my new work fascinating and a real challenge, for we are, in a sense, pioneering. This does seem to be the answer to the over-all rehabilitation problem.
>
> Best wishes to everybody I know up there.

A recent communication from Dr. Terry E. Lilly, Jr. (*ES* 1943) says, in part:

> I am now in that category familiarly referred to as "established in practice" with my father here at 807 Argyle Building, Kansas City, Missouri. Barring the usual disasters, I may be reached here from now on.

New addresses:—

Lt. Col. Frank L. Bauer, MC, USAR (*P* 1941), Army Medical Service Graduate School, Army Medical Center, Washington 12, D.C.
Dr. Joseph H. Boyes (*P* 1930), 416 North Alabama, San Gabriel, Calif.
Dr. George A. Filmer (*Oph.* 1939), 610 Metropolitan Bldg., Denver 2, Colo.
Dr. Donald M. Glover (*WS* 1922), 10300 Carnegie Ave., Cleveland 6, Ohio.
Dr. Buford Hall (*M* 1946), 336 East Main St., Georgetown, Ky.
Dr. Irad B. Hardy (*ES* 1939), 94 Russell St., Waltham 54, Mass.
Dr. Ralph Hawkins (*NS* 1948), 571 Hamilton Ave., Palo Alto, Calif.
Dr. Glenn W. Lawrence (*dn. s.*), 25 Bay State Road, Boston, Mass.
Dr. Pauline Owyang (*CM* 1943), 1624 Franklin St., Oakland 12, Calif.
Dr. Walter W. Point (*clin. & res. fel. M*), 330 Dartmouth St., Boston, Mass.
Dr. Hubert A. Shaffer (*a.r.p. R* 1932), 244 Lebanon Ave., Hopecrest, Morgantown, W. Va.
Dr. Earl G. Solomon (*r.p. Psychiat.* 1950), Department of Psychiatry, Cincinnati General Hospital, Cincinnati 29, Ohio.
Dr. Joseph K. Surls (*Or.* 1920 & *ES* 1922), 130 East End Ave., New York 28, N. Y.
Dr. Robert J. Tracy (*ES* 1943), 18 Bank Row, Pittsfield, Mass.

Brief bits:—

Dr. Henry K. Beecher, Chief of our Anesthesia Service, has recently returned from the University of Louisville where he was Visiting Professor under the Commonwealth Foundation. During his visit he gave eight lectures.

Dr. J. Howard Means, Chief of Medical Services at M.G.H., delivered two lectures at Johns Hopkins Hospital on April 26 and 27, under the William Sydney Thayer and Susan Read Thayer Lectureship in Clinical Medicine. Dr. Means's subjects were "The thyroid hormone: Certain aspects of its elaboration in the body and of its action on end organs" and "The use of hormones, drugs and radiations in the management of thyroid disorders".

Dr. Clarence A. Traver (*WS* 1927) is still at 28 Willett St., Albany 6, N.Y., and *not* at Bath, N.Y., where his brother is practising surgery.

* * *

It is a pity that so few staff members realize how nicely their convalescent patients can be accommodated at Storrow House. This is an ideal spot for anyone who isn't quite up to going home but is nearly enough well to make the use of a hospital room for the rest of the time a questionable expenditure.

Storrow House offers nursing service for dressings and treatments, and medical supervision. For specific information in relation to its suitability for your patient, see Dr. John Homans, Jr. or Dr. C. L. Clay, or call Miss Welch at Storrow House (LIncoln 6-0343).

* * *

The hospital is soon to be favored by a very special art show. Water colors and prints by Boris Margo, well-known New York artist, will be on exhibition in the Brick Corridor for two weeks, beginning June 14.

At the instigation of your editor and one or two of Margo's pupils who live in this vicinity, he was persuaded to conduct a creative art seminar in Boston for a few weeks last fall. Several MGH-ers were members of the group. When he departed for Orlando and Louisville to give similar courses last winter, he left a sizable collection of his paintings in the custody of your editor for safe keeping. As the time approached for him to take the paintings to Provincetown, where he spends his summers, it seemed a pity that more people could not enjoy these paintings while they are still here, so we secured Margo's permission for the exhibition.

Examples of Margo's work are in the permanent collections of the Museum of Modern Art, the Metropolitan, the Whitney, the Chicago Art Institute, the Philadelphia and Brooklyn Museums, the Rosenwald Collection, the United States National Museum, New York Public Library, the Smithsonian Institution, and many art collections of universities, colleges, and private individuals. Locally, other Margos may be seen at Margaret Brown's Gallery on Dartmouth Street.

The paintings will be changed every few days so that as many of the pieces as possible may be shown.

THE NEWS

No. 103 Boston, Mass. July and August 1951

DR. JAMES HOWARD MEANS,

CHIEF OF THE MEDICAL SERVICES OF THE MASSACHUSETTS GENERAL HOSPITAL

1923 – 1951

In order adequately to present the important contribution made by Dr. Means to the Massachusetts General Hospital, a brief historical introduction is essential. This hospital has happily been blessed, since its beginning in the early years of the last century, with many of the community's ablest and most devoted administrators, physicians, surgeons, nurses, and other specialists and personnel too numerous even to classify. It is indeed a community in itself with a personality all its own.

In the first century of its existence the hospital needed or at any rate was able to secure, with rare exceptions, only part of the time, activity, and thought, and then often very brief and fleeting, of those on its staff. As it grew and as medical knowledge increased it became essential to add to the staff full-time workers who were willing to sacrifice careers in private practice in order to devote all their thought and energy to some phase of the hospital service, be it administrative, clinical, research, or teaching. This development has come into full blossom today, a generation after the seeds were sown by such leaders as David Edsall, Richard Cabot, and Frederic Washburn. Full-time chiefs of the medical and surgical and certain special services, such as those of pediatrics, roentgenology, and pathology, a full-time staff of social service workers, and full-time researchers have established themselves as vital cogs in the machinery of the hospital community.* And as a result, the value of the hospital has been enormously enhanced, since happily at the same time the large staff of part-time workers has also grown in numbers and usefulness, bridging the gap that might otherwise separate the hospital itself from the citizenry and community for which it exists.

One of the very first of these full-time workers on the medical staff, who is now completing a long, useful, and devoted career in such service on June 30, 1951, is Dr. James Howard Means who followed Dr. Edsall as the second single Chief of the Medical Service in 1923. Prior to Dr. Edsall's own appointment in 1921 as the first single chief, there had been two chiefs, one for each of the two medical services, East and West, including such teachers of the older members of the staff as Drs. Shattuck, Cabot, and Lee.

Dr. Means was born in Dorchester, June 24, 1885 and after graduating from Noble and Greenough's School and Harvard College entered the Harvard Medical School in 1907 where he finished four years later the top man in his class with a grade of 90.49 percent. Then followed an East Medical internship, work with Dr. Benedict at the Carnegie Nutrition Laboratory, and study abroad in Copenhagen under August Krogh. In 1912 Dr. Edsall had arrived to take over the task of developing medical research at the hospital. This involved the setting up of laboratories and the establishment of new posts such as a Medical Resident, the first of whom was Dr. Walter W. Palmer, later Bard Professor of Clinical Medicine at Columbia University. In 1913 Dr. Means was appointed Walcott Fellow and in the spring of 1914 he set up the Basal Metabolism Laboratory under the Out-Patient Amphitheatre. There he began his notable life-long studies of the thyroid gland and its diseases. During World War I he served abroad, first as medical officer with Base Hospital No. 6 and then as adjutant there and later as administrative officer in England.

On this background of training and with an innate administrative interest and ability it was natural that Dr. Means should be appointed chief of the medical services and Jackson Professor of Clinical Medicine when in 1923 Dr. Edsall relinquished his post at the hospital to become full-time dean at the Harvard Medical School.

With extraordinary patience, wisdom, and skill Dr. Means has through the years directed the medical service, maintaining a fine balance between the broad field of internal medicine and the specialties in practice, research, and teaching. Thus the workers in endocrinology, gastroenterology, cardiology, and other branches of internal medicine have all had their share in the general visiting service in wards and out-patient department and have gathered weekly to attend the instructive Medical Grand Rounds. This successful division of labor and of opportunity brought renown to the old hospital, attracted many students and visitors from far and near, and set an example which was followed by many sister institutions.

Dr. Means, himself an able and eager worker in clinical research, constantly stimulated his colleagues to study not only problems that arose in the daily care of the sick but also basic principles, frequently in collaboration with scientists in the fields of physiology, pharmacology, chemistry, physics, and engineering at Harvard and at the Massachusetts Institute of Technology. Many volumes of medical papers and longer monographs have been published by members of the medical staff during the term of service of Dr. Means, and among them can be listed articles of historic importance presenting new discoveries related to etiology, diagnosis, and treatment. It was Dr. Means who fostered for many years, almost single-handed, the metabolic research ward, Ward 4, where critical clinical tests revealed the answers to many medical problems of the day. And now there has been added to the hospital the new Medical Research Building, the culmination of long years of hopeful planning by Dr. Means and his associates.

In closing this brief historical summary of the vital contribution that Dr. Means has made to the Massachusetts General Hospital may I express both for his older colleagues who include me and also for the younger members of the Medical Staff, and indeed for the entire hospital community, our gratitude and affection for what he has meant to us through the years, and the wish that he may have many more happy and useful days ahead.

Paul D. White, M.D.

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THE NURSING DEPARTMENT

A PROGRESS REPORT TO THE STAFF

Where are all the graduate nurses? What has happened to our supply? What is the Nursing Department doing about this shortage?

When so much is being said about the need for nurses, it may be a surprise to many members of the MGH family to learn that the Hospital employs almost as many graduate nurses today as at any other previous time, except in the spring of 1950. These nurses will not be found on all the wards, but they can be found in the Blood Bank, the Intravenous Service, the Central Supply Room, the Operating Rooms, on the Research Ward, the Psychiatric Ward, the Isolation Floor, Bulfinch 3, on four floors at Baker where students are not assigned, and teaching in the School of Nursing. Six graduate nurses will be found covering the assignments which five carried before the hours were reduced from fifty-two to forty-four a week. There will be three night nurses assigned to night and evening positions that were filled by two before patient service was accelerated by early ambulation and discharge. But the graduates are here. The situation at M.G.H. follows the national pattern. The problem is one of demand and distribution rather than shortage.

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* The oldest in point of service of all the hospital full-time workers are, of course, the nurses and the housekeeping staff who necessarily had to function from the very beginning.

The answer to the Hospital's need for nurses has been sought in two ways: through changes in the School program, and through modifications in the plans for Nursing Service. A new program for the School of Nursing was introduced in the fall of 1948. Graduation Exercises for the 104 members of the first class in this experimental program were held on June 15. The primary aim in the experiment was to determine whether or not a bedside nurse could be prepared in less than three years' time. Because the State law in Massachusetts, and in most other States, requires a minimum of three years for all registered nurses graduating from a hospital school, the program was divided into two units: an educational period of twenty-eight months, during which the student meets all State requirements in terms of class content and clinical practice; and an internship of eight months, during which the student has opportunity to develop skill in patient care, and to become oriented to the responsibilities of graduate nursing service. In acknowledgment of the large amount of service given to the Hospital by the nurse intern, she receives a stipend of $30 per month. Thus, in her last year she may have a small measure of financial independence.

Since this new program began, the enrollment of the School has increased from 241 to 387—a gain of 60%. Recruitment has been carried on actively in spite of the growing number of applicants. Applications for fall classes now outnumber possible admissions five to one. In the spring the ratio is usually three to one. As against the rate of over 30% annual drop-outs from schools of nursing in the country as a whole, our loss for 1950 was 6.5%.

Such an increase in the number of students, combined with the acceleration of the teaching schedule, has aggravated the need for more housing, teaching, and recreational facilities. Ninety applicants have been accepted for September 1951—the maximum number which can possibly be accommodated in our classrooms. As registration of the incoming class precedes graduation of the September 1951 class, it is impossible to find rooms enough for the entire School. As in 1950, we shall again give housing allowances to seniors who will move out into nearby apartments in August.

The Coordinated Program conducted by Radcliffe College and the School of Nursing is growing slowly. In the fall of 1950 the Simmons College School of Nursing affiliated with the Coordinated Program. The total collegiate group at the School of Nursing during the summer of 1951 will be 76 students, 36 of whom will live at Simmons College. Twenty-seven will remain at M.G.H., after the summer session is over, for their two years of clinical experience.

Space for student activities is also a problem. The art classes use the classrooms. The Glee Club and the lecture groups gather in the Walcott or Thayer living rooms. The basketball team, for lack of a gymnasium at home, goes to the Peabody Settlement House. The student newspaper staff has a corner in the Walcott House boiler room. The Senior Class despairs at the cost of the Peabody Playhouse when their annual play is staged. The Student Organization meets in the Moseley Rotunda, for no other room is large enough to accommodate the membership, in spite of the fact that many will be absent and on the wards for evening assignment. Only the bimonthly Friday night informal dances seem always to find an appropriate space in the Walcott House living room.

For housing facilities there is hope. Funds are available to begin the first unit of a nurses' residence in the fall. Whether enough money can be secured to include classrooms and adequate space for recreation in the second unit to be built is still a question of great concern.

One answer already made to the shortage of nurses is a larger number of graduates from the School with a patient-centered curriculum designed to prepare young women for the practice of nursing in the shortest period of time consistent with good nursing education.

A second answer to our problem is being sought through a variety of plans. Advertising brought no employable nurses. Constructive publicity did have a very definite effect on the numbers of nurses, licensed attendants, and aides who applied. But the supply of nurses which more than compensated for resignations between January and March disappeared entirely in May.

In 1941 a typical Baker floor staff for twenty-four hours was comprised of 17 graduate nurses (including 2 head nurses), 2 second or third year student nurses, 1 secretary, 2 ward helpers, and 2 or more orderlies. In contrast today, with the shortened hours, there may be 6 graduate nurses (including 2 head nurses), 1 nurse intern, 2 second year students, 6 students who have been in the School for 8 months, 1 secretary, and 8 aides (including 3 nursing orderlies). Or, there may be a total of 10 graduate nurses, 1 secretary, 3 licensed attendants, 3 student attendants, 7 aides (including 3 nursing orderlies), and 3 ward helpers. The General Hospital wards have shown similar changes.

Hospital aides were introduced in the General Hospital five years ago—young men and women trained briefly, as a group in the classroom, in simple nursing techniques and then supervised in their practice on the wards. This training program has continued constantly, until today aides are employed in all divisions of the Hospital and for many different types of work. In addition to assisting with patient care, aides have replaced staff nurses in the Central Supply Room. They have relieved a small percentage of the nurses on evening and night assignments. They are responsible for the care and sterilization of equipment in utility and treatment rooms, and "suction" rooms. In the General Hospital a small corps of men aides have been taught to scrub, to relieve or supplement nurses in the Operating Room as the need may arise.

Before 1941 the trained attendant was found to be a valuable member of the Baker nursing personnel. But trained attendants either felt insecure on the active Baker floors or the MGH personnel policies did not meet their needs, for the number remained small. In November 1950 the team plan for nursing care was introduced at the Baker. In April 1951 an affiliation was begun with the Household Nursing Association, in which the student attendants are sent to the Baker Memorial for 13 months of training in bedside nursing. Since the first of the year the number of graduate licensed attendants has risen from 7 to 27. This group, with a definite occupational interest and training, promises to be more stable than untrained personnel whose interests are easily diverted to industry.

The head nurse is the nursing key to good patient care. But her assignment has been so changed by trends of the past few years that she often finds her day too short for time to spend with patients or to supervise personnel in the giving of patient care. Assignment of personnel must be carefully planned when all members of the group cannot carry the same functions. More hours must be spent at the desk when the ward becomes a functional unit of the Hospital's accounting system. More doctors expect the head nurse to carry increasing responsibility for medical orders. It would be interesting to have prewar figures for contrast to see how medical changes have affected the head nurse's activities today. On the large Baker floors it is not uncommon to have as many as 77 doctors, by actual count, come to a floor between 7 A.M. and 7 P.M. to see patients. It is also not uncommon to have each of 2 members of a visiting surgical team rewrite a patient's orders within that same 12-hour period. When such a floor is fully occupied there may be as many as 6 to 7 discharges, an equal number of admissions, 3 to 4 operations, 3 to 4 patients prepared for operation, and 7 to 8 patients sent to X-ray—all within a 12-hour period.

Last fall assistance was secured from the United States Public Health Service for a study of head nurse functions. Four General Hospital and two Baker floors were studied. A report on this study will be published shortly. It shows a disproportionate amount of time spent on clerical activities, too little time available to know patients or plan the administration of the ward, and a shocking number of unnecessary interruptions. All of us had known most of these facts before the survey was made, but the head nurses who were studied and others who shared in the tabulations have been stimulated to seek ways whereby the head nurse can be freed to do the work which only she can do.

The first change to be put into effect was the introduction of the team plan. In the team plan a staff nurse or a nurse intern acts as leader for a group. The group may include a licensed attendant, a student attendant, or a nursing orderly. Under the guidance of the nurse the team cares for a group of patients, each member of the team carrying out the functions for which he or she is prepared. The team leader plans with the head nurse, interprets to the team members the plan for care, and works with them or supervises as the need may be. She cares for the more critically ill or the emotionally disturbed patients in the group, gives the medicines, does the treatments which cannot be done by auxiliaries, and teaches the patients whatever is appropriate.

This plan relieves the head nurse and enables her to give more oversight to the ward activities in general and to patient care in particular. The plan stimulates the staff nurse and makes her work more interesting because she, too, has opportunity to know her patients better. It offers more security to the auxiliary workers, some of whom have chosen to work at M.G.H. because the team plan was in use. Most important of all, the patients have expressed appreciation for the continuity of care and the interest shown in their individual welfare which the team provides.

But the answer to the shortage of nurses is not to be found merely in the number of workers or their assignments. A full-time supervisor is now assigned to investigate needs for new equipment, methods of improving the care and use of equipment, and means for reasonable standardization in all divisions of the Hospital, all of which can bring significant economies and facilitate patient care. Our next need is for a worker who can study our methods of nursing care and explore ways in which they, too, can be simplified and improved, to the end that there will be more time for patient care.

Better care of the patient and enough of it to keep all desired beds open is the only justification for seeking more graduate nurses. A well-organized plan for nursing care, time and the facilities with which to give good patient care, a reasonable hour schedule, a stimulating in-service education program, and active interest in the nurse and her problems are the major factors which hold graduate nurses. From these factors Nursing at M.G.H. has drawn its objectives for 1951.

Ruth Sleeper, R.N.,
Director of the School of Nursing and Nursing Service

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. LeRoy A. Schall, Chief of Oto-Laryngology, was elected President of the American Board of Oto-Laryngology at the Board's May meeting in Richmond, Virginia. Dr. Schall had been serving as the Board's Vice President.

Dr. Parker Heath, Director of the Pathology Laboratory, read a paper on "Iris tumors" at a meeting of the American Ophthalmological Society, held the week of June 5 at White Sulphur Springs, West Virginia.

Dr. John J. Shea, former Resident in Oto-Laryngology, now serving with the armed forces, is stationed at a United States Naval Hospital in Bainbridge, Maryland. Dr. Shea writes:

> The hospital is being rebuilt to hold about 1,000 and there are 80 beds assigned to EENT, about half of which will be ENT. I am the Chief of Service, with a full captain over me in charge of the eye department and the EENT section as a whole. There are two operating rooms for ENT, about the size of the smaller ones at the Eye and Ear. The equipment is not only the best, but is all that my mind can think up. Every effort is being made to make it a complete department in every way.

On June 6 Miss Florence Morrissey, R.N., former Chief Anesthetist at the Infirmary, was honored by Drs. Mosher, Schall, and Meltzer for her years of outstanding service.

Miss Morrissey came to the Eye and Ear in August of 1919, and when she retired in May had completed 32 years of work at this hospital. Presenting Miss Morrissey with a watch and a check, Dr. Mosher said:

> I have been asked by the Staff of the Infirmary to present you with this check and this watch, in appreciation for a job well done, over (if you will permit me to say it) many years. It is a great pleasure to me, and I feel it a high compliment to be asked to do this.
>
> I remember that you etherized me once, and I went under knowing that a friendly hand and a fully competent one held the ether cone. That was before the machine age in anesthesia. I was told afterwards, but not by you, that I was a bad patient, like most doctors.
>
> The check, I hope, will help a bit with the high cost of living. As the watch tells you present-day time, now and then turn to the memories of olden days. They should give you much pleasure and satisfaction. All of us owe you many a smooth operation. Tact, skill, and the human and sympathetic touch were yours in abundance.

The Retina Foundation, which is affiliated with the Infirmary, opened its doors on May 19 at 30 Chambers Street, Boston. The Foundation will conduct studies into the causes and more effective treatment of retinal separation, in close conjunction with the Infirmary's Retina Service.

The General Executive Committee, at their meetings on May 9 and 23, and June 6, voted:

To accept the resignation of Dr. Frederic C. Bartter as Clinical and Research Associate in Medicine, in order that he may take up his new assignment with the United States Public Health Service;

To grant Dr. N. Joel Ehrenkranz leave of absence for the month of June. He reported for active duty with the Army on June 1;

To promote Dr. Lyman C. Wynne to the position of Resident in Psychiatry, beginning July 1.

To appoint:

Dr. Jacques Arlet as Clinical and Research Fellow in Medicine, to begin July 1;

Dr. John A. Benson, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. William R. Brewster, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning July 1;

Dr. William C. Ebeling as Clinical and Research Fellow in Medicine for one year, beginning July 1;

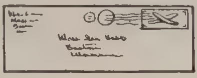
Dr. Margaret S. French as Clinical Fellow in Psychiatry for the term beginning July 1;

Dr. Paul Maurice as Research Fellow in the Children's Medical Department for the period June 1 to September 1;

Dr. Leon W. Miller as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Jean-Claude Roucayrol as Research Fellow in Surgery for the period May 14 through June 15;

Dr. Marvin M. Wasserman as Clinical Assistant in Medicine for the period May 15 to December 31, to work in the Out-Patient Department.



New address:—

Dr. Enrique L. Matta, Jr. (*gr. stud. a.* 1951), Department of Pediatrics, Jackson Memorial Hospital, Miami, Fla.

Brief bits:—

Dr. Edward B. Benedict, Endoscopist at M.G.H., discussed the following papers at the annual meeting of the American Gastroenterological Association, held in Atlantic City on June 8 and 9: "Experience with the operating gastroscope", by Drs. Wirts, Carroll, and Breckenridge; "Differentiation between benign and malignant disease of the gastric antrum", by Drs. Flood and Hennig; "The clinician and gastroscopy", by Drs. Alessandri and Lerner.

Renewal to his subscription gives the rank of Lieutenant Colonel for Frank A. Mantz, Jr. (*res. fel. P* 1950).

Dr. Joe V. Meigs, Chief of Gynecology on our staff, and Mrs. Meigs flew to Europe on June 9 and arrived in Geneva the following day. Dr. Meigs attended the meeting of the Congrès International Jubilaire de la Société Francaise de Gynécologie in Paris from June 22 through June 30. He presented a paper on the early diagnosis and treatment of cancer of the cervix at the meeting on June 26. While in Europe Dr. and Mrs. Meigs met Dr. John McL. Morris (*ES* 1941) and his bride. Dr. Morris was granted a fellowship for a year through the American Cancer Society and is at the Radiumhemmet at Stockholm at the present time. The Meigses will also visit Belgium, Germany, and Holland. They will fly home from Paris on August 9.

Mr. Raymond J. Reynolds has been appointed Administrative Resident at the hospital.

Dr. Paul S. Russell, Jr. (*S* 1949) was called to active duty in the U. S. Air Force on June 1.

Dr. Robb H. Rutledge (*S* 1950) signed out on June 4 to begin duty with the U.S. Air Force.

Dr. Robert S. Schwab, Associate Neurologist at M.G.H., was guest speaker at the meeting of the North Pacific Society of Neurology and Psychiatry, held in Victoria, British Columbia, on April 20 and 21. His subject was "Electroencephalography in clinical practice".

Dr. Arthur L. Watkins, Chief of Physical Medicine on our staff, addressed the New York State Medical Society in Buffalo on May 2. The subject of his paper was "Physical Medicine for the neurologic patient".

* * *

Dr. Viets called our attention to the following notice which appeared in the May 5 issue of the *Journal of the American Medical Association.* It concerns Dr. Harold W. Smith (*SS* 1903), and reads:

> The Naval Medical School, Bethesda, Md., has created an annual lectureship to be called the Harold Wellington Smith Lecture in honor of Rear Admiral Harold W. Smith, U.S.N., retired, former commanding officer of the Naval Medical School and the Naval Medical Center. Admiral Smith entered the Navy in 1904 after three years of residency in Massachusetts General Hospital. He served with distinction in many important positions until his retirement from active duty in 1946. He received the Legion of Merit for his achievements in medical research. Admiral Smith is now living at the Westchester Apartments in Washington.
>
> The physician selected to give the first lecture in this annual series, on April 27, was Dr. Hans Selye, director of the Institute of Experimental Medicine and Surgery, University of Montreal, Montreal, Canada. The surgeon general of the Navy, Rear Admiral Lamont Pugh, spoke on Admiral Smith's contributions to medicine.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted, though less frequently than heretofore. It would save your editor considerable time and trouble if you would remember to include that information.

In answer to a common question which has arisen, your title should be classified with respect to the subject matter and not under the hospital department with which the author is affiliated. As an illustration—an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The deadline date for each issue of THE NEWS is the 12th of the preceding month.

All requests for reprints are to go directly to the individual authors, and *not* to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Anesthesia

Bunker, J. P., Beecher, H. K., Briggs, B. D., Brewster, W. R., and Barnes, B. A.
Metabolic effects of anesthesia. II. A comparison of acid-base equilibrium in man and in dogs during ether and during cyclopropane anesthesia.
J. Pharmacol. & Exper. Therap. 102:62-70.

Cohen, E. N., and Beecher, H. K.
Needless use of a narcotic in preanesthetic medication. (Abstract)
Federation Proc. 10, Part 1:288.

Goodnow, R. E., Beecher, H. K., Brazier, M. A. B., Mosteller, F., and Tagiuri, R.
Physiological performance following a hypnotic dose of a barbiturate.
J. Pharmacol. & Exper. Therap. 102:55-61.
Same (Abstract)
Federation Proc. 10, Part 1:299.

Keats, A. S., and Beecher, H. K.
Respiratory effects of some new analgesics. (Abstract)
Federation Proc. 10, Part 1:313.

General Medicine

Hardy, H. L., Bishop, R. C., and Maloof, C. C.
Treatment of lead poisoning with sodium citrate.
A.M.A. Arch. Indust. Hyg. & Occup. Med. 3:267-278.

General Surgery

Churchill, E. D.
Fifty years of medical progress: Medicine as a science: Surgery.
New England J. Med. 244:799-805.

Cope, O.
La chirurgie va-t-elle abandonner a la medecine le traitement de l'hyperthyroidie.
Semaine d. hôp. Paris 21:887-892.

Laboratory Science

Waksman, B. H.
Significance of complement in tuberculin cytolysis. (Abstract)
Federation Proc. 10, Part 1:423.

Waksman, B. H., and Morrison, L. R.
Tuberculin type sensitivity to spinal cord antigen in rabbits with isoallergic encephalomyelitis.
J. Immunol. 66:421-444.

Ophthalmology

Beetham, W. P.
Diabetic retinopathy in pregnancy.
In Tr. Am. Ophth. Soc., vol. XLVIII, New York, Columbia University Press, pp. 205-219.

Cogan, D. G.
Applied anatomy and physiology of the cornea.
Tr. Am. Acad. Ophth., Mar.-Apr.:329-359.

Cogan, D. G., and Donaldson, D. D.
Experimental radiation cataracts. 1. Cataracts in the rabbit following single X-ray exposure.
A.M.A. Arch. Ophth. 45:508-522.

Dunphy, E. B.
Classification of diseases of the cornea.
Tr. Am. Acad. Ophth., Mar.-Apr.:382-386.

Oto-Laryngology

Mangiaracine, A. B.
Modern bacteriology as an aid to the Oto-laryngologist.
Ann. Otol., Rhin. & Laryng. 60:230-234.

Mangiaracine, A. B.
Oral moniliasis following antibiotic therapy: A warning.
New England J. Med. 244:655.

Pediatrics

Zygmuntowicz, A. S., Wood, M., Christo, E., and Talbot, N. B.
Studies of urinary 17-ketosteroid excretion by means of a new micro-chromatographic fractionation procedure.
J. Clin. Endocrinol. 11:578-596.

War Medicine and Surgery

Churchill, E. D.
Selective evacuation vs. hitchhiking.
J.A.M.A. 145:841.

Books

Benedict, E. B.
Endoscopy, as related to diseases of the bronchus, esophagus, stomach, and peritoneal cavity.
Baltimore, Williams & Wilkins Co.

Schwab, R. S.
Electroencephalography in clinical practice.
Philadelphia, W. B. Saunders Co.

* * *

In our June issue we included as many of the addresses given at the Research Building dedication exercises as space permitted. We continue here with those speeches.

The following address was delivered by Dr. W. Palmer Dearing, Deputy Surgeon General, United States Public Health Service:

> There are few more heart-warming experiences than to share a moment of triumph with the institution that helped shape one's career. Coming to Massachusetts General Hospital today, I feel that real personal gratification. And this is not only because the occasion sets a new landmark in the forward march of science and public health, but especially because it gives me a chance to be with the people who know me best—among them the hospital's distinguished director, Doctor Dean Clark.
>
> This new institution, dedicated to the science of healing, will be a landmark for future surveyors who seek to chart the course of medical science or medical practice, of public health or social action. For the Research Building itself is a symbol: A symbol of Massachusetts General Hospital and its long history, its high traditions, and higher aspirations; a symbol of man's "divine discontent" which drives medical science onward; a symbol of democracy wherein all the people work together for a common good.
>
> The significance of the Research Building to the growth of Massachusetts General Hospital and to medical science is apparent to all of us. I would like to focus our attention, therefore, upon a more spiritual significance, a significance we too often take for granted: namely, this institution as a symbol of democracy. Democracy stands challenged today by vast forces which threaten not only our ideals and institutions, but our very lives. Only in the successful meeting of that challenge can our country preserve a free science, a free society, or even the bricks and mortar of this building!
>
> Massachusetts, along with three other States of the Union—Virginia, Pennsylvania, and Kentucky—proudly bears the title "Commonwealth". That title, too, is a symbol of this Nation's earliest commitment to the ideals of democracy, for "the Commonwealth" was Oliver Cromwell's choice to replace "kingdom" when he came to power in England—at a time when the Massachusetts Bay Colony was less than 30 years old. "The Commonwealth" expresses admirably the sum total of the people, the resources, the social and political institutions that make up a State. "The Commonwealth" also suggests explicitly the sharing of responsibilities and privileges which we consider basic to citizenship in a democracy.
>
> The whole life story of Massachusetts General proclaims it to be an institution of the

commonwealth. The local commonwealth of Boston and nearby communities began it. They and the commonwealth of Massachusetts built it, nourished it, and shared in its problems and triumphs. But there has also been a larger commonwealth of citizens in other States and communities who helped to build and support, and who benefit from this institution.

Because of this ever-widening participation, Massachusetts General Hospital is truly a national and international institution. And this is so not simply because the Federal Government has contributed to the hospital's most recent development. It is so because the sick and broken have come here from far and wide to be restored. It is so because this hospital is *Alma Mater* to thousands of sons and daughters who carry to all corners of the world the skills, the ideals they acquired here. It is so because great revolutionary discoveries and developments have emanated from here, lighting the way to swifter, surer alleviation of suffering and to better health for all people everywhere. Today the area of commonwealths served in some way by this institution encompasses the whole of our country, and indeed the greater part of the world..

The outreach of a social institution is commensurate with the diversity of its support and the spread of its services. Without a wide diversity of support and participation, the conception, gestation, and delivery of the hospitals's newest baby—the Research Building—could not have taken place.

It is true that the building and the distinguished work that goes on in it "belong" in an immediate sense to the people of Massachusetts who have contributed to the hospital's research program. But the housewife in a small mid-western town who responded to the appeal of a voluntary agency for the support of cancer research, for instance, owns a piece of a brick or a test tube in the Research Building. The riveter in an airplane factory in California or Connecticut, the farmer in Georgia or Kansas, the miner in Pennsylvania or Colorado who paid his Federal income tax also owns a piece of a brick, or perhaps even an Erlenmeyer flask!

It is this participation of the Federal Government in building this institution of the commonwealth that gives me the honor, as a public servant, of participating in this ceremony. For the housewives, riveters, farmers, miners, bankers, manufacturers, teachers, physicians, research scientists—the whole body politic of our country—through their representatives in Congress have placed on the Public Health Service the solemn responsibility of carrying out their wishes with respect to expanding medical research.

We in the Executive Branch of the Government undertake to administer the laws enacted by Congress so as to implement and strengthen the democratic principles of individual freedom and cooperative action. As the research scientist is humble before the unknown, so the public servant is humble before society—in many ways the greatest unknown of all. The scientist, himself, is a member of society, and must ever be aware that to him, also, public service is a sacred trust.

The basic problem in our democratic society is to secure effective participation of the people in their government. In a complex, mechanized civilization, a citizen in South Boston, or South Chicago, or Cimarron County, Oklahoma, may be just as remote from his government as is the Indian in the upper reaches of the Amazon. We may have to learn the traffic rules or the garbage collection schedule, but we do not really learn about our legal government—still less about our Federal Government.

Herein lies grave peril to our way of life, a peril which every public servant seeks to avert throughout the gamut of governmental responsibility. The solemnity of the citizen's trust has been well expressed by one of this Nation's greatest public servants, David E. Lilienthal. "I find it impossible," he writes in *Democracy on the march,* "to comprehend how democracy can be a living reality if people are remote from their government and in their daily lives are not made a part of it."

A highly industrialized, highly interdependent society of 150 million people requires a government commensurate in size and complexity with the society's problems. But "big" government is not an end in itself. It exists only to serve its citizens. Service is a local, individual thing. The Federal Government cannot serve effectively unless local government—the citizens of a community acting together—assumes the lion's share of responsibility for the community's own welfare.

For this reason the men and women in Government constantly seek ways to bring this reality to pass—to make democracy work. Obviously, theirs is only part of the task. If citizens do not equally seek to participate in their government, if they do not assume equal responsibility for making democracy work, the cause is lost at the outset. Cooperation between the citizen and his government is essential, but neither partner can take the role of "co-ing" while the other is left to do all the "operating".

We are living in an era of unrest, perhaps unparalleled in modern history. The impact of stress on the human organism is reflected in countless ways, not the least of which is the ambivalent attitude of some individuals and groups—toward government: on the one hand to expect government to be "all things to all men", and on the other to fear every action of government which is directed at solving urgent problems. Mr. Lilienthal warns us that "democracy cannot thrive long in an atmosphere of scorn or fear."

It behooves us then, both as citizens and as specialists in our chosen callings, to do our share in making democracy work. In its research programs, the U.S. Public Health Service, as a part of the national government, has been faced with this problem. We are responsible to Congress for proper distribution of substantial sums. Moreover, the competition for financial support of research is nation-wide —and intense. We must administer these funds so as to ensure all of the freedoms essential to scientific progress—including the freedom of institutions and scientists to plan and conduct their programs without interference. The democratic principle of broad participation by interested citizens from all parts of the country makes it possible to discharge this dual trust.

In the specialized area of medical research, Federal participation, through the Public Health Service, is linked back to society by our advisory councils. Congress has created seven such councils with a membership of nearly 100 scientists, physicians, educators, and leaders in public affairs who have no other connection with the Government. Every one of these councils includes non-technical public members. Every council has a rotating membership. So it is that citizens and universities, medical and dental schools, hospitals, and other institutions participate in their Government.

Our advisory councils have broad statutory responsibilities—not only for reviewing and recommending specific research grants, but further to assist the Public Health Service in shaping its policies and programs. The councils have thus played a decisive role in the development of our research grants and fellowship program, our aid to professional education in cancer, cardiovascular disease, and mental health, and our control programs in the same fields.

Grants for the construction of research facilities were authorized by the Congress because of the action of the National Advisory Cancer Council. The Council felt that such a program was essential to any fundamental advances in the field of cancer research. Subsequently, the National Advisory Heart Council adopted the same policy. As a result, your Government has contributed substantially to the construction of the Research Building we are now dedicating.

Many thousands of applications for research grants are received by the Public Health Service each year. A system of seventeen study sections composed of scientists from institutions located all over the country review these applications from the technical standpoint before the Councils consider them. The memberships on study sections also are rotating. The 250 men and women on these study sections also help us identify gap areas in medical research which need emphasis. Thus the Public Health Service research program belongs to our whole society.

The Public Health Service is not simply a passive partner in this enterprise. Nor is it simply a disperser of funds. Throughout its history it has been an active partner in many programs—beginning here in Massachusetts, when our first Marine Hospital served Dr. Benjamin Waterhouse as the first teaching hospital for Harvard Medical students. For many years physicians and other personnel of the Service have worked at Massachusetts General, in cooperative projects.

Let us remember, then, that cooperation between citizens' institutions and government is a dynamic factor in democracy. In the intricate and ever-broadening field of medical research, no one source of support, no one type of institution will solve the health problems of the human race. Diversity of support ensures diversity of investigation, diversity of approach —and maximum results. As each research group has its particular problems to solve, so each institution has its unique contribution to make—the technical service of the Government no less than the voluntary agency or institution.

The splendid laboratory we are dedicating today has risen from such cooperation: Massachusetts General Hospital planning, building, operating; the people of this country, directly —or indirectly through their Government—aiding. Our democratic freedoms ensure that the advances made here will bless with better health and healing the people of this country and round the world. For this is indeed an institution of the commonwealth and, as such, an institution for the common health.

Recent gifts to the Archives Department:—

From Miss Agnes J. Chatfield of Rutland, Mass.—a copy of the 1st Edition of Bowditch's *History of Massachusetts General Hospital,* published in 1851.

From Dr. Henry C. Marble—2 glass transfusion tubes, used in the early 1900's.

From Dr. A. William Reggio—a framed colored reproduction of a picture of the Bulfinch Building used in Hinton's *History and topography of the U. S.,* published in England in 1830. This copy of the picture hangs in the Director's Office.

From Miss Mary Channing Rogers, great-granddaughter of Paul Revere—4 silver spoons which belonged to Sarah Clough, "for many years a valued and confidential domestic in the family of Joseph W. Revere, Esq., of this city." This appraisal of Miss Clough is from Bowditch's *History of the Massachusetts General Hospital.* Bowditch says further that Miss Clough "bequeathed to this institution the residue of her property, the little savings of her own personal labors. The amount which has been paid to the Treasurer, pursuant to this bequest, is $599.84. There never has been a donation, whatever its magnitude, more honorable either to the donor or to the institution." Miss Clough's name is engraved on the backs of the spoons. Miss Anna P. Revere, a member of our Ladies' Visiting Committee and a cousin of Miss Rogers, brought the spoons to the Archives Department.

Miss Ruth Sleeper, R.N.,
Director of the School of Nursing and Nursing Service

Dr. Churchill received this interesting letter from Lt. Robert W. Hopkins, MC, USNR (*S* 1948), and passed it on for all of us to enjoy.

> We've been up here in the North Country for a month and a half now. There is little excitement but much of interest. Unfortunately, most of what we eat, see, and do is classified (though I doubt if it is effective), and any detailed general description is forbidden.
>
> Thus far I have lost no hands or feet from frostbite, nor has anyone else. While the first thing one thinks about in Arctic medicine is frostbite, it is virtually no problem at all here. Adequate protection is almost second nature to all personnel here, and Chicago and Korea outdo us by far in the production of cold weather injury. This is really a rather healthful climate.
>
> The medical set-up for the district is very interesting. There is a doctor provided by the government to care for the native population of the region. Each fall and spring (when it is usually well below zero) he hitches up his dogs and makes three or four trips, of several weeks each, around the area, tuberculin testing, inoculating with BCG, and seeing whatever illness he might run into in the scattered population.
>
> The one scourge of the area, and a difficult one to handle, is tbc. There is no available X-ray, no adequate facilities for isolation, no sanitary control, no streptomycin. Perhaps strangely, the diagnosis of pulmonary tbc is rarely made. It may be suspected, and hemoptysis is the leading cause for suspicion. But advanced or obvious disease of the lungs is apparently relatively rare, and the red bugs are not often seen in the sputum. They are apparently there and active, however, for many of the children have picked them up from the dirty floors, and the bacteria have lodged with frequency and tenacity in lymph nodes and spines. The unfortunate victims usually have a definite kyphos and sometimes a paraplegia when seen. They are then packed into the "hospital" and encased in plaster for six months or more if they will tolerate it. Treatment is strictly by guess and by God—necessary, but rather a blind approach for those of us who take X-ray for granted.
>
> I had a good time covering for the local doctor while he was away. Like the old country doc in his sleigh, and with the wind and snow traveling at 30 to 90 m.p.h., I went to see a native infant who was sick with pneumonia. We country docs do deserve a bit of credit. Diagnosis isn't quite so easy in the sticks, and I was rather pleased when I substantiated mine the next day by throat smear—pneumococci probably smuggled into the area by one of us. The effect of penicillin was quite dramatic.
>
> I expect to be back in the middle of June and will drop into the M.G.H. as soon afterward as I can.

This nice note has come from Dr. Alphonso L. d'Abreu, Visiting Surgeon pro tem from January to March of 1951. His address is 58 Calthorpe Road, Edgbaston, Birmingham 15, England, and he writes:

> It was so kind of you to send me a copy of The News. I was delighted to receive it. It is really an excellent paper, and it makes me feel quite homesick for the Massachusetts General Hospital, where I had a wonderful time in an atmosphere of the greatest friendliness. I am asking my bank to arrange for the transport of some dollars so that I can become a subscriber to The News.

Dr. Clay received this letter from Dr. William D. Shorey (*ES* 1946). It bears the address American University of Beirut, Beirut, Lebanon, and says in part:

> Following a very successful trip we arrived in Beirut early in December, and after a month's orientation I took over the chairmanship of the Department of Surgery and the acting chairmanship of the Department of Gynecology and Obstetrics. The latter was a bonus, due to the illness of the Obstetrical Chairman, and between the two departments I have been quite busy.
>
> Beirut is a lovely town in a most beautiful setting, underneath the shadow of some high snow-capped mountains. It combines the Eastern and Western ways of living. We are very comfortably ensconced in our apartment near the hospital compound. On the 6th of February we had a baby boy who is doing very well.
>
> The types of patients seen here are extremely varied, with many congenital anomalies. It is really a marvelous opportunity to broaden one's experience and to obtain some insight into the problems of teaching and the administration of a department.

This report arrived from Lt. Adolph L. Gundersen (*a. res. S*).

> Date of Commission: 20 Nov. 1950.
> Active duty: 15 March 1951.
>
> To Chelsea Naval Hospital for indoctrination, where I was assigned to the General Surgical Service.
>
> Change of duty: To Naval Academy, Annapolis, Maryland, 21 April 1951 for Dispensary duty. My address here will be A. L. Gundersen, Lt. (j.g.), MC, USNR, Naval Academy, Annapolis, Md.

This letter will be of special interest to the rapscallions who were responsible for that pirated edition of The News which appeared a few months ago. The letter comes from Dr. Pierre E. P. Vandevelde, 12 Place Marguerite, Louvain, Belgium.

> Waves of the immense laugh produced by the "97A" issue of The News have even reached the small Belgium coast and could be registered, although attenuated, in the University Hospital at Louvain.
>
> Being editor in Louvain of a publication similar to your News, I would be very glad to receive, if possible, a sample of your "97A" issue.
>
> I am very proud to be coming to the M.G.H. next January as Clinical and Research Fellow in Surgery.

THE NEWS

No. 104 Boston, Mass. September 1951

MEDICAL SERVICE AFFAIRS

It was three years ago that a report on Medical Service affairs was last made in this column. At that time we were in an expansive mood, looking for greater spheres of usefulness. The hospital was searching for a successor to Dr. Faxon, and hoped to secure a medical statesman with special understanding of the hospital's opportunity to serve the whole community. A year later it succeeded, brilliantly, by obtaining Dr. Dean A. Clark. Plans were being made to bring outlying hospitals into relation with our medical center through rotation of house staff, this to be accomplished by increasing the number of our house officers still farther. Then, a year ago the blight of war again descended upon us. A small, but very bloody war, and the fear of a greater one has again occasioned the syphoning off of our house staff to do their duty in the armed forces. Planning for greater community service goes on, but sometimes action has to be deferred. The plans for a Family Health Service involving Harvard Medical School and Massachusetts General Hospital under Dr. David D. Rutstein's leadership is one of the most promising projects, and we hope that despite the war threat, it can be accomplished. A rotation of an Assistant Resident through the Salem Hospital, begun in 1950, has proved most successful. We hope it can be continued, but that all depends on how many doctors the armed forces allow us.

In the area of teaching no important curricular changes have been made, but we believe that the opportunities to learn are constantly being widened. The presence in our wards of visiting physicians of varied skills and viewpoints cannot but enrich the educational process. We have, for example, internists in private practice, full-time teachers and investigators in medicine, and preventive medicine people, all doing their trick of ward duty. Each has something peculiarly his own to offer. This variety is bound to be provocative to students and house staff. For one month, October 1949, we had a distinguished professor of medicine from Leiden, Holland, Andries Querido, serve as physician pro tempore on one of our wards.

There is abundant opportunity for further improvement in our educational program. If the Harvard Medical School would modernize its curriculum, some constructive changes could be made here at the Massachusetts General Hospital, as well, we believe, as in the other teaching hospitals. If the ward clerkship, for example, could be offered in the third year, students would be more advanced at the beginning of the fourth, and could be given more responsible work in clinics, field, or laboratories, which their greater experience would enable them to handle effectively.

The postwar research crescendo culminating in the opening of the Research Building has, of course, been an all hospital affair. The Medical Services, however, have played an important role in it. In the new quarters those working in the fields of cancer, arthritis, and heart disease will have the most *de luxe* laboratory facilities and equipment imaginable. They must take care that they don't go soft in them.

Some of our medical investigators must carry on in less sumptuous, though adequate, environments — some in the Domestic Building, some in the attic of the Bulfinch, some in the Bulfinch cellar. The last mentioned, now housing the research laboratories of the thyroidological group, is the only really unsalubrious spot in the lot. The gradual infiltration by the laundry is the factor chiefly responsible for the undesirable quality of this territory. Laundry trucks, laundry smells, scientific research and patients visiting labs, make an admixture as unholy as that of the proverbial skunk at the lawn party. The writer, through the administrations of four Directors, has begged for relief from this nuisance, and they in turn have importuned the Trustees. But the net result of all these efforts, over a period of nearly thirty years, is that one Trustee has written a poem, an amusing poem, about the laundry, which thus far has had no other effect than to be amusing. However, we can still take heart in the fact that good work is being done despite these drawbacks. Also, the memory of an episode which occurred in the middle thirties has always been comforting. A physician visiting us from England, on being shown the thyroid research laboratories remarked, "Oh I say, thank God, at last I have found a lab in the States that doesn't stink of money!"

In the Out-Patient Department Dr. Earle M. Chapman has continued to render devoted service in improving the organization and arrangements. The dispensary principle introduced by Dr. Joseph S. Lichty in March 1949 has been continued, but the scene changed in March of this year. The sorting of patients was moved to the desks in the medical and surgical clinics, and dispensary type patients are there assigned to one of the Assistant Residents for prompt treatment. In the medical clinic the dispensary patients are saved both time and walking by having a cashier directly in the clinic. The charges now are $5 for new patients in the regular clinic, $2.50 for return visits, but only $1 for dispensary care. This does not mean that an inferior type of medical care is offered certain patients, but rather that patients with what seem to be trivial maladies can be cared for expeditiously but skillfully. Certain physical changes in the Out-Patient medical clinics quarters are also facilitating the sorting and care of patients.

Mention should be made of alterations affecting Ward 4. As has been recorded previously in THE NEWS, this ward on March 21, 1949 was named in honor of one of its chief benefactors "The Mallinckrodt Ward". Until May of 1951 a main corridor ran directly through this ward — an undersirable but unavoidable arrangement. Fortunately, lately in connection with the new Research Building it has been possible to construct a corridor which by-passes Ward 4 and provides a good entry to the Research Building, and incidentally greatly increases the peace and comfort of the patients in Ward 4 and also of the personnel at work there. Moreover, it is expected that presently the ward's capacity will be increased from ten to sixteen beds by converting into ward use the space vacated by laboratories to the east of it which now have been moved to the Research Building. These changes have been made possible by further generous gifts on the part of Mr. Mallinckrodt.

Thus the half-century mark finds the Medical Service going strong in its treble function of care of patients, teaching, and research, and the writer, who has found great happiness in administering its affairs since 1923, turns it over to his friend and successor, Walter Bauer, with a heart full of gratitude and the utmost confidence that under his leadership it will reach new heights of accomplishment.

J. H. Means, M.D.

[Dr. Means wrote the above article in June 1951, while he was still Chief of Medical Services. Since it was not received until after our July – August issue had gone to press, it could not appear in that number, as we had planned. We have given it to you now, at the earliest opportunity. *Editor*]

⁂

Dr. Mary A. B. Brazier, Neurophysiologist in the Departments of Psychiatry and Anesthesia at M.G.H., was reelected Treasurer of the American Electroencephalographic Society at the last annual meeting.

Dr. John A. Abbott, Assistant Neurologist on our staff, was re-elected Secretary.

FERTILITY AND STERILITY CLINIC

As an adjunct to the long-established Ovarian Dysfunction Clinic, the Fertility and Sterility Clinic was organized approximately twelve years ago in the Out-Patient Department, meeting on Monday afternoons throughout the year except in August. Here are seen those couples complaining of infertility, repeated miscarriages, habitual abortion, and, occasionally, marital problems relating to infertility. Throughout the year the Clinic is visited by doctors from this country and abroad who are interested in this field. Endocrinologists visiting Dr. Albright often study our methods of investigating infertility.

The scope of investigation includes a complete study of both the husband and wife, as it has been well established that in up to 40% of marriages the husband may be the factor in infertility. Approximately 60% of the husbands seen have lower than normal semen examinations, and approximately 13% of these husbands have complete azoospermia or absence of any sperm. The causes for this vary from obstruction due to venereal disease, obstruction due to congenital anomalies, exposure to toxic elements such as X-ray, and primary failure of the testis itself from endocrine causes or as the result of mumps orchitis bilateral.

Examination of the husband

The detailed study of the husband includes a complete history and physical examination, with attention to all systems. The physical examination is supplemented by at least one and frequently two semen analyses where the volume, sperm count, motility, and morphology are evaluated. Normal semen analysis should include two to six cc. of fluid, containing 60,000,000 or better spermatozoa per cc., 60% of them actively motile two hours after production, and 70% normal morphology.

In addition, basal metabolic rates are usually secured, and testicular biopsy is often indicated and performed. Urinary assays for follicle-stimulating hormone and 17-ketosteroid assay are routinely carried out in those men who have oligospermia or azoospermia.

The examination of the couple is not complete without including in the husband's record the results of the postcoital examination of the cervical mucus, which is a test to determine whether or not the spermatozoa survive in the cervical mucus of the wife at the time of ovulation.

Treatment of the husband

Even though the husband has a normal semen analysis it is frequently necessary to treat the individual on the basis of his habits, occupation, or exposure to noxious influences. These men are urged to omit tobacco and alcohol, get regular exercise, lose weight if they are obese, and gain weight if they are underweight. Spacing of intercourse in relation to the ovulatory time of the wife is advised. Occasionally, irrigation of the vas deferens relieves azoospermia, and occasionally epididymovasostomy restores normal patency to tubes previously blocked as the result of venereal disease.

In the handling of cases of repeated miscarriages or habitual abortion, it has been demonstrated that often the potential source of the difficulty lies on the husband's side. In these cases, even though a history and physical examination revealed no abnormality, and the semen analysis is normal, attention to the basal metabolic rate and blood count frequently reveals a marked lowering of the metabolism. When these men are treated with thyroid over a long period of time, the next pregnancy often results in a normal delivery. These patients are particularly grateful.

In addition to the diagnostic study of the infertile male, another large group of the male population under study consists of those with varying degrees of testicular dysfunction. These, also, are investigated in our Clinic by means of testicular biopsy and urine assay for follicle-stimulating hormones and 17-ketosteroids. A selected group of these patients who have been labeled with a diagnosis of eunuchoidism with negative follicle-stimulating hormone have shown on testicular biopsy immature testes which have never been stimulated. By treating these men with a combination of chorionic gonadotrophic hormone, methyltestosterone, and sometimes thyroid, we have been able to improve these men from complete azoospermia to an essentially normal semen specimen, and two of these patients have become parents. Two other patients, unmarried, have started with no sperm and have developed normal sperm counts. Over 560 testicular biopsies have now been studied with the cooperation of Dr. Palmer Howard, formerly connected with the Ovarian Dysfunction Clinic but now at the Oklahoma Research Foundation, Oklahoma City, and Dr. Ronald C. Sniffen of our Department of Pathology. From these cases, six papers have been published in the current medical literature.

Often these cases are seen in consultation with someone from the Psychiatric Department, the Urological Department, and the North End Diet Kitchen, to correct matters of a psychosomatic, a urological, or a nutritional nature.

Investigation of the wife

Wives complaining of infertility also receive a complete history and physical examination, with particular attention paid to the obvious signs of endocrine abnormality, the pelvic examination, and the nutritional status of the individual. Specific tests which are indicated include a test of the fallopian tubes for patency, frequently called the Rubin's test or insufflation of the tubes. This is carried out with carbon dioxide gas under pressure, and if two of these tests are unsuccessful a uterotubogram or filling of the tubes with an opaque medium, followed by X-ray studies of the uterus and tubes, is carried out. Another important test is the taking of a sample of tissue from the lining of the uterus or endometrium, as it is called. This procedure is called an endometrial biopsy, and allows one to state whether or not the individual has ovulated that particular cycle and whether the uterus is responding properly to the stimulation from the hormones released by ovulation. A third important test is a postcoital examination of the cervical mucus to determine whether or not the spermatozoa survive in the cervical mucus of the particular wife in question. Routine basal metabolic determinations are carried out, complete bloods, urine analysis, and blood Wassermann.

The patients are instructed in the preparation of a basal body temperature chart, measuring the morning temperature on a graph which allows one to determine whether or not ovulation is occurring and what time of the month it does occur. This enables the patients to select the proper time of the month for observation of the optimum time for fertility. Occasionally when the tubes have been demonstrated to be non-patent, the patients are admitted to the House for surgical investigation of this disorder. Occasionally when the studies indicate that the patients are suffering from anovulatory cycles, the patients are also sent to the surgical ward for exploration of the ovaries and reconstructive surgery.

The Clinic has suffered from the loss of Dr. Somers H. Sturgis, long connected with the Gynecological Service, who has recently transferred to the Gynecological Service of the Peter Bent Brigham Hospital. He supervised the rapid rat test for pregnancy in the Vincent Memorial Laboratory, handled those cases where culdoscopy was indicated, and helped on many of the difficult problems of anovulation.

At present the Clinic is testing the use of the Kidde insufflation apparatus for manometric control of the passage of carbon dioxide gas through the fallopian tubes. In the fall when the Clinic reopens, arrangements have been made to test the Weisman gynograph, which allows us to insufflate the tubes with carbon dioxide gas or to use a radio-opaque material, transferring from one to the other at will. This should be an advance in the diagnostic acumen of the Clinic.

Treatment of the wife

Routine treatment of the wife includes, of course, correction of known obvious defects, attention to diet, obesity, lack of thyroid, and nutrition. Cauterization of the cervix is used as therapy, and often a retrodisplaced or retroverted uterus is manipulated to normal position and held there by means of a Smith-Hodge pessary. The patients are instructed in the use of a precoital douche, which is said to have a mechanical cleansing action and increases the favorable alkalinity of the cervical mucus. A small number of patients are sent into the hospital for surgical maneuvers, varying from dilating an intact hymen or dilating a stenotic cervix, to exploratory laparotomy, with resection of ovarian cysts, occasionally tumors, and plastic surgery to the tubes. Fibroid tumors of the uterus are removed surgically.

When all the studies on both partners have been completed, the situation is summarized and a course of treatment is laid out for the couple.

Purpose of the Clinic

It is hoped that this brief report will stimulate other departments of the Hospital to refer to the Sterility Clinic those patients who are anxious to have children and those who have problems relating to reproduction. In addition to helping such patients to achieve parenthood, the Clinic is interested in studying problems of ovulation, testicular dysfunction, and other abnormalities of the reproductive life of the human being.

It is hoped that the time will come when the Clinic may add to its services those on marriage counseling, the spacing of children, and the improvement in hygiene of the married couple. Certain of these functions obviously depend upon changes in legislation of the Commonwealth of Massachusetts.

Under the guidance of Dr. Fuller Albright and Dr. Joe V. Meigs, facilities exist for those of the Resident Staff who wish to learn the diagnostic and therapeutic procedures related to the study of the infertile couple, to secure a firm groundwork in the modern investigation of infertility.

There is a crying need for a volunteer social worker or secretary who could devote time to taking a more detailed social and environmental history on these patients, and to teach them the mechanics of recording the basal body temperatures. No funds exist for the carrying on of this work. The services of all of the workers are voluntary. Contributions of any nature are welcome.

Fred A. Simmons, M.D.,
Head of Fertility and Sterility Clinic

The Board of Trustees, at their meetings during June and on July 13, voted:

To accept with regret the resignation of Dr. Lowrey F. Davenport, Assistant Physician, effective July 1;

To accept the resignation of Dr. Eugene Kennedy, Assistant in Biochemical Research;

To accept the resignation of Dr. Arthur H. Rosenbloom, First Assistant Resident in Pathology, effective July 1;

To promote Dr. Daniel C. Dawes to Assistant Psychiatrist;

To grant leave of absence to Dr. Vincent P. Perlo, Assistant in Neurology, until the end of his current appointment, with the understanding that he be reappointed to the same position in February 1952, with an extension of his leave during the time he is in service with the U. S. Army;

To grant leave of absence to Dr. Paul L. Sweet, Clinical Assistant in Dentistry, until the end of his current appointment, with the understanding that he be reappointed to the same position in February 1952, with an extension of his leave during his service in the U. S. Navy;

To grant leave of absence to Dr. Vernon Thomas, Assistant Anesthetist, from August 1 until the completion of his current appointment.

To appoint:

Dr. Louis Bakay as Senior Resident in Neurosurgery for the period July 1 – December 31;

Dr. Wilma J. Canada as Assistant Resident in Radiology, beginning January 1, 1952;

Dr. Abraham L. Finesinger as Assistant in Psychiatry;

Dr. Jordi Folch-Pi as a member of the Committee on Research;

Dr. Fairfield Goodale, Jr. as Second Assistant Resident in Pathology, to begin July 1;

Dr. Walter C. Guralnick as Dental Surgeon;

Dr. James P. Isaacs as Assistant Resident in Anesthesia for one year, beginning July 1;

Dr. Robert W. Mackie as Assistant Resident in Neurosurgery for the period July 10 – December 31;

Dr. Walter W. Point, III as Assistant in Medicine;

Dr. Frederick C. Robbins as Assistant to the Children's Medical Service;

Dr. Bertram Selverstone as Clinical Associate in Neurosurgery as of July 1, when he goes to the New England Medical Center;

Dr. William H. Timberlake as Assistant in Neurology, as of July 1;

Dr. James H. Townsend as a member of the Board of Consultation.

The Trustees also voted:

To put Dr. Raymond D. Adams in charge of the Electroencephalographic Laboratory;

To grant a Dalton Scholarship to Dr. Jaimie S. Rodriguez with a stipend of $125 per month for six months, beginning June 1, to carry on research in thyroid cancer;

To appoint a permanent Animal Farm Committee consisting of Dr. William Clark, Chairman; Dr. Charles L. Clay, Secretary; Drs. Frantz and McDermott; and Dr. C. L. Blakely of the Angell Memorial Hospital;

That $1,000 be allocated from MGH Fund-Cancer to Dr. Chester N. Frazier, to replace the amount taken from his allocation under the ACS Institutional Grant;

To appoint Miss Sigrid Edge, Mrs. Thorwald Ross, and Mrs. Ralph Wetmore to the Advisory Committee to the School of Nursing, to succeed Miss Frances Dugan, Mrs. Arthur W. Bell, and Mrs. G. Tappan Francis, resigned.

At their meetings on June 13, 20, and 27, July 11, and August 1, the General Executive Committee voted:

To accept the resignation of Dr. Armand L. Bengle from the position of Clinical and Research Fellow in Anesthesia, effective July 1.

To promote:

Dr. Richard C. Austin from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1;

Dr. Benjamin A. Barnes from the position of Second Assistant Resident to the rank of First Assistant Resident in Surgery, effective July 1;

Dr. Robert C. Coe from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1;

Dr. Richard A. Currie from the position of Third Assistant Resident to the rank of Second Assistant Resident in Surgery, effective July 1;

Dr. Frank W. Garran, Jr. from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1;

Dr. John M. Head from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1;

Dr. George S. Richardson from the position of Third Assistant Resident to the rank of Second Assistant Resident in Surgery, effective July 1;

Dr. David B. Sheldon from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1;

Dr. Morten Smith-Petersen to the position of Senior Resident on the Orthopedic Service for the year beginning January 1, 1952;

Dr. Eji Suyama from the position of Intern to the rank of Third Assistant Resident on the Surgical Service, effective July 1.

To reappoint:

Dr. Daniel Joly as Clinical and Research Fellow in Surgery for three months, beginning July 1;

Dr. David Kahn as Clinical and Research Fellow in Pathology for one year, beginning July 1.

To appoint:

Dr. Hermann H. W. Baumann as Clinical Fellow in Psychiatry, beginning July 1;

Dr. Ellen Bell as Clinical Fellow in Pediatrics, effective July 1;

Dr. Van Boring Bennett as Clinical and Research Fellow in Medicine, assigned to Cardiology, for the period July 1 – December 31;

Dr. Lester J. Bienvenu as Clinical Assistant in Dermatology for the year beginning July 1;

Dr. Agnes S. Burt as Research Fellow in Pathology for one year, beginning July 1;

Dr. Mack L. Clayton as Clinical Assistant in Orthopedic Surgery for one year, beginning August 1;

Dr. Goodman Cohen as Clinical and Research Fellow in Medicine, assigned to Cardiology, effective July 1 – September 30;

Dr. Sybil Corbett as Clinical Assistant in Medicine, assigned to the Allergy Clinic, for the period July 1 – December 31;

Dr. Charles G. Craddock, Jr. as Clinical Fellow in Psychiatry, effective June 1;

Dr. George J. Cunningham as Clinical and Research Fellow in Pathology for one year, beginning September 15;

Dr. Jose Delgado as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Earle K. Harris as Clinical Fellow in Surgery, assigned to the Tumor Clinic, beginning July 1;

Dr. Frederic L. Hoch as Research Fellow in Biochemical Research, beginning September 1;

Dr. Hedvig H. Holger as Clinical Fellow in Psychiatry, beginning September 1;

Dr. Ruth Jaffe as Clinical Fellow in Psychiatry, beginning September 1;

Dr. Ruth Jens as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, for four months, beginning September 1;

Dr. Henry Walter Jones, Jr. as Clinical Assistant in Medicine, effective October 1;

Dr. Charles S. Keuper as Clinical Fellow in Psychiatry, effective July 1;

Dr. Owen W. Kite as Clinical Assistant in Dentistry, effective July 1;

Dr. John Lindenberg as Clinical and Research Fellow in Surgery, for the period June 25 – August 15;

Mr. Alden V. Loud as Research Fellow in Medicine and Neurosurgery, beginning June 11, to work with Drs. William H. Sweet and Ivan D. Frantz, Jr.;

Dr. Samuel G. McClellan as Clinical Fellow in Psychiatry, beginning July 1;

Dr. Sherman W. McIlmoyl as Graduate Student Assistant in Surgery for one month, beginning June 4;

Dr. Jorge A. Maisterrena as Clinical Fellow in Medicine, effective June 1;

Dr. David V. Mann as Clinical Fellow in Dermatology for one year, beginning July 1;

Dr. Vernon H. Mark as Clinical and Research Fellow in Neurosurgery, effective July 1;

Dr. Simon E. Markovich as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, for six months, beginning July 1;

Dr. Leon J. Marks as Research Fellow in Pediatrics, to work with Dr. Talbot's metabolic group, effective July 1;

Dr. Joseph E. Murray as Clinical Fellow in Surgery, assigned to the Plastic Clinic, effective July 1;

Dr. George F. Odland as Clinical and Re-

search Fellow in Dermatology for one year, beginning July 1;
- Dr. Juan V. Pena as Clinical Fellow in Surgery, assigned to Endoscopy, for the period September 4 – December 4;
- Dr. Raymond V. Randall as Clinical and Research Fellow in Medicine, assigned to Cardiology, beginning July 1;
- Dr. Victor M. Rodriguez as Clinical Student Assistant in Surgery for three months, effective April 9;
- Dr. Arthur H. Rosenbloom as Clinical Assistant in Medicine for one year, beginning August 1;
- Dr. Richard L. Rovit as Clinical and Research Fellow in Surgery for the period July 1, 1951 – June 30, 1952;
- Dr. Nathan E. Silbert as Graduate Student Assistant in Dermatology, effective July 19;
- Dr. Richard B. Streeper as Clinical Fellow in Medicine, assigned to Cardiology, effective July 1;
- Dr. Daniel L. Sutherland as Clinical and Research Fellow in Neurosurgery, effective July 1;
- Dr. Maurice Victor as Clinical and Research Fellow in Neurology, effective July 1;
- Dr. Ruth Weiss as Clinical Fellow in Pediatrics for one year, beginning July 1;
- Dr. Elizabeth R. Zetzel as Clinical Associate in Psychiatry, beginning September 1.

* * *

All of us have noticed and enjoyed the great improvement in the Phillips House and Vincent Memorial courtyards achieved by the grading and attractive plantings.

The Ladies' Visiting Committee has been working for some time to accomplish this, and this spring it was brought to a successful conclusion. The Committee secured the professional services – gratis – of a good friend, Arthur A. Shurcliff, one of New England's leading landscape architects. Contributions to cover the work were received from the Ladies' Visiting Committee and from the Vincent Memorial.

Brief bits:–

- Dr. Fuller Albright, Physician on our staff, was named by the Trustees and Council on Foods and Nutrition of the American Medical Association to receive the Joseph Goldberger Award, at the A.M.A. annual meeting in Atlantic City last June. The Award included a gold medal and a check for $1,000.
- Dr. Edward B. Benedict, Endoscopist at M.G.H., gave a talk on Endoscopy for the South End Medical Club, at the June 19 meeting of the Boston Tuberculosis Association.
- Dr. Carl C. Johnson, Assistant Surgeon in Ophthalmology at the Massachusetts Eye and Ear Infirmary, gave two lectures in the postgraduate course in Ophthalmology and Oto-Laryngology at the University of Kansas Medical Center last April. His subjects were "Ptosis: Diagnosis and management" and "Glaucoma surgery".
- Dr. Jack S. Parker (*WS* 1946) announces the opening of an office for the practice of General and Pediatric Surgery, at 3 Seaward Road, Wellesley Hills, Mass.
- Dr. Fred A. Simmons, Assistant Surgeon on our staff, was elected President of the American Society for the Study of Sterility, at the annual meeting of the Society last June. Dr. Simmons has also been appointed to the Council of the American Therapeutic Society, to serve for a five-year term.
- Dr. James M. Stewart (*M* 1946) announces the opening of his office for the practice of Internal Medicine, at 344 West Ave., Rochester 11, N. Y.

MASSACHUSETTS EYE & EAR INFIRMARY

At the June meeting of the American Medical Association, Dr. Edwin B. Dunphy, Chief of Ophthalmology, was elected Chairman of the Section of Ophthalmology for the 1952 meetings, and Dr. Trygve Gundersen was re-elected Secretary. Dr. David G. Cogan, Director of the Howe Laboratory, was chosen as Chairman of the Association for Research in Ophthalmology.

Miss Isabel Whiting has been appointed Director of the Massachusetts Eye and Ear Social Service Department, replacing Mrs. Eunice Wilson. Miss Whiting, who is a graduate of Wellesley College and holds an M.A. from Columbia University, taught history at the University of Vermont and was Assistant Dean of Women there for three years.

Miss Whiting received her M.S. in Psychiatric Social Work from the Graduate School of Social Work at Smith and came to Massachusetts General as a case worker on the Surgical Service in 1936. Subsequently, she was appointed head social worker on the Tumor Service. In 1944 Miss Whiting became a supervisor in the Department of Social Service and in 1946 she received the title of Administrative Assistant to Mrs. Wilson. Her new appointment at the Infirmary will begin on September 24.

Dr. Jorge de la Torre of Quito, Ecuador, has come to the Infirmary for six months of study in the Department of Oto-Laryngology. He is a graduate of the Central University at Quito and interned at Hospital Eugenio Espeje. Before his present visit to the United States Dr. de la Torre was head of the Division of Oto-Laryngology at the Social Security Department of Quito. He is now studying on a fellowship from the W. K. Kellogg Foundation.

Dr. Robert R. Trotter completed his residency on August 1. He has gone to Okinawa where he will join a group, sponsored by the National Research Council, for the study of trachoma.

Dr. Samuel T. Adams, who completed his residency last spring, left the Infirmary in August to return to Montreal where he will go into private practice in Ophthalmology.

Dr. Hugo D. Angelini has entered private practice in Hartford, Connecticut, having completed his term of residency in the Department of Oto-Laryngology this summer.

THYROID CLINIC

An expedition was sent out from the Thyroid Clinic of M.G.H. last June, to study goiter as it occurs in the foothills of the Andes in Argentina. Dr. Means has given us the following information regarding the project:

The group from M.G.H. is collaborating with a group of Argentinian doctors, and the work is being done at Mendoza, Argentina, where is located the University of Cuyo. The objective is to study iodine-want goiter by modern methods, particularly making use of radioactive iodine. The group from here is headed by Dr. John B. Stanbury, Assistant Physician at M.G.H. and now in charge of our Thyroid Clinic. He is accompanied by Dr. Gordon L. Brownell, Associate in Physics on our staff, and Dr. Douglas S. Riggs of the Department of Pharmacology at Harvard. Miss Eleanor Brown went as technician. The Argentinian members of the group include Dr. Hector Perinetti, Surgeon of Mendoza, Dr. Enrique B. del Castillo, Endocrinologist of Buenos Aires, and Drs. Trucco and Houssay, also of Buenos Aires.

Funds for this enterprise were contributed by the Rockefeller Foundation, the Loomis Foundation, and Parke Davis & Co. The Atomic Energy Commission is supplying radio-active iodine, which is flown down at regular intervals to the workers at Mendoza. All the equipment was sent to Argentina from the United States, and the plan is to sell it to the Argentinian Government after the work of the expedition is concluded. The Argentinian members of the group wish to set up a radio-iodine laboratory in their own country. Governmental agencies concerned gave their approval to the expedition, and we are all regarding it as a joint U. S.-Argentine affair.

The expedition took origin from a visit to our clinic by Dr. Perinetti about a year ago. He showed us photographs of enormous goiters from the Andes, and then and there the idea was born that here was a golden opportunity to study a vanishing disease. The interest is not in the area of prophylaxis or treatment, but in the fundamental physiology of the thyroid gland.

The expedition also has the blessing of the Committee on International Scientific Publication of the National Research Council, of which Dr. Means is Vice Chairman. It is believed that the expedition will indirectly promote the purposes of this Committee. As they travel, the members of the group will give lectures at various important centers.

The expedition is significant because, so far as we can recall, this is the first instance in which M.G.H. has sent forth a task force to collaborate with scientists in another country in a program of scientific research.

The expedition left the U. S. on June 10 and expects to return about the middle of September. The first report from our group is given in this letter from Dr.

Stanbury to Dr. Means, dated June 22.

You may well imagine, from the long delay in my writing you, that we have had a very busy time of it. I might say, to begin with, that our trip so far has been highly successful and there have been only a very few minor hitches. The worst of these happened about an hour ago, when our first shipment of RaI arrived without a sign of a calibration. This is going to delay us until we can get a cable back from Oak Ridge. I can't imagine whatever happened to it.

Our trip to Lima was pleasant and exciting, though we didn't get much sleep that night. We found it an interesting old town, full of curiosities of the past and quite charged with a lot of interest in human physiology. We were met at the airport by Dr. Paul, who is chief of the field party there of the USPH, and by Dr. Hurtado, the high-altitude physiologist. They left us to our own devices for the morning, and in the afternoon took us round the town. In the evening there was a cocktail party for us at the golf club, where we met the medical people of the city. The next morning we spent at the laboratory of Dr. Hurtado and that of Dr. Monke. Both are interested in high-altitude physiology and pathological physiology, and work part of the time at the high-altitude physiological station in the mountains behind Lima. Doug gave his lecture to the students on that morning. We found the labs remarkably well equipped. They have instruments of the very latest design, rather putting to shame some of the things we have been doing out at the school. We thought we were doing very well to have a single-channel electrograph and a single-strain gauge manometer. In Hurtado's place we found a 4-channel electrograph and a pair of manometers!

In the afternoon we were taken to dinner and then to see the Inca ruins just south of Lima – found them interesting. Eleanor found a femur, brought it back to the hotel, and then forgot it when we left the next morning. My lecture was in the evening, at the spectacular lecture hall of the medical school. After a long introduction by the Dean, I stumbled through an hour of things – each sentence being translated as it was given. It really wasn't too bad.

On Wednesday morning we flew to Santiago, where for five very trying days we were entertained and talked to and shown things until we were ready to fall in our tracks – Riggs very nearly did, and Brownell collapsed the last day with a gastroenteritis. Our impressions of Santiago were that it is certainly one of the most beautifully situated places in the world, and that there is an extremely active and interested and excellent group of investigators there. Brownell and Riggs gave a lecture each on the first two days, and on the third night I gave one to the medical society on the practical use of RaI and on the fourth morning on some experimental things we have done. I think our part of the show went off well enough. There seemed to be considerable interest. Certainly, for us, it was worth the trip just to meet Dr. Lipschutz. He was most kind to us, entertained us at luncheon at his house, showed us his library which surpasses anything I have ever seen anywhere, and even at his advanced years came to our lectures. He is surely one of the great scholars of the world. Middleton was very nice to us, Croxatto gave a tea for us, and Luco had us at his house. We hardly had a meal by ourselves. On Sunday I was taken up into the mountains for skiing – a wonderful experience in the sun with the jagged snow-covered Andes all around.

Last Monday Doug and I came on here to Mendoza. Eleanor had come three days earlier to pave the way, and Gordon wanted to come by plane rather than risk the 18-hour train trip with his G-I problem. The Trans-Andean rail trip was an unforgettable experience. We arrived here at midnight dog tired, only to face a dozen members of a delegation headed by Perinetti. They took pity on us and we went directly to our hotel. We are comfortably situated and find that our worst problem is that of not eating too much. It is fantastic what these people eat. It must have a caloric value twice what we ordinarily eat.

Tuesday morning we made our official rounds to the Governor's place where we signed the book, made the usual appropriate felicitations with the Governor, and did the same with the Dean of the medical school at his office. Then we came to the hospital to look the land over here. We are excellently situated in four more-than-adequate labs and an office. In the afternoon we met the plane of the Argentine Air Force which brought our equipment here. You can well imagine the thrill of seeing this, after the many months of uncertainty. The things are all unpacked now, and we are ready to make physical measurements just as soon as we have a calibration on the shipment of RaI.

Yesterday I was officially shown the patient material. All I can say is that it is unbelievable. Imagine seeing in a single day a dozen children in their early teens with large multinodular goiters! If we had dreamed of our clinical material it couldn't have been this good. Of course it remains to be seen how many of these patients have active hyperplasia from current iodine deficiency, but I think it is probably true that most of them do. We will know in a few more days. It will probably be another week before the iodine lab is functional, but this will not delay the start of observations, by any means. We will probably give our first dose of RaI tomorrow, if not later this afternoon.

Our job here has attracted considerable attention in the Argentine press. A delegation is arriving tonight from a new institute of physiology in Buenos Aires, and Dr. del Castillo arrived at six this morning. Dr. Perinetti is a dynamic person who gets things done.

If we don't turn out a good job it will be only our own fault. I should warn you that I understand the Argentine Government is tendering you and Mrs. Means an expense-paid trip to Argentina later in the summer. I only wish you would change your mind and come. They look upon you, of course, as the leader of this group.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted, though less frequently than heretofore. It would save your editor considerable time and trouble if you would remember to include that information.

In answer to a question occasionally asked, your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration – an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The deadline date for each issue of THE NEWS is the 12th of the preceding month.

All requests for reprints are to go directly to the individual authors, and *not* to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Anesthesia

Briggs, B. D.
Organization of an Inhalation Therapy Department.
Anesth. & Analg. 30:167-173.

Cardiology

Carmichael, D. B., Sprague, H. B., Wyman, S. M., and Bland, E. F.
Acute nonspecific pericarditis: Clinical, laboratory, and follow-up considerations.
Circulation 3:321-331.

Dermatology

Lever, W. F., Schultz, E. L., and Hurley, N. A.
Plasma proteins in various diseases of the skin: Electrophoretic studies.
A. M. A. Arch. Dermat. & Syph. 63:702-728.

General Medicine

Adams, F. D.
Reversible uremia with hypercalcemia due to vitamin-D intoxication.
New England J. Med. 244:590-592.

Krantz, J. C., Jr., Culver, P. J., Carr, C. J., and Jones, C. M.
Sugar alcohols – XXVIII. Toxicologic, pharmacodynamic and clinical observations on tween 80.
Bull. School Med. Univ. Maryland 36:48-56.

Myers, G. S., Scannell, J. G., Wyman, S. M., Dimond, E. G., and Hurst, J. W.
Atypical patent ductus arteriosus with absence of the usual aortic-pulmonary pressure gradient and of the characteristic murmur.
Am. Heart J. 41:819-833.

Paul, O., Myers, G. S., and Campbell, J. A.
The electrocardiogram in congenital heart disease: A preliminary report.
Circulation 3:564-578.

General Surgery

Daland, E. M.
Radiation damage to normal tissues in the diagnosis and treatment of nonmalignant conditions, and its surgical repair.
New England J. Med. 244:959-964.

O'Keeffe, A. F., Warren, R., and Donaldson, G. A.
Venous circulation in lower extremities following femoral vein interruption.
Surgery 29:267-270.

O'Keeffe, A. F., Warren, R., and Hill, R. C.
Alterations in skin temperature of the toes during lumbar sympathectomy.
In Surgical forum: Proceedings of the forum sessions, Thirty-sixth Clinical Congress of the American College of Surgeons, Boston, Mass., October 1950, Philadelphia, W. B. Saunders Co., pp. 391-394.

Laboratory Science

Geyer, R. P., Waddell, W. R., Pendergast, J., and Yee, G. S.
Oxidation of lipides (-$C^{14}00$-) in vivo by extrahepatic rat tissues.
J. Biol. Chem. 190:437-443.

Neurology, Neurosurgery, and Psychiatry

Blom, G. E.
A review of electrocardiographic changes in emotional states, with a clinical note on electrocardiograms of 193 psychotic patients.
J. Nerv. & Ment. Dis. 113:283-300.

Radiology

Hale, DeF. E.
Synovioma: With special reference to the

Dr. James Howard Means
Chief of Medical Services — November 1923 through June 1951

clinical and roentgenologic aspects.
Am. J. Roentgenol. 65:769-777.

Hanelin, J., and Eyler, W. R.
Pulmonary artery thrombosis: Roentgen manifestations.
Radiology 56:689-703.

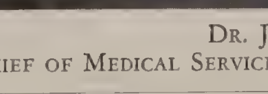
Holmes, R. B.
Primary tumors of the ureter: Their roentgen diagnostic features.
Radiology 56:520-527.

Hunter, F. T., and Robbins, L. L.
The protection of personnel engaged in roentgenology and radiology: Final report.
New England J. Med. 244:9-13.

Robbins, L. L., Colby, F. H., Sosman, J. L., and Eyler, W. R.
Excretory urography: A clinical trial of a new contrast medium (sodium 3-acetylamino-2, 4, 6-triiodobenzoate).
Radiology 56:684-688.

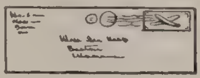
Miscellaneous

Garland, J.
Fifty years of medical progress: Medicine as a social instrument: Journalism.
New England J. Med. 244:838-844.



New addresses:–

- Dr. Donald V. Baker, Jr. (*ES* 1943), 40 Broad St., Boston, Mass.
- Dr. William H. Baker (*clin. & res. fel. M*), 40 Broad St., Boston, Mass.
- Dr. Arlington Bensel (*clin. fel. D* 1951), 163 Kilburn Place, South Orange, N. J.
- Dr. Earle M. Chapman (*WM* 1931), 330 Dartmouth St., Boston, Mass.
- Dr. Jaime Cortazar (*gr. stud. a. M* 1951), Transversal 15 #70-64, Bogota, Columbia, South America.
- Lt. N. Joel Ehrenkranz, MC, USAR (*M* 1950), Army Medical Center, Research and Graduate School, Washington 12, D. C.
- Dr. Richard R. Evans (*P* 1944), 263 Beacon St., Boston, Mass.
- Lt. Hermes C. Grillo, MC, USNR (*S* 1948), Co. D, 1st Med. Bn., 1st Marine Div. FMF, FPO, San Francisco, Calif.
- Dr. Fred H. Howard (*CM* 1949), Gorgas Hospital, Ancon, Canal Zone.
- Dr. Arthur J. Linenthal (*a.r.p.* 1944), 1265 Beacon St., Brookline 46, Mass.
- Dr. Jost J. Michelsen (*a.r.s. NS* 1938), 412 Beacon St., Boston, Mass.
- Dr. Raymond V. Randall (*M* 1946), House of the Good Samaritan, 25 Binney St., Boston, Mass.
- Dr. Victor M. Rodriguez (*clin. stud. a. S* 1951), Bruselas #7 Bis, Mexico, D. F.
- Dr. Francis Rouillard (*a. obst.*), 319 Longwood Ave., Boston, Mass.
- Dr. Earl B. Sanborn (*a.r. NS* 1943), 636 Church St., Evanston, Ill.
- Dr. Wilbur A. Sawyer (*WM* 1908), 2565 Rose St., Berkeley 8, Calif.
- Lt. Edgar J. Schoen, MC, USNR (*CM* 1950), Squadron VS 31, c/o Fleet Postmaster, New York, N. Y.
- Dr. Earl S. Seale (*Oph.* 1940), 126 Bay State Road, Boston 15, Mass.
- Dr. Bertram Selverstone (*r.s. NS* 1947), New England Center Hospital, Harrison Ave. and Bennet St., Boston, Mass.
- Dr. Harley C. Shands (*a. Psychiat.*), 51 Brattle St., Cambridge, Mass.
- Dr. Joseph M. Stowell (*gr. a. S* 1944), 1101 14th Ave., Altoona, Pa.
- Col. Milton S. Thompson, MC, USA (*Or.* 1934), Orthopedic Service, Brooke Army Hospital, Fort Sam Houston, Tex.
- Dr. Masao Yatsuhashi (*WS* 1945), 66 Beals St., Brookline, Mass.



Dr. Joseph S. Barr, Chief of Orthopedic Surgery, has returned from a six-weeks' European trip and has sent us this account of his journey:

A few days were spent in London, where a two-day orthopedic program was given at the Royal College of Surgeons, under the chairmanship of Sir Harry Platt. I visited the London Hospital and renewed acquaintanceship with W. A. Law, Orthopedic Resident and Clinical Fellow at M.G.H., 1946-48. Scotty Law has established himself as the English master of arthroplasty of the hip. His results rival those of his teacher, Smith-Pete.

The International Congress of Orthopedics and Traumatology was held in Stockholm, May 21 – 25. This was attended by about 400 members and guests from all over the world, including Soviet Russia. One of the main topics of discussion was "Low back and sciatic pain – Results of treatment". The main purpose of my trip was to participate in this symposium. I was favorably impressed with the high standards of medical care, the quality of medical research, and the beautiful hospitals and equipment – all of which are, of course, state-supported and state-controlled.

* * *

Dr. John E. Dalton (*r.p. SM* 1928) sent this letter to the Trustees last May.

I regret that I will not be able to attend the dedication of the Research Building on May 16. It so happens that I am having an earlier resident of the old South Medical Service – Dr. Charles C. Dennie (*D* 1914) – as guest moderator for one of our special monthly clinics on that same date.

Two years ago I was elected Chairman of the Department of Dermato-Syphilology at Indianapolis General Hospital. Since the American Board of Dermatology and Syphilology has awarded our department full accrediting for the training of residents in this specialty and since our service is called upon to conduct all the clinical teaching in this field for students of Indiana University School of Medicine, we have been going through considerable reorganization and development. However, some results from the time and effort spent are now emerging.

This spring has been particularly rugged. As Vice Chairman of the Section of Dermatology and Syphilology of the American Medical Association, I succeeded to the Chairmanship on the untimely death of the duly elected Chairman. This necessitated the preparation of a Chairman's Address for the Atlantic City meeting, along with the many other already existing duties.

Some day, when the deck is cleared, I want to revisit M.G.H. and see all the splendid advances which are being made there.

* * *

This note, welcome though brief, came from Lt. John J. Shea, Jr., MC, USNR, recently Resident in Oto-Laryngology.

I have no important news for The News other than that I am now back in the Navy, in the newly reopened Bainbridge Naval Training Center, as Chief of the Ear, Nose and Throat section of the hospital.

I certainly appreciate The News and read every line just as I would a personal letter.

My new address is USNH, Bainbridge, Maryland.

THE NEWS

No. 105 Boston, Mass. October 1951

THE NEW SURGICAL PRINCIPLE OF THE INCOMPLETELY COVERED FOREIGN BODY AND ITS APPLICATION TO THE EYE

Until very recently it had been thought improbable that a foreign body, incompletely covered by tissue, could be left indefinitely in the human or animal body without extrusion.

HISTORY

Impetus was given the study of this problem during World War II, as a result of the desirability for improving the cosmetic appearance of an artificial eye so far as motility is concerned. In the classical artificial eye there is no attachment between the stump of muscles and the overlying shell, and thus the action of the muscles is transmitted but poorly to the shell. To rectify this defect there was devised in this laboratory, under the auspices of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary, a plastic implant partially surrounded by tantalum meshwork, to which the eye muscles were attached, and having an exposed anterior surface so that a peg from the overlying artificial eye might fit into a hole in the implant. It was found that not only did muscle and connective tissues, as is usual, grow very readily into the tantalum meshwork; but also, surprisingly, the epithelial cells of the conjunctiva, which had been pursestringed around the neck of the exposed area, grew into the edge of the tantalum meshwork and completely sealed off the wound. Thus an effective barrier was created against ingress of both fluids and bacteria; and even though the anterior surface was not covered by tissue, no infections occurred behind the implants.

One hundred seventy-five of these movable implants have been placed at the Massachusetts Eye and Ear Infirmary in the past four and one-half years. There have been no extrusions, and the motility has been practically complete in all. During the first year and one-half, as with any new operative procedure, certain complications were noted. These included some secretion, granulation tissue, and difficulties with performing the secondary implant. With changes in the operative technique and hygiene of the socket these complications have been eliminated to date.

It has been found possible to place a movable implant with excellent results in patients who have had their eyes removed many years previously. The implant has been placed in a patient who had his eye removed thirty-five years before, with good results.

Earlier work on the incompletely covered foreign body was done in dentistry by Strock. He has had a tantalum tooth, exposed on one surface, in a patient's jaw for thirteen years without extrusion.

THE PLASTIC ARTIFICIAL CORNEA

During the past three years work has been progressing in this laboratory on the further study of the fundamental principles involved in the retention of incompletely covered foreign bodies in tissues and on the possible application of this principle to a plastic artificial cornea as a substitute for the eye-bank corneal transplant.

There are approximately 90,000 people in the United States today who are partially or completely blind as a result of scarring of the cornea. Transplantation of the eye-bank cornea can help approximately 16 percent of those operated upon. The failure in 84 percent is due mostly to postoperative clouding of the corneal window or ingrowth of blood vessels into the new graft. It seemed desirable, therefore, to attempt to develop an artificial plastic graft which could not cloud and into which vessels could not grow.

A stimulus was given us for this procedure by an observation made during the war. Several pilots of dive bombers were observed whose plastic cupolas had collapsed and shattered into thousands of minute pieces, with an imbedding of many of these particles in the pilots' corneas. In several cases, the particles were so small and so numerous that removing all of them would have meant the removal of practically the entire cornea. Many of them were therefore left in place, and peculiarly enough they produced very little, if any, reaction. As a result of this observation, it was thought that it would be interesting to determine how the cornea would tolerate larger pieces of plastic.

Three years ago, plastic discs of various shapes and sizes were placed in fifteen rabbits as full thickness grafts. All these grafts extruded within a fourteen-day period.

Fifteen months ago, a different principle was explored. It was decided to attempt to apply a principle learned previously with the incompletely covered plastic mesh postenucleation implant; namely, that it was necessary to keep the tissues in apposition with the mesh with suitable suture material a sufficient period of time for firm fibrosis to take place. To this end, a two-stage procedure was devised. It consists of first incising the cornea at the periphery, splitting the cornea into two layers, sliding the implant between the two layers, and suturing the corneal incision. Later, a trephine hole is made in the front layer and, if necessary, in the back layer. In this way corneal tissue itself holds the disc in place mechanically for a sufficient time for corneal tissue to grow into the holes in the periphery of the disc.

Nine rabbits have been experimented on to date. The first experiment was done fifteen months ago. All the implants have remained in place. The corneas are clear and the eyes white and quiet. Figure #1* shows the plastic disc which is being used at present. Figure #2* shows the scarred cornea of a rabbit after the second stage of the procedure. The hole has been placed in the anterior layer, the eye can be seen into very clearly through the plastic opening, and the rabbit can see out. This photograph was taken at the end of twelve months.

Work is continuing on this project. This is merely the preliminary work and it remains necessary to do a great deal more work on the shape, size, and fabrication of the discs, and to try them on dogs and monkeys, as well as more rabbits. We hope that at the end of two more years we shall be able to offer this procedure to a percentage of the 90.000 people who are now using braille and doing basket weaving and for whom there is no other hope in sight.

William Stone, Jr., M.D.,
Assistant in Ophthalmology,
Massachusetts Eye & Ear Infirmary

*See page 6.

* * *

Dr. Faxon has a new "job", as he calls it. He has been appointed Medical Director of the Massachusetts Regional Blood Program, conducted for the American National Red Cross. The Regional Blood Center is at 314 Dartmouth Street.

We have been told that the English Speaking Union here in Boston is very desirous that all English speaking visitors in this vicinity acquaint the Union of their presence in the U.S.A., to the end that contacts with other visitors from the British Empire may be effected. We are passing on this information for the benefit of those doctors here at M.G.H. to whom this would apply. The Union headquarters are at 33 Commonwealth Avenue.

The tennis court, which used to be at the south end of the Bulfinch lawn, is no more. It has been made into a temporary parking lot to relieve the congestion in the other parking spaces and accommodates 79 cars.

WILFRID J. COMEAU

(1906 – 1951)

Dr. Wilfrid J. Comeau died September 6, 1951, in Bangor, Maine, following a coronary thrombosis. He is survived by his wife, Virginia Tate Comeau, and three children. Dr. Comeau was President of the Maine Heart Association at the time of his death and an outstanding consultant in cardiovascular disease in his community and State.

"Bill" Comeau was born in Worcester, Massachusetts. He received an A.B. degree from Amherst College in 1929 and an M.D. degree from Harvard in 1933. After an internship at the Boston City Hospital he went abroad, where he pursued investigative work with Dr. Ronald Grant at Guy's Hospital in London and with Professor Ludwig Aschoff at the Pathological Institute of the University of Freiburg in Germany.

Upon his return from abroad he came to the Massachusetts General Hospital as Cardiac Research Fellow in 1936, and continued until 1939 as an associate of Dr. Paul D. White and an active participant in the affairs of the Cardiac Clinics and Laboratory. In 1939 he entered private practice in Bangor and rapidly attained a position of prominence and respect in his community. During World War II he entered the Army in 1942 as a major, served in the European Theatre, and was discharged in 1945 with the rank of colonel. Thereafter he resumed his practice in Bangor.

The first indication of cardiac impairment came three years ago, but his recovery was good and his adjustment complete. Although well aware of his precarious future, he carried on conscientiously and courageously to the end. The M. G. H. has lost a loyal alumnus, and the State of Maine a solid citizen.

E. F. B.

[Edward F. Bland, M.D.]

The Board of Trustees, at their meeting on August 3, voted:

To relieve Dr. Tracy B. Mallory of his administrative responsibilities as Chief of the Pathology Department and to retain him as Consultant to the Department; and to appoint Dr. Benjamin Castleman as Acting Chief of the Pathology Department, beginning September 1.

To appoint:

Dr. Alastair J. Gillies as Assistant Resident in Anesthesia for a period of one year, beginning December 10;

Dr. Nicholas M. Greene as Assistant Anesthetist, to begin August 15;

Dr. Edwin C. Hoodless as Assistant Resident on the Orthopedic Service, to begin January 1, 1952;

Dr. Daniel F. Milam, Jr. as Third Assistant Resident on the Surgical Service, as of August 1.

At a previous meeting of the Trustees, William J. Brickley was appointed Consultant in Pathology, and Dr. Michael A. Luongo was appointed Assistant Visiting Pathologist.

At their meetings on June 13 and 20, and July 11, the General Executive Committee voted to appoint:

Dr. George C. Blanchard as Clinical and Research Fellow in Neurosurgery, effective July 1;

Dr. Samuel Brendler as Assistant Resident on the Neurosurgical Service, beginning July 1;

Dr. James L. Buchanan as Clinical Assistant in Surgery for one year, beginning July 1;

Dr. Louis Kunian as Clinical Assistant in Medicine, effective July 1;

Mr. Frank J. Schmetz, Jr. as Research Fellow in Biochemical Research, effective June 11.

* * *

We are always eager to hear about the professional activities of those men and women from other countries after they finish their work here at M.G.H. and return home. Mr. Elias C. Dow, who is working with Drs. James C. White and William H. Sweet on Neurosurgical Research, brought us such information concerning Dr. Bernard J. Harries, a Clinical and Research Fellow in Neurosurgery here in 1950. The information is contained in an article from the spring issue of *The University College Hospital Magazine,* published in England. It tells us that Dr. Harries was appointed to the Consultant Staff at U.C.H. as a general surgeon and took up his duties there on April 1. The article gives an outline of Dr. Harries's preparation for a medical career, his war experiences, and his work here at M.G.H. and at the Neurological Institute in Montreal. It tells us that after his return to the United Kingdom, the Bilton Pollard Fellowship was extended for Dr. Harries, enabling him to do research work in the Pathology Department at the National Hospital, Queen Square, London. All of Dr. Harries's many friends here will be interested in hearing of his recent appointment to the staff of U.C.H.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted, though less frequently than heretofore. It would save your editor considerable time and trouble if you would remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go directly to the individual authors and *not* to Treadwell Library nor to The News.

The following new titles have been received:

Endoscopy

Benedict, E. B.
Gastroscopic biopsy in the differential diagnosis of gastritis and carcinoma.
New England J. Med. 245:203-206.

General Medicine

Irwin, J. W., Graham, M. J., Jacobson, B. M., and Burrage, W. S.
Penicillin allergy.
New England J. Med. 245:246-248.

Lever, W. F.
Electrophoretic analysis of the plasma proteins in various diseases.
Bull. New England M. Center 13:160-174.

Pittman, H. S., and Kane, L. W.
Fungus infections of the lungs.
M. Clin. North America, Sept.:1323-1331.

General Surgery

Taylor, G. W.
Unnecessarily radical surgery. (Editorial)
Surg., Gynec. & Obst. 93:246-247.

Laboratory Science

Edsall, J. T., and Lever, W. F.
Effects of ions and neutral molecules on fibrin clotting.
J. Biol. Chem. 191:735-756.

Lipmann, F., and DuToit, C. H.
Replacement of thyroxin by its nitro analogue (3, 5, 3′, 5′-tetranitro thyronine). (Abstract)
Science 113:474.

Stadtman, E. R., Doudoroff, M., and Lipmann, F.
The mechanism of acetoacetate synthesis.
J. Biol. Chem. 191:377-382.

Stadtman, E. R., Novelli, G. D., and Lipmann, F.
Coenzyme A function in and acetyl transfer by the phosphotransacetylase system.
J. Biol. Chem. 191:365-376.

Neurology, Neurosurgery, and Psychiatry

Brown, M. R.
The classification and treatment of headache.
M. Clin. North America, Sept.: 1485-1493.

Brown, M. R.
The incidence and heredity of muscular dystrophy: A study of seventy-one patients admitted to the Massachusetts General Hospital.
New England J. Med. 244:88-90.

Cobb, S.
Review of Neuropsychiatry for 1950.
A. M. A. Arch. Int. Med. 87:889-898.

Cobb, S., Shands, H. C., and Miles, H. H. W. (Editors)
A case of asthma treated with Psychotherapy.
Am. J. Med. 11:117-122.

Green, T. H., Jr.
Management of craniocerebral injuries.
U.S. Armed Forces M. J. 2:455-463.

Orthopedic Surgery

Barr, J. S.
Low-back and sciatic pain: Results of treatment.
J. Bone & Joint Surg. 33-A:633-649.

Cave, E. F., and Rowe, C. R.
Medical progress: Treatment of fractures and dislocations.
New England J. Med. 245:253-259.

Physical Medicine

Watkins, A. L.
Physical Therapy in the home.
Physical Therap. Rev. 31:219-222.

Miscellaneous

Seymour, E. L.
Visual automatic filing.
Mod. Hosp. 77:66-67.

Books

Brazier, M. A. B.
The electrical activity of the nervous system: A textbook for students.
London, Sir Isaac Pitman & Sons, Ltd.; New York, The Macmillan Co.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Lyman G. Richards will lecture on "Injuries of the larynx and their treatment" at a Medico Military Symposium to be held at the United States Naval Hospital in Chelsea on October 31. Dr. David G. Cogan will speak on "Effects of radiation on the eye".

Miss Phyllis Scott has been appointed Executive Secretary of the Boston Eye Bank, replacing Miss Olive Crowley. Miss Scott has been associated with the Infirmary for two and a half years, in the Public Relations Department.

Plans for the expansion of the Eye Bank throughout the New England area will continue. Forty-nine hospitals are now affiliated with the Eye Bank—the most recent affiliates being the Portsmouth Hospital, Portsmouth, New Hampshire, and the Harbor Hospital, York, New Hampshire. Last year, 90 eyes were received from the affiliated hospitals (including the Massachusetts General and the Vincent Memorial). These eye donations were used either for the corneal graft operations or for research.

A series of ophthalmological films were shown in the Lucien Howe Library during July, August, and September for the Infirmary House Officers and interested Staff members. Special invitations were sent to Boston hospitals for the showing of an exceptionally fine color and sound film, "Embryology of the eye", produced with the cooperation of the Carnegie Institute. Some 75 people attended.

The film program was a teaching experiment this summer, and it is hoped that more films may be shown during the fall and winter.

Dr. Jens Edmund of the University Eye Clinic, Copenhagen, Denmark, spent six weeks visiting the Infirmary. He was particularly interested in observing the work of the Howe Laboratory of Ophthalmology. A recent paper of Dr. Edmund's—"Photoelectric measurements of the corneal gloss"—has been translated into English.

* * *

MGH DISHWASHING

Many people from outside the hospital visit the Dietary Department throughout the year and each one of them is invariably impressed with our dishwashing unit, which operates with a high degree of efficiency under the direction of Kenneth Weyand. Many of the daily patrons of the cafeterias are not aware of this important unit.

There are two dishrooms – one serves the Nurses' and the West Cafeterias, and is open 24 hours a day; one serves the East Cafeteria, and is open on weekdays for the lunch period only. Each dishroom worker has a special job to do. In the west dishroom, for example, one worker gathers paper and silver from the tray as it is passed into the dishroom, another removes the glasses, another scrapes dishes, etc.

All soiled dishes and cups are presoaked at a temperature of 108°F. before being fed into dishmachines. In the West Cafeteria dishmachine the washwater is 160°F., the first rinse 180°F., and the final rinse 200°F. Dishes and silver are air-dried. Trays are partially air-dried, and then are blotted with sponges which are constantly being sent through the machine to be sanitized.

There are 21 dishwashers who work round the clock – 10 work from 6:30 A.M. to 3 P.M., 10 work from 11:45 A.M. to 8:15 P.M., and 1 from 10:30 P.M. to 5:30 A.M.

A member of the Pathology Department spot checks clean dishes once a week to determine bacterial counts. Here is a report of the findings of Dr. Louis Dienes's laboratory, made on July 24, 1951:

Bacterial food utensil count
West Cafeteria
Planted on bacto agar for bacterial count

Plates	1
Silver	0
Cups	0
Glasses	1

Bacterial count should not exceed 100.

On the day this count was taken, the following numbers of patrons were served in the cafeterias:

Nurses' Cafeteria	
Breakfast	534
Lunch	814
Supper	702
Midnight supper and tea	168
Total	2218
West Cafeteria	
Breakfast	163
Lunch	440
Supper	148
Midnight supper and tea	0
Total	751
East Cafeteria	
Breakfast	0
Lunch	554
Supper	0
Midnight supper and tea	0
Total	554
Grand total —	3523

This does not include the 500 or more cups and saucers used that day at coffee time – this being the number used *every* day during coffee time.

Louise Hatch,
Director, Dietary Department and School of Dietetics

* * *

New addresses:—

Dr. Frank B. Colloten (*a. D* 1946), 271 Dartmouth St., Boston 16, Mass.
Dr. Ernest S. Crawford (*ES* 1947), Jefferson Hospital, Houston, Tex.
Dr. Arthur B. French (*a. M* 1951), University of Utah School of Medicine, Salt Lake City, Utah.
Lt. John M. Head, MC, USAR (*a.r. S*) USPHS Hospital, 331 Veranda St., Portland, Maine.
Dr. James E. Kreisle (*WM* 1943), 1003 Capital National Bank Bldg., Austin, Tex.
Dr. Glenn W. Lawrence (*dn. s.*), 25 Bay State Road, Boston, Mass.
Lt. John D. Pitts, MC, USAFR (*a.r. S*), 3615th Med. Group, Craig AFB, Selma, Ala.
Capt. Iwao Uyeda, MC, USAFR (*CM* 1951), 6162d Hospital Group, 314th Air Division, Far Eastern Air Force, APO 994, c/o Postmaster, San Francisco, Calif.

Brief bits:—

Dr. Henry K. Beecher, Chief of our Anesthesia Service, testified before the Senate Interstate Crime Committee (Kefauver Committee) at Washington on August 15, at the hearings on narcotics. Dr. Beecher gave testimony on the new synthetic agents.

Dr. Edward D. Churchill, Chief of Surgical Services at M.G.H., was elected Miembro Correspondiente Extranjero de la Academia Argentina de Cirugía on August 8.

Dr. William E. Eaton (*D* 1907) was retired from the Navy on March 1. Until Dr. Eaton establishes a permanent address, he is using the Munsey Trust Co., Washington, D.C. as a forwarding address.

Dr. Lytt I. Gardner (*CM* 1944) has been appointed Associate Professor of Pediatrics at the State University of New York Medical Center, Syracuse, N.Y.

Mr. E. Russell Greenhood, who was appointed the first Comptroller in the history of M.G.H in May 1947, resigned on August 31. Mr. Lawrence E. Martin is now serving as Acting Comptroller.

Mrs. Sarah R. Trask, who has graced the Front Desk in the General for the past ten years, has retired to her farm. Mrs. Adeline E. Morrill has taken her place.

Dr. Arthur L. Watkins, Chief of Physical Medicine, left for Denver on August 31 to preside at the annual meeting of the Congress of Physical Medicine and Rehabilitation which took place from September 4 to 8.

* * *

Dr. Dean A. Clark was the last speaker at the dedication of our new Research Building on May 16. Here is a transcription of his address:

COMPLETING ONE HUNDRED FIFTY YEARS

1961

This ceremony marks the completion of one of the fondest dreams of the Hospital for a long time—a laboratory building worthy of the men and women of our staff who, through the years, have toiled, often in attics, cellars, and cubbyholes, to make many notable contributions to the scientific knowledge of medicine, for the well-being of mankind. It also marks the beginning of new efforts in research, directed especially at those diseases like cancer, heart disease, arthritis, and mental illness, that are as truly the plagues of the human race in our day as was the Black Death in the fourteenth century. This is a splendid achievement of which we may well be proud and a challenge that we are confident our research workers, together with their associates here and in other institutions, will meet with courage, imagination, and plain hard work.

Sometimes people wonder why so much attention these days is given to research in hospitals. Why can't it be done, as it frequently used to be, in special scientific laboratories quite separate from a hospital? Of course it can be, and very successfully, in many fields. But the challenge of these diseases illustrates most pointedly that the "proper study of mankind is man." For only in man can most of these chronic afflictions be found, and so we must turn to man to learn about them. Clinical observation, valuable as it is, cannot alone get to the root of these problems. Hence we must have, associated with our clinicians, those engaged in the basic sciences of chemistry, physics, and biology, and it is to bring these scientists into the closest possible connection with the health problems of people that this splendid building has been erected not fifty feet from where our patients are being treated. Indeed, one of the wards in the Bulfinch Building, made possible by the benefactions of a person sitting on this platform, is devoted exclusively to research studies on patients who have volunteered for this purpose. Thus, the findings of these new laboratories can immediately be applied in human subjects, under optimal conditions for their protection and observation. From the successes in our research ward benefits can be released for the aid of all sufferers throughout the world. Such association of scientists and clinicians also calls for an intimate relationship with other institutions whose concern with science is a primary one. Hence, we are most grateful for the cordial associations with Harvard University and the Massachusetts Institute of Technology, about which you have already heard today.

For, as I need hardly remind you, a hospital's primary function is not research, but care of the sick. So that we may be able in the future to continue to render the high standard of care of which we are rightfully proud, we must also have teaching; and to improve the effectiveness of our care and our teaching, we must have research. The three are inseparable in a hospital of this kind.

In 1961—ten years from now—the Massachusetts General Hospital will have attained the respectable age of 150 years. By then we hope to see many new developments here in the care of patients, in teaching, and in research. We have been working hard, together with Harvard and M.I.T., to plan these developments, and to estimate the staff, the buildings, and the endowment required to bring them into being.

For the care of patients, the Hospital finds itself less fortunate in some respects today than it was ten years ago. During this time our endowment income for patient care has increased but a very little, while the cost of that care has more than doubled, exclusive of costs for teaching and research. As a result, the Hospital today can afford to furnish only about one-half as many patient days of charitable service as it could ten years ago. To restore our ability to serve the community adequately, we shall need additional endowment funds for patient care of at least $6,600,000.

The full-time staff required for patient care, teaching, and research must be increased if we are to carry our full share of these activities. Over the next ten years we are hoping, in collaboration with the Medical School, to increase our full-time permanent staff by nine associate professors and professors. This may sound, at first, like an unwarranted expansion in these times. Its importance to the Hospital, however. is in the intensification of our work this new staff will make possible, by bringing on to a permanent, full-time basis staff who must now be engaged for brief periods only, or who must now try to carry on their scientific work and teaching amid the arduous demands of clinical practice. The endowment needed by the Hospital and Medical School together, to support the work of these men and to bring to an adequate level the support of those already with us, will be $7,500,000.

Our research work at present is entirely supported by outside funds, mostly temporary in character. If we are to attract the kind of scientists who will make research their career and thus give promise of worth-while accomplishments, at least a core of endowment is needed which, when supplemented by temporary funds, will enable us to continue and improve the quality of our work. Again, we do not intend or desire to expand our research activities, but merely to intensify them and improve their quality. But to make even this possible, research endowment funds of $2,500,000 must be found.

Capital endowment brings central strength to an institution and, because of this, our primary aim in the next decade will be to meet the needs for endowment I have just outlined. But there must also be structures in which the work can be carried out. Once again we do not want to expand but to improve quality. We do not believe that this Hospital should have any additional beds except perhaps in psychiatry. But to care for the sick, to do our teaching and research, we must have housing for our nurses and house officers, decent laboratories for supporting services, such as pathology, and such mundane things as space for parking, for the laundry, maintenance shops, storage, and renovation and relocation of operating rooms. The X-ray department is largely housed in quarters which, though just passable now, are extremely inconvenient and inefficient and, over the next ten years, will become wholly obsolete.

There are other building needs, all for replacement, renovation, or improvement of quality, but today I shall stress only those we believe to be of immediate urgency. The first of these is the nurses' home and training school. As you know, we are currently engaged in a campaign to raise building funds for this. Demands for nurses far exceeds the supply today. Only by enlarging our school of nursing and by providing decent quarters for staff nurses can we hope to meet our requirements for nurses and assume our fair share of meeting the nation's needs. It is utterly impossible to accomplish this with our present quarters, and we hope, therefore, by next year to see built as a structure at the lower end of this yard, balancing this Research Building, a fine addition to our nurses' home to house 145 nursing students and staff nurses.

The other building in our present campaign is for Pathology, the discipline that largely determines the quality of medical care provided in any hospital. It is the Pathologist who, by examining tissue under the microscope, or by making chemical, biological, or bacteriological tests, confirms the clinician's impression of his patient's condition, or gives him information that enables him to seek new explanations for it. Our Pathology Department which now serves a hospital with nearly 1,000 beds and 15,000 admissions a year, not to mention 200,000 out-patient visits, is housed in a building constructed for it in 1896, when the Hospital had 250 beds, 4,304 admissions, and 91,468 out-patient visits annually. Obviously, first-class work can be done under such conditions only through the most devoted and self-sacrificing efforts of the staff and its technical associates and we cannot permit this unfair situation to continue any longer.

Close upon the heels of these two structures must come a building for the medical care of ambulatory patients. This we visualize as a true medical center for the community. At present, patients from all walks of life may, for bed care, benefit from the research and education carried on at Massachusetts General Hospital, whether they are private, semi-private, or general hospital patients, but out-patients may obtain these benefits only if they are financially needy. This seems an unfair discrimination against those in more comfortable circumstances. Our staff believes that the services of our highly trained personnel and complex equipment should be utilized as fully as possible by the whole community. The new ambulatory service, therefore, is planned to be available to all, rich or poor. A trend toward this type of ambulatory service, grouped about a hospital, is now well established in this country and our staff believes that to maintain a place of leadership in medicine today, the M.G.H. must offer such a service to the public and that this will be of great value to patients and doctors alike.

These buildings, and the others I have suggested, must be constructed through public subscription, plus such bequests and governmental assistance as we can obtain. We are proud of the fact that nearly 10,000 individuals made contributions, large or small, to the Research Building fund, and we are deeply grateful to each person who made a contribution. We hope and believe that this wide-spread interest symbolizes the affection and confidence of the entire community.

Financial support and buildings are necessary for any human undertaking, but they are the skeleton alone. What really matters, of course, is what is done with these funds and in these buildings. Our research program is exemplified by contributions like those presented this morning at the scientific session. Teaching has been touched upon this afternoon by two distinguished educators closely associated with the Hospital. Plans are also being made for improved care of the patient, enlarged service to the community. In mentioning our proposed new building for ambulatory patients, I touched upon the plan to develop medical group practice in close association with the Hospital. Another new field of development today is the rehabilitation of the handicapped so that they may be, as far as possible, restored to active and useful lives. Already the Bay State Medical Rehabilitation Clinic is renovating quarters made available to it by our Board of Trustees, and we are looking forward enthusiastically to collaborating with the Bay State Clinic in its important work. This Rehabilitation Clinic, which is to be conducted as a community service by the Bay State group, will be open, from the start, to patients referred from all hospitals, doctors, industries, and social agencies in the area, whatever their age or economic status.

Finally, we are planning, in cooperation with the Medical School, a family health service or "home care" program for the people of the area immediately surrounding the Hospital. As you know, patients from our general hospital now cease to be our responsibility when they are not in our beds or out-patient department. But there is much to be gained today through preventive medicine, and thorough treatment early in illness that cannot be obtained without a complete health service for the family. By including these services, better supervision of treatment is made possible, many admissions to the Hospital will become unnecessary, and patients can go home much earlier, thus saving many days of hospitalization. A movement for such home care programs is also well established among hospitals in Boston and elsewhere and we believe it to be an essential function in any general hospital that seeks to be of maximum usefulness.

With such a comprehensive program of home care, ambulatory service, and rehabilitation, in addition to our more traditional bed and out-patient care, the benefits of the research to be carried out in this new building, and of the educational activities here, can be extended to a much broader section of the people than they now can. By this means, we believe that health can be better protected, illness, disability, and unnecessary death prevented, for the benefit of us all. The initiation of these activities will, it is true, be expensive. But we are certain that, in the long run, the medical resources represented by a hospital like this one can thus be utilized most economically and that immeasurable savings to the community—to you—in direct medical and hospital costs, in loss of time from productive employment, and in the costs of invalidism and dependency, will result.

Our ten-year program may seem an ambitious one. We do not think so. We think of it as an evitable step in the evolution of the Hospital from a four-walled haven for the desperately sick poor, to a center from which preventive and curative health service may be extended to all. We hope that all of you will be eager to join us in the endeavor.

⁂

The Massachusetts General Hospital family again this summer welcomed the students in the Summer School of Clinical Pastoral Training, a course which is sponsored by the Institute of Pastoral Care. This year there were nineteen clergymen and theological students in each of the two six-weeks' sessions which were conducted consecutively. The thirty-eight persons in the School represented widely varying backgrounds in their ages, origins, education, and previous experiences. The youngest was twenty-one, the oldest was fifty-three. They came to the M.G.H. from fourteen States, scattered as far apart as Florida, Michigan, Iowa, and Connecticut. Others were from four provinces of Canada, and one from Thailand.

Each member of the group had one academic degree, and several had two or three. Three had been elected to Phi Beta Kappa, and four others admitted to having received university degrees with special honors. They had received their advanced education in forty-eight different colleges and universities which were as varied as Harvard, Yale, and M.I.T. on the one hand, and the Hebrew University in Jerusalem, Bangkok Christian College in Siam, and the University of Alberta on the other.

Fourteen of the thirty-eight were veterans of World War II. At least four of these veterans were influenced toward their religious vocation by certain war experiences or through meeting particular persons during their military service. Twenty-one were married, seventeen were single. Two were women training for full-time work in religious education. Fourteen different religious faiths and denominations were represented: Baptist, Church of England in Canada, Church of the New Jerusalem (Swedenborgian), Congregational, Episcopal, Evangelical United Brethren, Jewish, Lutheran, Methodist, Moravian, Presbyterian, Unitarian, United Church of Canada, and Universalist.

Many lay people feel that all clergy ought to have some practical experience at making a living in ways similar to those of other people. The members of the Summer School had worked for periods ranging from a few months to as much as ten years as the following: investment banker, skilled machinist, foreign correspondent, worker in a meat-packing plant, factory worker, college teacher, public health instructor, radio tester, staff worker at M.I.T. acoustics laboratory, employee of the U.S. Department of Agriculture, theatre usher, high school English teacher, Y.M.C.A. secretary, instructor in radar, furniture salesman, sawmill laborer, advertising agent, police reporter, editorial writer, machinist's helper, newspaper worker, and pre-law student. Three had been pre-medical students. In addition, several of the veterans had been Army or Navy pilots. One had flown the "hump" from India to China. One had been a public relations writer for the Navy, another a Naval historian, another a personnel technician and classification specialist, and another a production control and procurement officer. One veteran had served as aide-de-camp to certain highly placed Army generals. It was impossible to find out from these veterans how many of them had been awarded the Purple Heart and other military decorations, but we know that this information would have made an impressive list.

The members of the Summer School put in full time at the M.G.H. during their period of training. For the first two weeks of each session they worked three hours daily as volunteer orderlies. This work seems to be the most efficient and effective way to get the students acquainted with the total task of caring for the sick. For the remaining four weeks they served as assistant chaplains and called on patients, under the close supervision of Chaplain James H. Burns and his Summer School staff. Two meetings were held each day. During the summer eighteen members of the Massachusetts General and Eye and Ear staffs lectured to the students. Representatives of the Nursing Service, Social Service, and Admitting Office also met with and talked to the groups.

A young clergyman from Nashville voluntarily wrote us at the end of his course, "I feel that the six weeks at the Massachusetts General Hospital was one of the most profitable experiences I have ever had, and I intend to be a strong booster for the course there."

Rev. James H. Burns,
Protestant Chaplain to the
Massachusetts General Hospital

BIOGLETS

Dr. Ransom J. Arthur, Intern on the Children's Medical Service – born in New York, N. Y., December 5, 1923; 1st Lieutenant, U. S. Marine Corps, 1943-46: Intelligence Officer with 22d Marine Regiment, serving in the Marianas and the Okinawa campaign; A.B., University of California, 1947; M.D., Harvard Medical School, 1951; home: San Francisco, California.

Dr. Anthony A. Arzimanoglou, extra Assistant Resident in Orthopedic Surgery – born in Athens, Greece, November 23, 1919; Athens American College, Athens, 1930-38; M.D., Athens University School of Medicine, 1945; General Surgery, Athens Laicon Hospital, 1946; Assistant Resident and Chief Resident in Orthopedic Surgery, Orthopedic Clinic, Athens University Evangelismos Hospital, 1947-50; military service: in charge of Amputee Center for amputations and prostheses, Ministry of War, Athens, 1948-50; came to U. S., July 1950, with appointment as Research Fellow in Orthopedic Surgery, Boston University Medical School, under the Fulbright Smith-Mundt exchange of persons program; Fellow in the Fracture Clinic, Boston City Hospital, July 15, 1950 – December 31, 1950; Chief Resident, Orthopedic Clinic, Massachusetts Memorial Hospitals, January 1 – June 30, 1951; home address: Patisia Avenue 197, Athens, Greece.

Dr. Henry H. Banks, Assistant Resident in Orthopedics – born in Boston, Massachusetts, March 9, 1921; A.B., Harvard College, 1943; M.D., Tufts Medical School, 1945; Intern, General Surgery, Beth Israel Hospital, Boston, 1945-46; U. S. Army: April 1946 – October 1947; Assistant Resident in Surgery, Beth Israel Hospital, October 1947 – July 1949; Assistant Resident in Orthopedics, Children's Hospital, Boston, July 1949 – April 1950; married; one daughter.

Dr. Crawford S. Brown, Assistant Resident in Dermatology – born in Minneapolis, Minnesota, April 30, 1923; B.A., Kenyon College, Gambier, Ohio, 1946; M.D., University of Michigan, 1948; Intern, Germantown Hospital, Philadelphia, 1949; U. S. Navy: Lieutenant (j.g.), Naval Medical Research Institute, Bethesda, Maryland, investigating biological changes in irradiated animals, 1949-50; private practice of Dermatology, as associate to the Assistant Professor of Dermatology, Georgetown University, Washington, D. C., 1950-51; home: Washington, D. C.

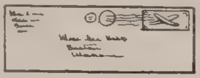
Dr. Albert Damon, Intern in Medicine – born in Boston, Massachusetts; A.B., Harvard College, 1938; certificate in Anthropology, Oxford, England, 1939; graduate student, Harvard and University of Chicago, 1939-42; U. S. Army Air Force, 1942-46: Aero Medical Laboratory, Wright Field, Ohio, and service in England and France in 1944; Ph.D., University of Chicago, 1946; M.D., Harvard Medical School, 1951; home: Newton, Massachusetts.

Dr. Fa-Chi Dunn, Assistant Resident in Dermatology – born in Canton, China, April 18, 1920; M.D., Hsiang-ya Medical College, 1944; Intern in Pathology, Yale University Medical College, New Haven, Connecticut, 1948; Assistant Resident in Pathology, Temple University Medical College, Philadelphia, 1949; Assistant Resident in Medicine, McCook Memorial Hospital, Hartford, Connecticut, 1950.

Dr. Harry Chao-Hung Fang, Assistant Resident in Psychiatry – born in Soochow, Kiangsu, China, March 10, 1924; B.S., St. John's University, Shanghai, 1942; West China Union University College of Medicine, Chengtu, Szechwann, China, 1943; Army, China: Liaison Officer, Ex-Major, September 1943 – March 1945; M.D., St. John's University College of Medicine, 1948; Surgical Intern, Lester Chinese Hospital, Shanghai, July 1948; Rotating Intern, Bishop DeGoesbriand Hospital, Burlington, Vermont, October 1948 – July 1949; Resident in Neuropathology, Mallory Institute of Pathology, Boston City Hospital, Boston, Massachusetts, July 1949 – July 1950; Assistant Resident in Neurology, Neurological Unit, Boston City Hospital, July 1950 – June 1951; home: Shanghai, China.

Dr. James B. Field, Intern in Medicine – born in Fort Wayne, Indiana, May 28, 1926; Harvard College; U. S. Army: 3d Infantry Division in France and Germany, 1944-45; wounded in action; M.D., Harvard Medical School, 1951.

Dr. John C. Rowe, Intern in Medicine – born in Dunkirk, N. Y., July 27, 1927; A.B., Colgate University, 1947; M.D., Harvard Medical School, 1951; home: Dunkirk, N. Y.



This brief note has come from Lt. Weldon W. West, MC, USAR (*S* 1948):

> At present I am doing surgery at the U. S. Army Hospital at Fort Hood, Texas. Since leaving the medical orientation course at Fort Sam Houston, I have not been associated with any of the men from M.G.H.
>
> Mrs. West sends her greetings to the Distaff Club.

Lt. Col. Frank A. Mantz, Jr., MC, USAR (*res. fel. P* 1950) sends us word of his present assignment.

> This will inform you that I have had a change of station and will depart soon for my new assignment. I enjoy receiving THE NEWS more than I can say, and request that in the future you send my copies to me at the Army Medical Service Graduate School, Tropical Medical Research Laboratory, San Juan, Puerto Rico.

Dr. Means received this interesting letter from Lt. William N. Christenson, written last June from the Epidemic Disease Control Unit #2, Naval Base, Norfolk 11, Virginia.

> I've been looking for the opportunity to write you a note, for I have fallen into that part of the Navy that makes one long even more strongly than usual for the friendships and teaching of the M.G.H.
>
> At the time you saw me I was enjoying a three-month period in Washington, where I was working at the Bureau of Medicine and Surgery of the Navy. Being in Washington

Dr. William Stone, Jr., M.D., Assistant in Ophthalmology, Massachusetts Eye & Ear Infirmary, whose ingenious technique, applied to the movable artificial eye and the new plastic cornea, is described on page 1.

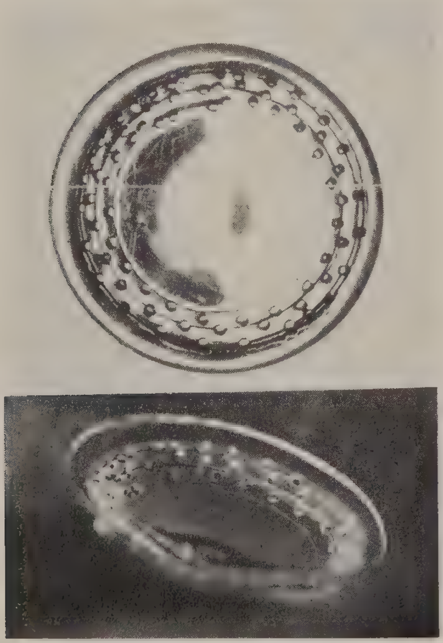


Figure 1. Plastic artificial corneal discs presently in use in these experiments.

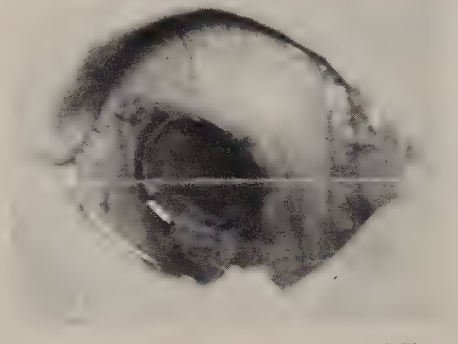


Figure 2. Photograph shows plastic disc of Figure 1 in place in scarred rabbit cornea at end of 12 months. Large central area is clear, exposed plastic.

was pleasant, but the work at the Bureau could hardly be called stimulating. However, as you doubtless know, many former MGH people are in Washington now, including Holly Smith, Don McCann, and Lorry White, with Bill Fritz near by in Baltimore. Needless to say, we had numerous reunions – so many, in fact, that the term "reunion" became improper, for it was very much like our days in Boston.

Before Washington, I had been stationed at Camp Edwards on the Cape, and there life was most pleasant, though not too busy, with work on a medical ward under Gus Kaufmann, who was our Chief of Professional Services. When I left Camp Edwards I was in a state of great delight, as my orders read for me to report at the Naval Medical School at Bethesda and I naturally thought this was going to be a chance to work there on something interesting. Unfortunately for me, this bliss ended rather abruptly when I learned that the orders had left out the important fact that I was being sent to Bethesda to attend the photofluorographic school. I had to inquire in order to find out what in the world this long term stood for, and learned this too late. Since then the answer has been unfolding, for it means the reading of miniature chest X-rays. The three months in Washington, spent at the Bureau and not at the Hospital in Bethesda, consisted of reviewing thousands of such films in preparation for reading them in the field. The Navy considers this a "course" of instruction, but at least they were correct in admitting (which they actually did) that the real reason behind the course was to explain the paper work. The reading of the films was only incidental.

When I first learned of my orders to Bethesda I hoped that I would be able to work on an artificial kidney for the Navy. And, in view of the nature of the work I found waiting for me, it is not surprising, I trust, that I did all I could to promote my transfer to the Naval Hospital for such an assignment. I got so far as to help convince the Navy that it should develop an artificial kidney, since the Army has one, but when I was ordered out to my present job the kidney had not materialized. Happily, I left with word of the possibility of my being recalled to work with the kidney, if it is obtained. Needless to say, I'm hoping most strongly.

At present I am located on the Naval Base in Norfolk, where I am in charge of the mobile photofluorographic unit for the Fifth Naval District. The work consists mostly of administration, since it is my responsibility to schedule the unit's work amongst the various ships and shore establishments in this area, and I have to sign all the items in the voluminous correspondence entailed. I read all of the little X-rays, which come out on 35 mm. film and which amount to about 300 to 400 a day in number. Any suspicious lesion on a small film calls for a standard 14 x 17 film, which we are equipped to take and which I read also. Any sustained positive findings call for hospitalization of the patient for study. In this fashion the system works pretty well, as the Navy requires such a miniature X-ray yearly on all of its men and civilian employees. My unit is mounted in a bus and we can travel all over this Naval District, though so far most of our work has been confined to the rather extensive Naval lay-out here in the Norfolk area.

I miss very much the personal contact with patients. Actually, unless I hunt up my suspected candidates on their ships, which I do, I'm not supposed to see any patients. The job offers an excellent experience in the surveying of the normal chest. I suppose I've seen some 10,000 of them since coming here! There is a Naval Hospital near, in Portsmouth, but this is a geographically difficult spot to reach from the Naval Base, as in this city one has only ferries, not bridges, on which to cross the rivers, and the traffic reminds one of downtown Boston on a busy day. There is a lot of time for reading, obviously, and this is some retribution for the lack of clinical work. But the whole thing makes me look back upon the productive days at the M.G.H. with ever-increasing longing.

Several weeks ago I received quite a shock, while reading the MGH News, when I came upon your epitaph to Dr. Beckman, for I had not heard previously about his death, although I did hear last year of his severe illness. During my brief contact with Dr. Beckman I grew to like him very much, and like many others I had occasion to be grateful to him for advice and help. I always felt a little disappointed that he left the M.G.H. at about the same time I returned as an intern.

Please remember me to the people at the M.G.H. Perhaps it is a little strange that I should ask you to do this at a time when I know you are leaving the Hospital. But I cannot believe that you ever actually will leave the M.G.H., for to me much of the fineness of the Hospital appeared to stem from your direction of the Medical Service. I hope it will not seem impertinent of me to have said this, and I want only to add that I know it will always remain my greatest honor and privilege to have worked on your service.

THE 1811 NEWS

No. 106 Boston, Mass. November 1951

ENDOSCOPY

Fifteen years ago, when the Endoscopy Service was started, the endoscopist used to go around the wards inquiring if there were any cases available for endoscopic procedures. Often there seemed to be none, or if there were the answer was, "We don't want to put the patients through it." On one occasion when he wanted to demonstrate gastroscopy to a distinguished visitor from England the endoscopist was told there were no suitable cases, and a complaint was made to the Medical Chief that he was a nuisance! The attitude of the visiting staff and the house staff seems to have changed considerably, for now they say, "Let's slip in a bronchoscope", and sometimes a consultation reads like an order —as, for example, "Bronchoscope tomorrow"! (Bronchoscope, by the way, is a noun and not a verb.)

"The word endoscope comes from [two Greek words meaning, respectively,] 'within' and 'to examine', and means an instrument for the examination of the interior of a hollow viscus.

"Bozzini in 1806 was the first physician to show an interest in the inspection of body cavities by artificial lights. . . . Kussmaul in 1868 was the first to attempt gastroscopy. . . . His first experiments were carried out on a professional sword swallower, but unfortunately the source of light was insufficient to give any practical results."[1] A new era for endoscopy began in 1879 with the invention of the carbon incandescent electric lamp. Since then electrical, mechanical, and optical improvements have been rapid, and each has contributed to modern endoscopy.

Regarding modern endoscopy Dr. Edward D. Churchill recently wrote, "Someone has said that endoscopy is merely the art of looking through a tube. Could anyone be so rash as to say this of the great science of astronomy? Of course, the technics of both astronomy and endoscopy can be brought to the carnival level where one may drop a quarter in the slot and look at the moon, or for the same price watch a sword swallower pass a strip of metal down his esophagus." So the answer as to how endoscopy should be molded "into a productive and significant area of medicine is simple: the subject matter of the area [should be] first and foremost the patient and not merely the technical skill of taking a look at his insides."[2]

The endoscopist actually does come in contact with a great many diseases, and since he takes an interest in the patient as a whole his interests are widespread. The following summary illustrates the common and also the rare pathology which may come to his attention.

BRONCHOSCOPY

The bronchoscopist should keep up his interest in general pulmonary disease by attending thoracic rounds and pulmonary clinics, where he will see chest X-rays and hear general discussions of the patients from the point of view of the internist, the thoracic surgeon, and the radiologist. In bronchoscopy he may see acute laryngotracheobronchitis, chronic bronchitis, bronchiectasis, lung abscess, postoperative atelectasis, congenital cardiovascular anomalies, tracheobronchial tuberculosis, tracheobronchial syphilis, tracheobronchial diphtheria, mycotic infections, foreign bodies, benign tumors, carcinoma, sarcoma, lymphoma, metastatic malignant disease of the bronchus, tumors of the trachea, asthma, sarcoid, bronchial trauma, and fibrocystic disease of the pancreas with bronchitis and bronchial obstruction.

ESOPHAGOSCOPY

Diseases of the esophagus are of interest to the gastroenterologist as well as to the thoracic surgeon. Therefore, in addition to attending thoracic meetings, the esophagoscopist should attend gastrointestinal conferences and be familiar with the medical, surgical, and radiological discussions of diseases of the esophagus. In performing esophagoscopy he frequently sees esophagitis, hiatus hernia, esophageal ulcer, benign stenosis, lye stricture, esophageal web, achalasia, diverticulum, varices, benign tumors, carcinoma, sarcoma, lymphoma, metastatic tumor, foreign bodies, and extrinsic pressure (from tumors, tuberculous glands, aneurysm, congenital vascular ring, and cardiac hypertrophy). Less often he may see trauma, external injury, bronchoesophageal and tracheoesophageal fistula, tuberculosis, syphilis, diphtheria, actinomycosis, blastomycosis, pellagra, scleroderma, mucous membrane pemphigus, myasthenia gravis, paralytic dysphagia, and emotional disorders of swallowing.

GASTROSCOPY

All diseases of the stomach are of interest to the gastroscopist and should be studied clinically on the wards and at gastrointestinal rounds in association with internists, surgeons, and radiologists. Gastric diseases include superficial gastritis, hypertrophic gastritis, gastric atrophy, gastric ulcer, gastrojejunal ulcer, benign tumor, carcinoma, sarcoma, lymphoma, tuberculosis, syphilis, actinomycosis, moniliasis, diverticulum, foreign body, bezoar, gastric allergy, extrinsic tumors pressing on or invading the stomach, and functional dyspepsia.

PERITONEOSCOPY

By way of the peritoneoscope, the endoscopist comes in contact with carcinoma (especially as it invades the liver and peritoneum), sarcoma, lymphoma, cirrhosis of the liver, hepatitis, tuberculous peritonitis, and ectopic pregnancy. Unexplained ascites brings up many interesting problems and is often an indication for peritoneoscopy.

Interest in learning endoscopy is attested by the recent report of the Surgical Residency Survey Committee in which, as a result of a questionnaire, it was recommended that "more experience in thoracic surgery and endoscopy be arranged by better organization of our own clinical resources. . . ." Such a reorganization seems to be indefinitely postponed, due to the war in Korea with its consequent demands on our resident staff. At the present time the Endoscopy Service is continuing to train residents from the Ear, Nose and Throat Service, and from the Anesthesia Service. World-wide interest in endoscopy is proved by our Harvard Medical School graduate students, who have been geographically distributed as follows: United States (36), South America (6), Canada (3), China (3), Mexico (2), Portugal (2), Philippines (2), Cuba, India, Guatemala, Lebanon, Turkey, and South Africa, one each.

Since the first report on the flexible operating gastroscope in 1948[3] we have taken 240 biopsies, with no accidents and no complications. The greatest field of usefulness for gastroscopic biopsy lies in the differential diagnosis of gastritis, lymphoma, and diffuse carcinoma. Other authors have reported similar results. Over 200 flexible operating gastroscopes are now in use.

Dr. Lowrey F. Davenport, associated for many years in bronchoscopy, has resigned as Assistant Physician at the Massachusetts General Hospital and has moved to Atlanta, Georgia. Dr. J. Gordon Scannell, Assistant in Surgery, and Dr. Lamar Soutter, Assistant Surgeon, have been helping in bronchoscopy and esophagoscopy. Dr. Gustavo R. Serrano of Mexico City, here as a Clinical Fellow in Surgery since January first, became so proficient in all the endoscopies that he was a real addition to the Endoscopy Clinic. Unfortunately, he left at the end of October to return to Mexico.

Edward B. Benedict, M.D.,
Endoscopist

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1. Benedict, E. B.: Endoscopy, as related to diseases of the bronchus, esophagus, stomach, and peritoneal cavity, Baltimore, Williams and

Wilkins Company, 1951.
2. Id. Churchill. E. D.: Foreword.
3. Benedict, E. B.: An operating gastroscope, Gastroenterology *2*:281-283, 1948.

* * *

VOLUNTEERS WANTED—DOCTORS' WIVES

Please leave a message for Mrs. Walter Bauer in the Volunteer Office (La3-8200, Extension 257) if you can contribute any time to MGH activities.

The Board of Trustees, at their meetings on September 7 and 21, and on October 5, voted:

To accept with regret the resignation of Dr. Brown M. Dobyns, Assistant in Surgery;
To accept the resignation of Dr. Arthur B. French, Assistant in Medicine;
To accept the resignation of Dr. Patricia Wanning from the position of Assistant to the Children's Medical Service;
To grant leave of absence to Dr. Churchill from September 11 to November 12, and to make Dr. Leland S. McKittrick Acting Chief of the Surgical Service for that period;
To grant leave of absence to Dr. Richard Chute from September 15 to the end of his present appointment, allowing him to retain full privileges at Baker Memorial and Phillips House;
To grant leave of absence to Dr. Charles E. Rounds for the balance of his present appointment.

To appoint:

Dr. George R. Burland as First Assistant Resident in Surgery for one year, beginning October 1;
Dr. Ernest M. Daland to the Board of Consultation, effective as of July 1;
Dr LeRoy L. Eldredge, Jr. as Assistant to the Children's Medical Service;
Dr. Richard H. Eppright as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1953;
Dr. Robert H. Fennell as Assistant Pathologist, effective January 1, 1952;
Dr. Hans J. Harder as Assistant Resident in Anesthesia for six months, beginning August 6;
Dr. James P. Hepburn as Assistant Resident in Anesthesia for one year, beginning September 1;
Dr. Owen W. Kite as Assistant Dental Surgeon;
Dr. James H. Means to the Board of Consultation;
Mr. Lovick C. Miller, Jr. as Assistant Psychologist, beginning September 1;
Dr. William J. Shriber as Assistant in Medicine and Assistant in Physical Medicine, effective as of September 1;
Dr. Paul A. Srere as Assistant in Biochemical Research, effective as of September 1;
Miss Mildred E. Swinson as Assistant Psychologist, beginning September 1.

At their meetings held during September, the General Executive Committee voted:

To promote Dr. Falls B. Hershey to the position of Resident Surgeon, effective January 1, 1952;
To promote Dr. Robert S. Shaw to the position of Resident Surgeon, effective January 1, 1952;
To continue the appointment of Dr. Frederic M. Blodgett as Clinical and Research Fellow on the Children's Medical Service for the year July 1, 1951 through June 30, 1952;
That Dr. Morten Smith-Petersen's appointment as Orthopedic Resident become effective October 1, 1951 rather than January 1, 1952.

To appoint:

Dr. Mustafa I. Adham as Graduate Student Assistant in Surgery for one year, beginning September 17;
Dr. Simon Black as Research Fellow in Biochemistry, beginning September 1;
Dr. Aulio R. Brea, as Clinical Fellow in Surgery, assigned to Endoscopy, beginning October 1;
Dr. Daniel R. Clement as Clinical and Research Fellow in the Children's Medical Department for one year, beginning September 4;
Dr. Jeannine Crepeaux as Clinical and Research Fellow in the Children's Medical Department for one year, beginning September 4;
Dr. William H. Elliott as Research Fellow in Biochemistry, effective as of September 1;
Dr. Joseph W. Gardella as Clinical and Research Fellow in Medicine, effective as of September 1;
Dr. Edgar L. Gasteiger, Jr. as Research Fellow in Neurosurgery, effective as of July 1;
Dr. Mary E. Jones as Research Fellow in Biochemistry, beginning September 1;
Dr. Leon Levintow as Research Fellow in Biochemistry, beginning September 1;
Dr. Winifred Liu as Research Fellow in Surgery, assigned to Gynecology, effective August 1;
Dr. Herbert B. Locksley as Clinical and Research Fellow in Neurosurgery for one year, beginning August 1;
Dr. Robert F. Martin as Graduate Student Assistant in Surgery for nine months, beginning July 23;
Dr. Charles V. Menendez as Clinical and Research Fellow in Surgery, effective as of July 1;
Dr. Paul H. Painter as Clinical Fellow in Psychiatry, beginning October 1;
Dr. Pierre Passouant as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, as of September 1;
Dr. Manuel Quijano as Clinical and Research Fellow in Surgery for nine months, beginning October 1;
Dr. Prospero T. A. Santos as Clinical Fellow in Surgery, assigned to Endoscopy, effective as of October 1;
Dr. Raymond C. Vilain as Clinical and Research Fellow in Surgery for nine months, beginning October 1;
Mr. Lawrence L. Whytehead as Clinical and Research Fellow in Surgery, beginning October 1.

* * *

NEUROPHYSIOLOGY AT M.G.H.

The role of the nervous system in the body is that of an intercommunicating network linking its various parts, informing one part of what another is doing, and thus contributing to the resultant performance of the whole. It would appear that the science of the nervous system—neurophysiology—is beginning to play a somewhat similar role in our hospital, for basic research in this field finds its place in many departments: in Neurology, Anesthesia, Psychiatry, Neurosurgery, and Physical Medicine (to mention only its principal mentors). All of these medical sciences seek the answer to the questions: how does the brain work? how does the spinal cord work? and the peripheral nervous system?

In laboratories in the White Building, the Bulfinch, and the Domestic Building, workers are to be found engrossed in these problems at levels varying from the most basic to the most directly applied forms of neurophysiology.

To describe all the lines of attack that are currently being pursued would be impossible in this space, and only those with which the writer is closely in touch will be described here.

Among the laboratories built last year in Dr. Beecher's new wing for Anesthesia is a well-equipped electrophysiological laboratory designed from the outset for experimentation involving the recording by amplification systems, cathode ray oscilloscopes, and camera, of the minute but all-important electrical potentials which signal the presence of activity in the nervous system.

Here in this laboratory some of the fundamental properties of the nerve tracts of the central nervous system are being studied and contrasted with those of the peripheral nerve. This work is wholly new and has been made feasible by the discovery of a technique for dissecting out the white tracts of the live mammalian spinal cord and for keeping them "alive" and functioning in a nerve-chamber similar to that used in peripheral nerve studies. The first preliminary description of this technique has been published recently[1]. Dr. Donald O. Rudin, who holds a research appointment in Dr. Beecher's department, has been helped in this work by George Eisenman, from the third year of the Harvard Medical School, and we have been glad to welcome lately the assistance of Mme. Thérèse Passouant, a physiologist from France.

This research is already yielding information which will lead to new concepts of the mechanisms of central nervous system function and the understanding of some of the apparently anomalous results found by older techniques.

Ever since Du Bois-Reymond demonstrated, over a hundred years ago, that a state of activity in nerve is always accompanied by an electrical change, the science of neurophysiology has developed more and more along electrophysiological lines. Whereas the microscope reveals the inert structure of the nervous system, electrophysiology gives us information about its living function; it reveals the codes by which messages are carried along nerves and the routes these messages follow. It is not surprising, then, that the modern neurophysiologist is concerned not only with anatomy, physiology, and biochemistry, but also with electronics.

It is through the role played by electronics (and by the catalytic action of Professor Norbert Wiener, who has always been a good friend to our laboratory) that neurophysiology in this hospital has been able to establish a very fruitful liaison with the Massachusetts Institute of Technology where Professor Jerome Wiesner, Director of the Research Laboratory of Electronics in the Department of Communication Engineering, has been good enough to give research facilities to the writer and to Mr. James Casby of the Electroencephalographic Laboratory.

There are many features of nervous communication which parallel closely those of communication engineering. This fact has received a great deal of publicity lately, due to the general interest in the new calculating machines and so-called "giant brains". Some of this may have been overpopularized, but there is no doubt that the neurophysiologist often finds himself faced with almost the same problems as is the engineer. One such problem is the subject of our current research. We want to know whether the brain-waves recordable from the two sides of the head, under certain conditions, are different or identical in respect to voltage fluctuation with time. (All electroencephalograms are time-series or graphs of voltage changes along a time course.) This is the same kind of problem which frequently faces a communication engineer, for he, too, is interested in studying voltage change with time.

At M. I. T. they have built an instrument, called a digital electronic correlator, which makes such comparisons of time-series automatically. Five-minute samples of two such graphs can be taken by the correlator and, after being transformed into frequency-modulated pulses, can be sampled by the machine 12,000 times at each of 80 time steps—a total of just under a million calculations. The result is reached in a matter of minutes, whereas to handle the mathematical calculations ourselves would probably take us our two lifetimes.

One of the problems to which we have applied this electronic correlator is that of the special type of brain-waves produced by a person when he is engrossed in some mental work, such as arithmetic. We have been able to establish that the waves produced in these circumstances have features almost unique among electroencephalographic patterns and that they differ profoundly from the waves produced by many other types of brain activity (e.g., seeing, listening, sleeping, or in the diseased brain: convulsions, coma, etc.). The exact characteristics found (identical voltage changes in both hemispheres, except that they are of opposite electrical sign) give the neurophysiologist a lead as to the possible brain mechanisms called into play by such a task as mental calculation. A report of this work was given recently at the meeting of the Eastern Association of Electroencephalographers in Canada[2].

Another application of this method is being made by Mr. Casby. This is a study of changes in brain-waves produced by visual stimulation.

In the Electroencephalographic Laboratory, under the direction of Dr. Robert S. Schwab, we have for some time been interested in the effect on the electroencephalogram of flickering lights of varying intensity shone into the eyes of the subject. Such a stimulus is "coded" by the optic nerves and carried to the brain. From animal experimentation sufficient knowledge has been gained to enable us to interpret in some measure the effects we find in the human subject and to elucidate to a certain extent the nervous pathways used and the reactions evoked in a normal person[3].

This work has been closely paralleled on the clinical side by Dr. Schwab's and Dr. John A. Abbott's researches into the reactions of the abnormal subject, and in particular those of the epileptic. The responses of the patients with certain types of epilepsy are strikingly different from the normal, and by comparison with the studies of normals and of animals some clue can be gained as to the mechanism involved in the diseased state. In this work we are fortunate to have visiting us for some months Dr. Pierre Passouant, Research Fellow in the Department of Neurology, who comes to us from the oldest university in Europe—the University of Montpellier in the south of France.

Visiting us also for some months, and also holding an appointment in the Department of Neurology, is Dr. Simon E. Markovich from Santiago, Chile. Dr. Markovich's current studies are of the electrophysiology of muscle, an interest shared by the Department of Physical Medicine and one closely related to Dr. Schwab's researches on Parkinson's disease and myasthenia gravis.

In collaboration with the Departments of Psychiatry and Neurosurgery, we are taking part in a study directed by Dr. Stanley Cobb and Dr. William H. Sweet on the efficacy of orbital gyrectomy as a therapeutic measure in cases of intractable pain. This entails making electroencephalographic recordings before, during, and after the operation. Opportunities to record from this part of an undiseased brain at operation are rare, and correlation of the results with the observations on blood pressure and respiration changes made simultaneously by Dr. William P. Chapman of the Department of Medicine should prove informative. Techniques of this kind are intricate, and without the help of Miss Elizabeth Peterson and Mr. Frank Eckert these recordings would be impractical in their complexity. Other opportunities to record from the exposed brain at operation have been given to us by Dr. James C. White in his operations for temporal lobe epilepsy. Every such opportunity takes us one step nearer to the goal of elucidating the physiological mechanisms of the brain.

Another aspect of human electrophysiology has been followed in the Department of Anesthesia, where Dr. Beecher's project for the Study of Sleep and Sedatives has included observations of the electroencephalogram at various stages of normal and of sedated sleep[4]. A popular description of this work appeared in *Life* magazine. The correlation of electroencephalographic changes with movements made during sleep has also contributed to our understanding of the nervous centers responsible for the change of state.

None of the work outlined here would be possible were it not for generous support from various sources, and it would not be fitting to close without acknowledging our appreciation of grants from the Office of the Surgeon General of the U.S. Army, the Office of Naval Research, the U.S. Department of Public Health, and from Mrs. Henry D. Minot, a very good friend to the Electroencephalographic Laboratory for many years.

Finally, it is good to be able to add that a former neurophysiologist holds the appointment of General Director of this hospital—Dr. Dean A. Clark.

Mary A. B. Brazier, Ph.D.,
Neurophysiologist in the Departments of Psychiatry and Anesthesia

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1. Rudin, D. O., and Eisenman, G.: A method for dissection and electrical study in *vitro* of mammalian central nervous tissue. Science *114*: 300-302, 1951.

2. Brazier, M. A. B., and Casby, J. U.: An application of the M. I. T. digital electronic correlator to a problem in electroencephalography, EEG & Clin. Neurophysiol. *3*: 375, 1951.

3. Brazier, M. A. B., and Casby, J. U.: A study of the EEG in normal subjects during intermittent photic stimulation: Read at the Annual Meeting of the American Electroencephalographic Society, June 1951, EEG & Clin. Neurophysiol. *3*: 380, 1951.

4. Brazier, M. A. B.: A study of the electrical fields at the surface of the head during sleep, EEG & Clin. Neurophysiol. *1*: 195-204, 1949.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and *not* to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Dermatology

Frazier, C. N., Lever, W. F., Leeper, R. W., Keuper, C. S., Bienvenu, L. J., LeDonne, J. E., and Levy, S. W.
Effect of adrenocorticotropic hormone (ACTH) and cortisone on the several varieties of pemphigus.
J. Invest. Dermat. 17:55-60.

Lever, W. F.
ACTH and cortisone in diseases of the skin.
New England J. Med. 245:359-363.

General Medicine

Burrage, W. S.
Medical progress: Antihistamines: Their use and abuse.
New England J. Med. 245:532-537.

Ophthalmology

Leahey, B. D.
Bullous keratitis from vitreous contact.
A. M. A. Arch. Ophth. 46:22-32.

Oto-Laryngology

Miller, D.
Nasopharyngeal cancer.
Laryngoscope 61:187-214.

Radiology

Hanelin, J., and Robbins, L. L.
Medical progress: Radiology in bone pathology.
New England J. Med. 245:20-27; 60-66.

Klein, A., Joplin, R. J., Reidy, J. A., and Hanelin, J.
Roentgenographic features of slipped capital femoral epiphysis.
Am. J. Roentgenol. 66:361-374.

McCort, J. J., and Robbins, L. L.
Roentgen diagnosis of intrathoracic lymph-node metastases in carcinoma of the lung.
Radiology 57:339-360.

Brief bits:—

The address for Dr. William H. Baker (*clin. & res. fel. M*) is still M.G.H. The address for him which appeared in our September issue, given us by what we considered to be an unquestionably reliable source, is incorrect.

Dr. Henry K. Beecher, Chief of our Anesthesia Service, lectured recently at Guy's Hospital, London, and La Salpetriere, Paris, and then went on to Germany at the request of the Surgeon General of the U.S. Army.

Dr. Edwin F. Cave, Visiting Orthopedic Surgeon on our staff, lectured before the New England Surgical Society in York Harbor, Maine, on September 22. His subject was "Femoral shaft fractures treated by medullary nailing".

Dr. Edward D. Churchill, Chief of our Surgical Services, and Mrs. Churchill left on September 11 for a short vacation trip through North Africa and Italy. On October 1 Dr. Churchill went to the University of Birmingham, Birmingham, England, for a month, as Honorary Professor of Surgery. While in England he gave the Simpson-Smith Memorial Lecture at the University of London, Hospital for Sick Children, and a Hunterian Lecture for the Royal College of Surgeons of England.

Dr. E. Grey Dimond (*clin. fel. M* 1949) is Director of the Cardiovascular Laboratory at the University of Kansas Medical Center, Kansas City 3, Kan.

Dr. Sheridan S. Evans (*ES* 1945) is now Assistant Chief of Surgery at the Veterans Administration Hospital in Houston, Texas, and Instructor in Surgery at the Baylor University College of Medicine.

Dr. Leon R. Lezer, one of our Assistant Directors, and his family have moved from the Penthouse, atop the White Building, to the Resident Physician's House. It already looks much happier, now that it is occupied again. It was moved a bit to the south to make room for the new Research Building, and has stayed disconsolately empty since then till now.

Dr. Tracy B. Mallory, until recently Chief of Pathology and Bacteriology at M.G.H. and now Consultant to the Department, was the recipient of the Ward Burdick Award, presented to him by the American Society of Clinical Pathologists on October 17.

Dr. Gertrud C. Reyersbach, Associate Physician to our Children's Medical Service, announces the opening of an office for the practice of Pediatrics at 330 Dartmouth St., Boston.

Dr. Earl B. Sanborn (*a. r. NS* 1943) announces the opening of an office for the practice of Surgery, including Thoracic Surgery, in Illinois. His card bears two addresses—636 Church St., Evanston, and 55 East Washington, Chicago.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Philip E. Meltzer, Surgeon in Charge of the Winthrop Foundation for the Deaf, and Dr. Donald K. Lewis, Associate Surgeon, will speak at the first fall meeting of the New England Otolaryngological Society, to be held in the Ear, Nose, and Throat Clinic on November 14. Dr. Meltzer will report on the work of the Foundation. The subject of Dr. Lewis's talk will be "Ménière's disease—Some observations".

Also on November 14, the New England Ophthalmological Society will meet at the Infirmary, where Dr. Walter H. Fink of Minneapolis, an alumnus of the Eye and Ear, will speak on "The present status of superior oblique surgery".

Observation of the work being carried on here by the Department of Ophthalmology was included in the conference program of the Association of Surgeons of the New York Central System, held in Boston Ocotber 3—5. Dr. Joseph J. LoPresti of the Infirmary staff was host for the visiting surgeons, who toured the Howe Laboratory, the Boston Eye Bank, the Retina Service, and Dr. William Stone, Jr.'s laboratory.

The Infirmary was represented at the fall meetings of the American Academy of Ophthalmology and Otolaryngology and of the American Boards of Ophthalmology and Otolaryngology, which met in Chicago during the second and third weeks in October. Dr. Edwin B. Dunphy, who is Secretary-Treasurer of the American Board of Ophthalmology, took part in the Board examinations and also in the Academy symposium on Medical Education. Among the staff members who participated in the Academy meetings were Dr. W. Morton Grant of the Howe Laboratory, who gave a paper on clinical tonography, and Dr. William Stone, Jr., who spoke at a symposium on the movable implant.

Dr. LeRoy A. Schall, as President of the American Board of Otolaryngology, and Drs. Harris P. Mosher, Philip E. Meltzer, and Werner Mueller assisted with the otolaryngology examinations.

Recent visitors at the Infirmary were a group of Ophthalmologists from Spain and South America. The doctors toured the hospital, spending considerable time in the Howe Laboratory. Dr. David G. Cogan and Dr. David Donaldson discussed briefly the projects of the Laboratory. The visiting doctors were particularly interested in the three-dimensional color slides taken with Dr. Donaldson's stereocamera.

The visiting doctors were Dr. J. Casanovas of Salamanca, Dr. A. Pinero of Cadiz, Dr. Pedro Tena of Madrid, Dr. E. Arques and Dr. J. Arriaga of Seville, Dr. Juan Arentsen of Chile, and Dr. Garcia Aliy of Chile, who is now living in New York City.

* * *

BAY STATE
MEDICAL REHABILITATION CLINIC

The Bay State Medical Rehabilitation Clinic, Incorporated, was established on the grounds of the Massachusetts General Hospital last May. Old Ward I was turned over to the Clinic as part of a corporate community project, to establish in New England a medical rehabilitation clinic. The need for such service has been plainly apparent for several years, particularly in view of the growing realization that the physician's responsibility does not end with definitive medical or surgical care, but extends to those long-neglected problems of medical care relating to physical independence for the severely disabled (self-care in dressing, feeding, locomotion, toilet care, and so forth). To provide this type of medical rehabilitation service, the Bay State Medical Rehabilitation Clinic has a professional staff including a medical director and assistants, who are specialists in Physical Medicine and Rehabilitation; physical and occupational therapists, experienced in the techniques of physical analysis and restoration and development of occupational skills; and a rehabilitation specialist, trained in the counselling and coordinating of rehabilitation services. A large board of consultants from the many teaching hospitals of the city provide expert opinion in all special medical fields.

Because of the location of this Center and its easy accessibility to the Massachusetts General Hospital, arrangements were made whereby the Clinic may buy services, such as special diagnostic examination and specialized types of treatment, from the hospital. This eliminates duplication of expensive equipment.

The majority of physicians and surgeons are probably not familiar with this particular field of practice, as undergraduate medical education has been lacking in this aspect of treatment. Only recently, through postgraduate training, has the medical specialty of Physical Medicine and Rehabilitation developed. Specialists in this field, known as physiatrists, concentrate on this portion of medical practice and prescribe specific therapy at the hands of physical therapists and occupational therapists, and other ancillary medical techniques—always keeping in mind the total rehabilitation of the handicapped individual to the fullest physical, mental, social, vocational, and economic usefulness of which he is capable. Physical Medicine and Rehabilitation does not overlap the field of general specialized medicine, but, rather, supplements and complements it.

Although the Clinic is set up as an out-patient center, arrangements have been made with Baker Memorial for those patients needing hospitalization while undergoing treatment at the Clinic.

The Clinic is not set up to service any particular area or patients from any particular hospital. It is open to all handicapped individuals, wherever they may reside. The handicapped person's need and the Clinic's ability to meet that need are the only prerequisites for admission. Patients are admitted to the Clinic for evaluation by the medical staff on referral by private physicians, hospitals, clinics, insurance companies, and social agencies. The patient, on admission, enters an evaluation period, during which the attempt is made to define his capacities and his needs. He undergoes medical examination, his medical history is studied, and he is assigned to the Occupational Therapy and the Physical Therapy Departments for evaluation of his skills and physical capabilities. He is similarly studied from the psycho-social point of view. If he is known to other agencies, they are asked to contribute a report of their experiences.

The length and composition of the evaluation period varies according to the need. During the study all members of the staff confer. Views are exchanged and a tentative rehabilitation diagnosis is agreed upon. On this basis, further activities for the patient at the Clinic are recommended and services from other sources in the community are planned.

A prescription for Occupational Therapy may include one or more of the following techniques: kinetic (to increase motion), energic (to increase strength), metric (to measure or evaluate prevocational potentials, or the activities of daily living), and apotrophic (where physical improvement or well-being depends upon emotional attitude toward illness). It sometimes helps to direct a patient's concentration from the physical abilities that he lacks to an activity or interest which will encourage him to use what he has.

Kinetic and energic Occupational Therapy include coordinated exercise through purposeful activity, very often used by the doctor in combination with or as a step beyond Physical Therapy.

We have set up the Occupational Therapy Department with job demands, in order to do prevocational analysis and training. The aims in this type of analysis are to investigate the physical capacities, intelligence, work habits, attitude toward employment, previous experience, and social relationships of the individual. Since we are not a placement agency, this analysis is sent either to the referring agency or to the agency we feel is best qualified to handle the case.

Prevocational training, as was mentioned above, may precede, be combined with, or follow the analysis, for it utilizes such techniques as are required for teaching an upper extremity amputee to use his prosthesis, a hemiplegia to write or type with the sub-dominant hand, or a handicapped housewife to resume her responsibilities in the home.

Naturally, in a rehabilitation clinic independence of the handicapped is sought, and an evaluation of the individual's ability to perform the activities of daily living is a prerequisite to training in these activities. They include hygienic care, eating, dressing, putting on and caring for orthopedic apparatus, locomotion, and other skills such as writing and getting into and out of bed.

A point to be stressed is that the department is not a vocational training center; but in order to accomplish the above aims, we have included among our tools clerical equipment (typewriters, mimeograph machine, adding machine, etc.), drafting equipment, hand and power sewing machine, metalwork equipment, (including a metal-turning lathe), jewelry-making equipment, hand and machine wood-working tools, printing equipment, textiles (including weaving materials and fabrics for decorating techniques, such as silk screening and stenciling), art supplies for painting and sketching, a training bathroom and kitchen, and equipment for a variety of manual benchwork tests.

The Physical Therapy Department is well equipped. Many patients, before receiving treatment here, are unable to walk—due in many instances to muscle weakness. With these cases the Elgin table (more commonly known as the DeLarme table) is used for progressive resistance exercises. As a result of this specific technique, muscles are built up to withstand the patient's weight. The table is also used for exercises of the back, abdomen, and upper and lower extremities.

A patient learning balance and step as a prerequisite for walking, uses the parallel bars, where he has security, before advancing to crutches, canes, or the full bearing of his weight.

To prepare a patient for obstacles he will encounter in his own surroundings, we use steps, ramps, and curbs.

Mat work is given to many patients whose legs are paralyzed. In these cases we teach the patients to use their arms and shoulders, so that they may be able to perform wheel chair activities, sit, turn, learn to put on their appliances, and finally to walk with the aid of crutches.

A special treatment room is equipped with treatment tables, a luminous heat lamp, and an electric stimulator.

The aim of our Physical Therapy Department is to enable the patient to live independently, in spite of his handicap.

As was mentioned before, it is important to avoid duplication or overlapping of services. Therefore, we work cooperatively with agencies in the community that may supplement the services here at the Clinic or at the Massachusetts General Hospital. To coordinate the services of the Clinic and those of the community, there is need for a rehabilitation counsellor and coordinator.

The counsellor observes the patient from the time of his admission to his discharge, coordinates the findings of the staff, and sees that the rehabilitation program of each person is individually planned on the basis of an analysis of his total personality, with all of its components. The counsellor takes responsibility for the quality and congruence of planning, and makes discriminating use of the diversified resources in the community which he finds necessary as part of the rehabilitation plan. He assumes continuing responsibility for the outcome of each special service as it relates to the individual's total need.

The majority of patients who have been admitted to the Clinic have been handicapped by industrial accidents, amputations, fractures, arthritis, and neuromuscular disorders. We have serviced or are in the process of servicing 103 patients. These patients have come from all the possible referring sources that were mentioned above. Also, the United Mine Workers of America Welfare and Retirement Fund organization has selected the Bay State Rehabilitation Clinic as one of five such centers in the United States where they are sending their disabled miners for rehabilitation.

As was mentioned in the opening of this article, the Bay State Medical Rehabilitation Clinic is a community project. It is a completely independent, non-profit corporation, aided by anonymous gifts and backed by the Bay State Society for the Crippled and Handicapped, Incorporated. The Clinic provides a new community medical service, deserving the approval and cooperation of the entire medical profession.

Ottilie M. Banks, M.A.,
Rehabilitation Counsellor
and Coordinator

BIOGLETS

Dr. John G. Gibson, Assistant Resident in Psychiatry – born in Belfast, North Ireland, April 14, 1920; M.B., B.C.H., B.A.O., Queen's University, Belfast, 1942; Assistant Extern Surgeon, Royal Victoria Hospital, Belfast, 1943; military service: Flight Lieutenant, Royal Air Force (V.R.), 1944-46; M.D., Queen's University, 1947; Medical Registrar, Royal Victoria Hospital, Belfast, 1947; Senior Resident Medical Officer, Royal Free Hospital, London; Registrar, Nervous Diseases Hospital, Belfast, 1948; M.R.C.P. (London), 1949; Senior Registrar in Psychiatry, Bethlem Royal and Maudsley Hospitals, London, 1949 – (still on staff of Maudsley); married; 2 children.

Dr. Shepard C. Ginandes, Intern on the Children's Medical Service – born in Brooklyn, N. Y., June 7, 1928; A.B., Harvard College, 1947; M.D., Harvard Medical School, 1951; home: Cambridge, Massachusetts.

Dr. Melvin J. Glimcher, 3d Assistant Resident in Surgery – born in Brookline, Massachusetts, June 2, 1925; U. S. Marine Corps: 1942-45; Duke University, Durham, North Carolina, 1943; B.S. in Mechanical Engineering, Purdue University, Lafayette, Indiana, February 1946; B.S., Purdue University, June 1946; M.D., Harvard Medical School, 1950;

NO. 33 IN A SERIES OF STAFF PHOTOGRAPHS
DR. LEON R. LEZER, ASSISTANT DIRECTOR

Surgical Intern, Strong Memorial Hospital, University of Rochester, Rochester, N. Y., 1950-51; home: Brookline, Massachusetts.

Dr. Fairfield Goodale, Jr., 2d Assistant Resident in Pathology – Harvard College, 1941-42; Army Air Corps: fighter pilot, ETO, 1942-45; Adelbert College, Cleveland, Ohio, 1945-46; M.D., Western Reserve School of Medicine, 1950; Intern, Mount Auburn Hospital, Cambridge, Massachusetts, 1950-51; home address: Winch Street, Framingham, Massachusetts.

Dr. W. Robert Harris, Assistant Resident on the Orthopedic Service – born in Toronto, Canada, December 19, 1922; M.D., University of Toronto, 1945; Junior Intern, Toronto General Hospital, 1945-46; military service: Surgeon Lieutenant, R.C.N. (R), 1946-47; Research Assistant, Department of Anatomy, University of Toronto, 1947-48; Senior Intern in Surgery, Hospital for Sick Children, Toronto, 1948-49; Senior Intern in Surgery, Toronto General Hospital, 1949-51.

Dr. Manucher Javid, Assistant Resident in Neurosurgery—born in Terehan, Iran, January 9, 1921; Daru'l Fonun College, 1937-40; University of Terehan Medical School, 1940-43; came to the U.S.A., February 1944; M.D., University of Illinois Medical School, 1946; rotating internship, followed by two years of senior residency in General Surgery and Neurosurgery, Augustana Hospital, and Neuropathology, Illinois Neuropsychiatric Institute, Chicago; Fellow in Neurosurgery, Lahey Clinic, and Resident in Neurosurgery, New England Center Hospital, Boston; Clinical and Research Fellow, Harvard Medical School and M.G.H., July—December 1950.

Dr. Arthur F. O'Keeffe, First Assistant Resident in Surgery—born in Boston, Massachusetts, May 8, 1916; U. S. Army: Captain, ETO, 117th General Hospital, England and France, 1½ years, and in U. S., Deshon General Hospital, 1 year; A.B., Johns Hopkins, 1939; M.D., Duke, 1943; Intern in Surgery, Duke Hospital, 1944; Junior, Intermediate, and Chief Resident in Surgery, VA Hospital, West Roxbury, Massachusetts; Review Course in Medicine and Surgery, Harvard Course for Graduates, January—June 1947; Research and Clinical Fellow in Surgery, M.G.H., January—June 1950.

New addresses:—

Dr. Gregory Bard (*clin. fel. Phys. M*), 137 Englewood Ave., Brighton, Mass.
Dr. Edwin F. Cave (*ES* 1926 & *Or.* 1928), 264 Beacon St., Boston 16, Mass.
Dr. Richard Chute (*ES* 1929), 203 Commonwealth Ave., Boston 16, Mass.
Dr. Mack L. Clayton (*clin. a. Or. Surg.*), 264 Beacon St., Boston 16, Mass.
Dr. Edwin M. Cole (*r. p. N* 1932 & *Psychiat.* 1934), 412 Beacon St., Boston, Mass.
Dr. John R. Frazee (*Oto-Lar.* 1925), 1180 Beacon St., Brookline 46, Mass.
Dr. William F. Fritz (*M* 1951), National Heart Institute, USPHS Hospital, Baltimore, Md.
Dr. Walter C. Guralnick (*dn. s.*), 29 Commonwealth Ave., Boston 16, Mass.
Capt. Vincent P. Perlo, MC, USAR (*a.* N), Madigan Army Hospital, Fort Lewis, Wash.
Dr. Carter R. Rowe (*Or.* 1939), 264 Beacon St., Boston 16, Mass.

All of you who read the March 1950 issue of THE NEWS will always remember that interesting letter from Dr. Russell T. Congdon (*WS* 1909), in which he told of his early experiences in out-of-the-way sections of the far northwest and of the exciting discoveries made by him and his son Russell S. on their many trips of exploration and excavation.

Although much briefer than the previous one, this letter from Dr. Congdon was most gratefully received.

> Please continue to send me THE NEWS. It would be sorely missed if you didn't.
>
> I expect to attend the meeting of the College of Surgeons at San Francisco in November, and hope to see some of our fellows there. Having my two sons working with me makes it easy to get away for vacations.
>
> We spent a month at Churchill, Manitoba, this summer, pursuing our hobby of bird-photography. We made newspaper headlines by finding a nest of the rare Hudsonian godwit, a large shore bird which is nearly extinct, and obtained good pictures of many handsome birds. Mrs. Congdon is a rare companion on these excursions, enjoying equally with us all the thrills.

We were glad to receive this letter from Dr. John M. Head (*a.r. S*).

> I was called to active duty with the U.S. Public Health Service on July 30, with the rank of Assistant Surgeon, and am working on the surgical ward of the USPHS Hospital in Portland, Maine. So far it has been quite enjoyable; nor does an occasional fishing trip out into Casco Bay detract too much from the daily routine. I have the good fortune to be working under Dr. Reed Broadbent, a medical school friend of Dr. Tom Nielson.
>
> I hope I may be able to revisit the scene of my many MGH crimes before too long.
>
> Please keep on sending THE NEWS. I appreciate being able in this way to keep in touch with events at M.G.H.

In this one letter from Lt. Adolf L. Gundersen, MC, USNR (*a.r. Surg.*) we learned about two of our men—Adolf himself and his brother, Lt. Sigurd B., Jr. (*Surg.* 1949). The letter bears the address Naval Academy Athletic Association, U.S. Naval Academy, Annapolis, Maryland, and reads:

> I don't know whether you have my brother Sig's address or not. He was assigned these past eight months to the Yokosuka Naval Hospital in Japan. After being in various assignments, including the Medical Service, he now has been assigned to the 13th Surgical Team and has been sent to the 1st Marine Division in Korea. His present address is U.S. Naval Hospital #3923, Box 44, c/o Fleet Post Office, San Francisco.
>
> My present work here at the Naval Academy is concerned primarily with athletic injuries. I'll be traveling with the Navy football team this fall, which should be fun.
>
> It is certainly nice to get THE NEWS and keep up with goings-on at the M.G.H.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 107 Boston, Mass. December 1951

NEUROSURGERY

It is three years since the previous report of work on the Neurosurgical Service appeared in THE NEWS. During this period there has been no alteration in the number of patients or operations, both being limited by the space that can be assigned to a specialty in a general hospital. The important changes are related to changes in personnel. Dr. Bertram Selverstone, four years from the termination of his residency, has left our full-time visiting staff to become chief of the service at the New England Medical Center and the first Professor of Neurosurgery at Tufts Medical School. He will be greatly missed. Fortunately, he continues as Clinical Associate here and frequently takes part in our meetings. Dr. Louis Bakay will take his place on the full-time staff when he completes his residency at the end of December.

It is of interest that the Bureau of Medicine and Surgery of the U. S. Navy has sent us three men for resident training. The first two have finished their course. Commander Richard W. Garrity was assigned as head of the neurosurgical service at the large Naval Hospital in San Diego, and Commander William J. James to the corresponding service at St. Albans.

There has been a notable increase in the research staff. Working in the laboratories there are now a Research Associate in Physiology assigned to our service and five Research Fellows. Three medical students have been engaged in full-time research work during their summer vacations and part-time during the academic year. A staff of four technicians is required to work on the various research projects listed below. Funds for the salaries of the workers and the material required have been generously supplied by the Atomic Energy Commission, the American Cancer Society, the U. S. Public Health Service, the Damon Runyon Fund, and an anonymous medical research foundation. The complex technique of our current investigations requires team work integrated with a wide variety of specialists not only in the field of medicine, but also in chemistry, atomic energy, and acoustics. For assistance outside the hospital we are greatly indebted to Harvard Medical School, Massachusetts Institute of Technology, and the Brookhaven National Laboratory. A general idea of the more important projects under investigation by the staff can be obtained from the following summary:

Radioactive mapping of the position and extent of brain tumours: The value of beta emanation from radioactive isotopes of phosphorus and potassium in mapping the extent of tumours in the brain was discovered by Drs. Selverstone and William H. Sweet of this department, with the help of Drs. Charles V. Robinson and Arthur K. Solomon in the Department of Chemistry at Harvard Medical School. A preliminary report of this work was given in the January 1949 article in THE NEWS. The accuracy with which deep tumours can be charted by probing with a micro-Geiger counter was graphically shown in an article in the September number of *Annals of Surgery*. This method of employing weakly penetrating beta emanation at operation is proving to be of greater value than the more deeply penetrating gamma radiation of radioactive iodine combined with fluorescein, which has been advocated in Minneapolis and Chicago. While the latter gives some clue as to the position of a tumour within the intact skull, it is less accurate than the older methods of X-ray pneumography. What is of inestimable value to the neurosurgeon, when he has the cerebral cortex exposed and no abnormality is visible, is to be able to determine the exact depth and extent of the tumour so that he can plan his resection with minimal injury to the brain. Today it is also possible to rely on the counter in the resection of tissue which to the naked eye looks like normal brain but which proves on microscopic examination to contain invading cells of tumour.

Treatment of brain tumours by atomic fission: In conjunction with the Brookhaven National Laboratory, Drs. Sweet, Gordon L. Brownell, and Manucher Javid have been investigating the possibilities of specific radiation of brain tumours by an entirely new principle. If neoplastic cells can be made to pick up an element like boron in considerably greater concentration than normal brain tissue, then these abnormal cells can be subjected to intrinsic radiation when the boron is split to lithium by the passage of a beam of slow neutrons from an atomic pile. The resultant alpha radiation has great destructive force, but such limited penetration that only the area of the tumour is affected. This endeavour has been described prematurely in an unauthorized popular article in *Collier's*. Unfortunately, the uptake of boron as borax by many types of neoplastic cells is not sufficient to supply the desired intensity of radiation. The theory, however, is a most stimulating one and should yield dramatic results if a suitable fissionable compound can be found which will enter the tumour cells in high concentration.

Study of brain tumours by radioautography: Dr. Selverstone, in collaboration with Dr. Daniel Steinberg, now of the National Institutes of Health, has studied the phosphorus metabolism of brain tumours by means of radioautography. In this way it has been possible to make quantitative determinations of the relationship between the microscopic characteristics of certain tumours and the way in which they use the phosphate ion, which is so important to their growth.

Studies of secretion and circulation of cerebrospinal fluid: Radioactive and stable isotopes have also been used by Drs. Sweet, Bakay, and Selverstone to make quantitative determinations of the secretion and circulation of cerebrospinal fluid. This new method has also proved of value in learning more about the poorly understood "blood-brain barrier" (the way molecules of different sizes pass from the blood stream into the brain).

The pressure gradient in the cerebral arteries: Drs. Sweet and Bakay have been making direct measurements of the pressure in the cerebral arteries (including cortical arteries) and the effect of carotid occlusion thereon, recording these in craniotomies with a specially adjusted electromanometer. Data are being collected about the arterial pressure in the carotid arteries and above the circle of Willis which are of clinical as well as physiological importance in handling aneurysms of these vessels.

Possibilities of localizing brain tumours by ultrasound: Two years ago a project sponsored jointly by the Hospital and Massachusetts Institute of Technology was set up to investigate the possible use of high frequency sound waves to delineate the position of the cerebral ventricles. This work is under the combined direction of Dr. Thomas Ballantine of our department and Dr. Richard Bolt, Director of the Acoustics Laboratory of M. I. T. If certain highly technical electronic problems can be overcome, it seems likely that ventriculography for the localization of brain tumours can be carried out more safely and more easily by the use of an ultrasonic method of transmission than by the X-ray techniques which are employed at present.

Investigation of pain pathways by stimulation of somatic and visceral nerves in conscious patients: The role of certain nerves in pain conduction has remained obscure, and testing them in monkeys and other lower mammals has failed to give accurate information, not only because our nearest furry relatives are unable to speak, but because there are often important anatomical differences. As good an anatomist as Ranson made the statement that right- or left-sided visceral pain cannot be relieved by unilateral division of the spinal pain pathway. This is known to be true of the dog, but fortunately is not so in man, as Dr. Sweet and I have learned from our patients after unilateral cordotomy. On distending the pelvis of the kidney or duodenum, our urologists and Dr. William P. Chapman have no longer been able to evoke any pain on the side rendered insensitive by this operation. By direct electrical stimulation in conscious patients under local anaesthesia we have learned that the pain pathway in the anterolateral quadrant of the spinal cord is distributed over a much wider area than is shown in published descriptions, also that only on rare occasions may an anterior spinal root carry some accessory pain fibres. These findings are of considerable practical importance to neurosurgeons who have often claimed that cordotomy is an unsatisfactory operation, when this is largely because they have failed to make their cuts into the cord deep enough. Others have ascribed their failures after section of the sensory spinal roots for post-amputation pain to a supposed exception to the Bell-Magendie law, assuming that painful impulses may ascend in the motor roots. We have likewise been able to test the distribution of pain from structures such as the great superficial petrosal nerve, the various ganglia of the sympathetic chain, and the splanchnic nerves. These investigations have called attention not only to the importance of sympathetic pathways in the direct conduction of visceral pain, but also to the fact that they do not constitute an accessory pathway from the extremities in painful neuromata and phantom limbs after amputation.

Evaluation of frontal leukotomy for relief of suffering and pain: With the help of Drs. Stanley Cobb and Frances Bonner of the Psychiatric Service, we have been testing psychological and mental changes in a wide variety of operations on the frontal lobes. Leukotomy has been advocated by many as a solution for chronic unbearable pain in advanced malignant disease, and even in many neuralgias which in no way shorten the patient's life. Psychiatric tests have convinced us that the deterioration of an otherwise normal individual's personality is much too serious to justify any form of bilateral frontal leukotomy that has yet been advocated, except as a procedure of last resort. Therefore we are campaigning for a return to more specific methods of surgical denervation and are striving to perfect their technique. The statistical results of 220 anterolateral cordotomies reported by White, Sweet, Nilges, and Hawkins (*Brain* 73: 346, 1950) have demonstrated that between 70 and 80 percent of the sufferers from malignant disease in the abdomen and pelvis can be freed of their pain by this operation. Despite statements to the contrary from other neurosurgical clinics, our results have been equally effective in post-amputation neuralgias in the lower extremity, including pain in phantom limbs.

This leaves the cases of malignant disease in the oropharynx and upper thorax, which are difficult to deal with in any other manner than by surgical procedures on the brain. The fear of imminent death from strangulation or hemorrhage may demand relief from mental as well as physical anguish. Provided these unfortunate persons do not survive for more than six months, unilateral leukotomy is proving to be a fairly satisfactory solution. There are still complicating changes in personality, but these have not been serious. As the effects of unilateral leukotomy are of only relatively short duration, this more conservative procedure cannot be expected to give lasting improvement, and serious deterioration is certain to follow a second intervention of the opposite frontal lobe. However, for the worse sufferers from atypical facial neuralgia and post-herpetic pain the preliminary results of resection of the orbital surface of the frontal lobes, which has been carried out by Dr. Sweet and tested by Drs. Cobb and Bonner, have given promise that otherwise intractable pain may be relieved without serious deficit by appropriately limited decortication. Dr. Chapman and our electroencephalographers have taken advantage of these operations to study physiological responses to stimulation of the frontal and temporal lobes of the human brain, a field that heretofore has been explored very little except in lower mammals and in a few of the primates.

In concluding this report I want to take the opportunity to thank the administration and Dr. Churchill for giving us space in the crowded laboratories of the Hospital to carry out this work. We have been singularly fortunate in obtaining the necessary funds from research foundations. Our only serious handicap is the lack of an operating room of adequate size to permit the erection of glassed-in galleries to protect the patients from infection. In prolonged operations with the brain or spinal cord exposed, our patients are submitted to the risk of air-borne infection from the presence of complicated electrical equipment and the personnel required to use it.

James C. White, M.D.,
Chief of the Neurosurgical Service

* * *

The Directory section of the soon-to-be-issued Annual Report has been prepared this year, for the first time, in the Archives Department. Should you detect any error in the Directory, no matter how relatively unimportant it may seem to you, it would be greatly appreciated if you would send the correction to Cora F. Holbrook, Archivist and Editor of The News.

* * *

Our Ambulance Service, which was begun in 1873 with the purchase of the first horse-drawn vehicle, was discontinued in October. With the excellent service rendered by Red Cross ambulances from many cities and towns near by and with local ambulances that are always available, our own hospital service is no longer necessary.

* * *

TRACY BURR MALLORY

We have lost a beloved friend and a distinguished professional brother. It is fitting this morning, in this place, the scene of his labors, and at this exercise which owes so much of its character to him, that we should pause for a moment from our busy routine and think of him.

The professional accomplishments of Tracy Burr Mallory will presently be duly recorded, no doubt, in resolutions passed in various official places. They are too numerous to be enumerated even briefly on this occasion.

Let us rather think today of our friend himself as we knew him, what he meant to us. I can remember him as a medical student, on the medical wards of this hospital. That was in 1921. My chief recollection of him as of that time is of his sincerity of purpose and his intellectual honesty, his genuine scientific curiosity. He had begun to show the very healthy skepticism which I believe was one of his striking characteristics.

I recall his coming to see me with his wife at Woods Hole in the summer of 1925. This was when we were trying to persuade him to be the successor of his father's collaborator, Dr. James Homer Wright. He thought the proposition through with characteristic thoroughness, but finally, having accepted, he gave everything he had to the job with the utmost loyalty until his death. Faced with facilities which ever became more inadequate, and with steadily increasing volume of departmental work, he maintained always his whimsical good humor and patience.

His office door always stood open, and a smiling welcome there was for anyone dropping in, and wise counsel on whatever problem was presented. I used frequently to intrude on him, as did many others. Never did he say he was too busy, but always had time to listen and to discuss.

Innumerable hospital and university burdens he bore unhurriedly and with equanimity.

He went to war. Did a magnificent job. Returned home and picked up his permanent job again without any fuss, and carried on again in his unhurried but effective manner.

He saw nearly every department but his own get improved quarters and equipment, but never did he show annoyance or bitterness on that account.

These clinicopathological conferences now take the form he set. The Cabots, Richard and Hugh, who started them, discussed most of the cases themselves. Tracy Mallory broadened the base, giving opportunity for most of the clinical staff to participate in rotation, and I believe greatly enhanced their scientific value thereby.

For all these and many other things we

are grateful to Tracy.

Let us stand now for a minute in silence in memory of him.

* * * * *

And now, as he would have wished, carry on with the job.

Read by Dr. J. H. Means at the clinicopathological conference at Massachusetts General Hospital on November 15, 1951.

Published in the New England J. Med., vol. 245, no. 22, 1951.

G. MARSHALL CRAWFORD

Everyone was shocked and saddened by the sudden death of Dr. Crawford on October 18, while he was on a hunting trip on Prince Edward Island. Death was probably due to a heart attack, though no previous symptoms are known. He is survived by his wife, Dorothy B. Crawford of Lincoln, his mother who lives in Shelbyville, Kentucky, and a brother in Seattle.

Dr. Crawford was born in Seattle in 1906 and had his medical training at Northwestern Medical School. After his graduation he had two years of training in medicine in St. Louis and Chicago, and came to the Massachusetts General Hospital in 1933. Following a residency of one year in the Department of Dermatology and Syphilology he entered the private practice of his specialty here in Boston. He became Assistant in Dermatology at Massachusetts General in 1934, Assistant Dermatologist in 1943, and Dermatologist in 1948. For the year 1947-48 he was Acting Head of the Dermatology Department and a member of the Medical Executive Committee. He was also an instructor in the Department of Dermatology at the Harvard Medical School. As consultant in dermatology he served numerous hospitals about Boston, including Massachusetts Eye and Ear Infirmary, Boston Lying-in Hospital, the Free Hospital for Women, the Good Samaritan Hospital, New England Deaconess Hospital, New England Baptist Hospital, and Robert Breck Brigham Hospital. He was Chief of the Dermatology Department at the Mount Auburn Hospital at the time of his death, and was also Dermatologist for the clinic at the Massachusetts Institute of Technology.

Dr. Crawford was a member of the Massachusetts Medical Society and the American Medical Association. He became a diplomate of the American Board of Dermatology and Syphilology in 1939 and was elected a member of the American Dermatological Association in 1948. He held membership in the Society for Investigative Dermatology and the American Academy of Dermatology and Syphilology. In the New England Dermatological Society his loss will be keenly felt, for he had been secretary for two terms and was president at the time of his death, having just been elected to this office last spring. He was also permanent secretary of the Atlantic Dermatologic Conference.

The radiation aspects of cutaneous therapy was a major interest with him and he participated in the Tumor Clinics of Massachusetts General Hospital for many years as a dermatologic representative. Because of his interest in and knowledge of this field he had been selected for several years as lecturer in the radiotherapy symposiums at the meetings of the American Academy of Dermatology and Syphilology. His other interests concerned syphilis, the use of sclerosing agents in the obliteration of vascular nevi, and the use of hormones in dermatology. He had written numerous papers, and was held in high esteem by the members of the various societies to which he belonged.

Dr. Crawford was an excellent teacher, presenting his material in a most logical, clear-cut fashion. He was a sincere, conscientious worker in the clinic. Many of the younger men in training, both residents and graduate students, owe much to him for his assistance and his interest in their desire for knowledge of his specialty. He was unassuming, reliable, and efficient, and he accepted responsibility graciously and well in clinics and associations to which he belonged. Of particular value were his suggestions in the management of clinic and society affairs. These were always practical, diplomatic, and constructive.

His place will be difficult to fill in the clinic, and among his friends and his patients.

[C. Guy Lane, M.D.] C. G. L.

* * *

We want you to know that the attractive new draperies on the Fourth Floor of the Baker Memorial have been given to us by a generous friend of the Hospital.

The Board of Trustees, at their meetings on October 19 and November 2, voted:

To accept with regret the resignation of Dr. Wyland F. Leadbetter as Associate Visiting Urologist, and to appoint him as Clinical Associate in Urology;

To accept the resignation of Dr. Farahe Maloof from the position of Assistant in Medicine, in order to appoint him as Assistant Resident in Medicine, effective as of October 1.

To appoint:

Dr. Francis de Marneffe as Assistant Resident in Psychiatry for one year, beginning January 1, 1952;

Dr. Merle A. Haanes as Assistant in Psychiatry, beginning October 15;

Dr. Si-Chun Ming as Second Assistant Resident in Pathology for the year beginning January 1, 1952;

Mr. Raymond S. Quick as Assistant Physicist for one year, effective April 1, 1952;

Dr. Byron W. Steele, Jr. as First Assistant Resident in Surgery, beginning January 1, 1952.

At their meetings during October and on November 7, the General Executive Committee voted:

That Dr. Nathan E. Silbert's title be changed from Graduate Student Assistant in Dermatology to that of Clinical Fellow and Graduate Student Assistant in Dermatology, effective as of July 19.

To promote:

Dr. Leonard Atkins from Second Assistant Resident to First Assistant Resident in Pathology for one year, beginning July 1, 1952;

Dr. Fairfield Goodale, Jr. from Second Assistant Resident to First Assistant Resident in Pathology for one year, beginning July 1, 1952;

Dr. Hanna Klaus from Second Assistant Resident to First Assistant Resident in Pathology for one year, beginning July 1, 1952;

Dr. John L. McClung to the position of Resident in Anesthesia, as of November 1.

To appoint:

Dr. Abdus-Sattar Adi as Graduate Student Assistant in Surgery for nine months, effective as of September 24;

Dr. Luis I. Arias as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Jose Barzelatto as Clinical and Research Fellow in Medicine for one year, beginning December 1;

Dr. Germain J. Bouchard as Clinical Assistant in Urology for one year, beginning October 1;

Dr. John S. Bray as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. George D. Caldbick as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Goodman Cohen as Clinical and Research Fellow in Medicine, assigned to Cardiology, for the period November 1, 1951 to July 1, 1952;

Dr. Pier C. Curti as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Victor M. M. Diaz as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Rodney H. Foss as Clinical Fellow in Radiology for one year, beginning January 2, 1952;

Dr. John G. Freymann as Clinical and Research Fellow in Medicine, effective November 1;

Dr. Kaiki B. Grant as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Carl A. A. Hernberg as Clinical and Research Fellow in Medicine for a period of four months, effective as of September 20;

Dr. James H. Kelleher as Clinical Assistant in Urology for one year, beginning November 1;

Dr. Francisco Kerdel as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Roeinton B. F. Khambatta as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Luis V. Larralde as Graduate Student Assistant in Pathology for a period of one year, beginning October 1;

Dr. Jean Lepoire as Clinical and Research Fellow in Surgery, assigned to Neurosurgery;

Dr. Carlo Mauro as Graduate Student Assistant in Surgery for one year, beginning October 1;

Dr. Victoriano P. Menendez as Research Fellow in Pathology for three months, beginning October 1;

Dr. Paul H. Nitschke as Graduate Student Assistant in Surgery for one year, effective as of September 17;

Dr. Patrick A. Ongley as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Regulo Otamendi as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. William R. Owen as Clinical and Research Fellow in Medicine, assigned to Cardiology, for the months of November and December;

Dr. Cusrow S. Patell as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Thip Pholpoke as Graduate Student Assistant in Surgery for one year, beginning August 1;

Dr. Huntington Porter as Clinical Fellow in Neurology for the period September 1, 1951 to July 1, 1952;

Dr. German V. Rodriguez as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Lysia Saxe as Research Fellow in Neuropathology for the period September 1, 1951 to September 1, 1952;

Dr. Walter J. Schmidt as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Alfred J. Schwager as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Wiliam D. Sohier, Jr. as Clinical and Research Fellow in Medicine, effective as of October 15;

Dr. Nozomi Suwa as Clinical Fellow in Psychiatry for a period of one year, beginning September 15;

Dr. Melvin L. Taymor as Clinical Assistant in Surgery, assigned to Gynecology, for one year, beginning October 10;

Dr. Paul H. Thomas as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Helen Thomopoulo as Clinical and Research Fellow in Medicine for one year, beginning September 20;

Dr. David Toll as Clinical and Research Fellow to the Children's Medical Service, effective as of November 1;

Dr. Barzillia R. Waldron as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1.

One of the six who received 30-year pins on Ether Day was Miss Catherine Carleton.

Miss Carleton graduated from the Massachusetts General Hospital School of Nursing in 1910, and served overseas with Base Hospital 6 in the First World War, where she was known as "The Belle of Bordeaux". Following her tour of duty overseas, she returned to the Massachusetts General Hospital, where she has served for thirty years as the head nurse on the Fifth Floor of the Phillips House and where we hope she will continue to serve for many years to come.

The head nurses at the Phillips House gave a party on October 16 in honor of Miss Carleton. On this occasion Miss Eleanor Pitman, head nurse on the Fourth Floor, read a delightful poem which she had written about Miss Carleton.

During the week of October 15 Miss Helen Gilmore, head nurse on Baker 6 (formerly on Baker 5) met with a national committee in New York. Miss Gilmore was invited to attend this conference by the chairman of the National Committee for the Improvement of Nursing Services. The subcommittee in which Miss Gilmore worked was summoned by the parent committee to prepare a manual on the head nurse unit.

The committee was made up of head nurses from the Hartford, Bellevue, Walter Reed, and Massachusetts General Hospitals, plus the nursing specialist of the American Hospital Association, a public health nurse employed in a hospital setting, certain staff personnel of the National League of Nursing Education, and Miss Ruth Gillan, Nurse Consultant, Division of Nursing Resources, FSA. The last named acted as temporary chairman of the group.

By unanimous vote, Miss Gilmore was elected to the permanent chairmanship of that group, to continue to work on and to act as consultant to the writer of the manual which will be based upon the findings of the committee on which Miss Gilmore served.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted, though much less frequently than heretofore. It would save your editor considerable time and trouble if you would remember to include that information. Your title should be classified with respect to the subject matter and *not* under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Psychiatry Department may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and *not* to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Pain and some factors that modify it.
Anesthesiology 12:633-641.

Beecher, H. K., Deffer, P. A., Fink, F. E., and Sullivan, D. B.
Field use of methadone and levo-iso-methadone in a combat zone.
U.S. Armed Forces M. J. 2:1269-1276.

Beecher, H. K., Quinn, T. J., Jr., Bunker, J. P., and D'Alessandro, G. L.
Effect of position and artificial ventilation on the excretion of carbon dioxide during thoracic surgery.
J. Thoracic Surg. 22:135-148.

Rudin, D. O., and Eisenman, G.
A method for dissection and electrical study *in vitro* of mammalian central nervous tissue.
Science 114:300-302.

Cardiology

Alimurung, M. M., Rappaport, M. B., and Sprague, H. B.
The auscultatory signs in rheumatic valvular disease: A phonocardiographic correlation.
New England J. Med. 244:1-9.

Bland, E. F.
Rheumatic heart disease.
In Nelson loose-leaf medicine, New York, Thomas Nelson & Sons, pp. 448C-448FF.

Counihan, T., Messer, A. L., Rappaport, M. B., and Sprague, H. B.
The initial vibrations of the first heart sound.
Circulation 3:730-732.

Currens, J. H., Reid, E. A. S., MacLachlan, E. A., and Simeone, F. A.
Metabolic effects of the rice diet in the treatment of hypertension.
New England J. Med. 245:354-359.

Daley, R., Mattingly, T. W., Holt, C. L., Bland, E. F., and White, P. D.
Systemic arterial embolism in rheumatic heart disease.
Am. Heart J. 42:566-581.

Garn, S. M., Gertler, M. M., Levine, S. A.. and White, P. D.
Body weight versus weight standards in coronary artery disease and a healthy group.
Ann. Int. Med. 34:1416-1420.

Gertler, M. M., Driskell, M. M., Bland, E. F., Garn, S. M., Lerman, J., Levine, S. A., Sprague, H. B., and White, P. D.
Clinical aspects of coronary heart disease: An analysis of 100 cases in patients 23 to 40 years of age with myocardial infarction.
J. A. M. A. 146:1291-1295.

Gertler, M. M., Garn, S. M., and Levine, S. A.
Serum uric acid in relation to age and physique in health and in coronary heart disease.
Ann. Int. Med. 34:1421-1431.

Gertler, M. M., Garn, S. M., and White, P. D.
Young candidates for coronary heart disease.
J. A. M. A. 147:621-625.

Hartman, S. A., and Bland, E. F.
Rheumatic fever and glomerulonephritis.
Am. J. Med. 10:47-51.

Johnson, R. P., Messer, A. L., Shreenivas, and White, P. D.
Prognosis in bundle branch block: II. Factors influencing the survival period in left bundle branch block. III. A comparison of right and left bundle branch block with a note on the relative incidence of each.
Am. Heart J. 41:225-245.

Loofbourow, D. G., Callahan, D., and Palmer, R. S.
The rice diet in ambulatory patients with essential hypertension: A two-year study of 105 patients.
New England J. Med. 244:577-581.

Mantz, F. A., Jr., and Craige, E.
Portal axis thrombosis with spontaneous portacaval shunt and resultant cor pulmonale.
A. M. A. Arch. Path. 52:91-97.

Messer, A. L., Counihan, T. B., Rappaport, M. B., and Sprague, H. B.
The effect of cycle length on the time of occurrence of the first heart sound and the opening snap in mitral stenosis.
Circulation 4:576-580.

Purtell, J. J., Robins, E., and Cohen, M. E.
Observations on clinical aspects of hysteria: A quantitative study of 50 hysteria patients with 156 control subjects.
J. A. M. A. 146:902-909.

Rappaport, M. B., and Sprague, H. B.
The effects of tubing bore on stethoscope efficiency.
Am. Heart J. 42:605-609.

Samani, O. T., Gertler, M. M., Hamilton, J. B., and White, P. D.
The eosinophilic response in castrates and non-castrates.
Indian J. M. Sc. 5:77-86.

Wheeler, E. O.
Atherosclerosis, serum cholesterol, and lipoproteins.
Nutrition Rev. 9:167-169.

White, P. D.
Chronic constrictive pericarditis.
Circulation 4:288-294.

White, P. D.
Chronic valvular cardiac disease.
In Cecil & Loeb's Textbook of medicine, 8th edition, Philadelphia, W. B. Saunders Co., pp. 1110-1123.

White, P. D.
Coronary heart disease in midcentury, with a note concerning its military importance.
U.S. Armed Forces M. J. 2:357-364.

White, P. D.
Fortschritte unseres Wissens von den Herz- und Gefasskrankheiten.
Deutsche med. Wchnschr. 14:446-447.

White, P. D.
Proceedings of the symposium: Studies on arteriosclerosis. Third Annual Scientific Meeting of Gerontological Society, Inc. Clinical aspects.
J. Gerontol. 6:151-153.

Dermatology

Frazier, C. N., Lever, W. F., and Keuper, C. S.
Response of patients with malignant and benign pemphigus to adrenocorticotropic hormone and cortisone.
Am. J. M. Sc. 222:308-312.

Endoscopy

Benedict, E. B.
Diseases of the esophagus.
In Nelson loose-leaf medicine, New York, Thomas Nelson & Sons, pp. 69-86.

Benedict, E. B.
Esophageal ulcer.
In Peptic ulcer, David J. Sandweiss, Editor, Philadelphia, W. B. Saunders Co., pp. 565-573.

Gynecology and Obstetrics

Ingersoll, F. M., and Meigs, J. V.
Minor gynecologic surgery.
Surg. Clin. North Am. 31:1391-1406.

Laboratory Science

Matoltsy, A. G., Gross, J., and Grignolo, A.
A study of the fibrous components of the vitreous body with the electron microscope.
Proc. Soc. Exper. Biol. & Med. 76:857-860.

Matoltsy, A. G., and Matoltsy, M.
The action of histamine and antihistaminic substances on the endothelial cells of the small capillaries in the skin.
J. Pharmacol. & Exper. Therap. 102:237-249.

Neurology, Neurosurgery, and Psychiatry

Bakay, L.
Studies on the blood-brain barrier with radioactive phosphorus.
A. M. A. Arch. Neurol. & Psychiat. 66:419-426.

Pediatrics

Talbot, N. B., Wood, M. S., Worcester, J., Christo, E., Campbell, A. M., and Zygmuntowicz, A. S.
Further observations on the urinary excretion of water-soluble corticosteroids by normal and abnormal subjects.
J. Clin. Endocrinol. 11:1224-1236.

Surgery — Reconstructive

Cannon, B., and Fisher, D.
Medical progress: Plastic Surgery: Harelip and cleft palate. With a section on Speech Therapy by Henry C. Britton.
New England J. Med. 245:179-185; 215-219.

Weisman, P. A., Quinby, W. C., Jr., Wight, A., and Cannon, B.
The adrenal cortical hormones and homografting: Exploration of a concept.
Ann. Surg. 134:506-518.

Books

Craige, E.
If your child has rheumatic fever. (Pamphlet)
Boston, The Massachusetts Heart Association, Inc.

White, P. D.
Heart disease, 4th edition.
New York, The Macmillan Co.

BIOGLETS

Dr. Walter M. Haynes, Jr., Intern in Surgery – born in Sanford, Florida, March 2, 1921; U. S. Air Force: in England with the 8th A.F., 1942-45; B.S., University of Florida, 1947; M.D., Harvard Medical School, 1951; married; home: Sanford, Florida.

Dr. Martin B. Levene, 2d Assistant Resident in Radiology – born in New York, N. Y., March 5, 1922; B.S., Massachusetts Institute of Technology, 1942; U. S. Army: Major in Coast Artillery Corps, serving with an Antiaircraft Artillery Gun Battalion in Massachusetts, North Carolina, Virginia, England, France, and Germany, 1942-46; M.D., Boston University School of Medicine, 1950; Intern, Bellevue Hospital, New York, N. Y., 1950-51; home: Brighton, Massachusetts.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Varaztad H. Kazanjian, Consulting Surgeon, received a special honorary citation from the American Society of Plastic and Reconstructive Surgery on October 31 in Colorado Springs. The plaque presented to Dr. Kazanjian reads: "In recognition of his leadership in the organization and development of the specialty of plastic surgery and his outstanding scientific contributions and advancement of its practice."

A review of Dr. Kazanjian's long and outstanding medical career will appear in a subsequent issue of The News.

The first of a series of symposiums for house officers on the Ophthalmic Service and for interested staff members took place on November 7. The subject "Concomitant strabismus: Diagnosis and management" was first discussed by Dr. Charles D. Regan, who was followed by a panel of speakers: Dr. Abraham Pollen, Dr. Virgil G. Casten, and Miss Ann Stromberg, orthoptic technician. The meeting ended with an hour for questions and answers.

Dr. Edwin B. Dunphy, Chief of Ophthalmology, gave a paper before the Southern Medical Society in Dallas, Texas. His subject was "Some external ocular signs associated with constitutional diseases".

Again this year several groups of second year student nurses from the Massachusetts Memorial Hospital, with Miss Mary Petkauskos, Public Health Nurse Coordinator, have visited the Infirmary to observe the work of a specialized hospital and study the unique services the Infirmary offers.

Thirty students have visited the Infirmary this fall, and thirty more are expected early in December. These groups attend speech therapy classes in the Winthrop Foundation and Mrs. Paul Doehler's esophageal voice classes. They inspect the private floors, nursery, and new operating rooms, and hear about the work of the Retina Service, the program in retrolental fibroplasia, and the Boston Eye Bank.

Miss Pauline Moor has accepted a position with the American Foundation for the Blind in New York City, as an Educational Consultant in the area of the pre-school blind child. Miss Moor, a pre-school teacher, came to the Infirmary in 1947. She worked in association with the Foundation for Vision, which sponsors research into the causes of retrolental fibroplasia, and for several years maintained a social service program for retrolental children and their parents. Working with these children, Miss Moor offered a home service which aided parents in matters of training and development.

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New addresses:—

Dr. Lowrey F. Davenport, 700 Spring St., Macon, Ga. (after Jan. 1).
Dr. LeRoy L. Eldredge, Jr. (*a.r.p. CM* 1951), 215 Main St., Hingham, Mass.
Dr. Frederick C. Goetz (*M* 1947), Peter Bent Brigham Hospital, Boston 15, Mass.
Dr. Richard E. Goldsmith (*clin. & res. fel. M* 1950), Cincinnati General Hospital, Cincinnati 19, Ohio.
Dr. Rita M. Kelley (*M* 1947), 264 Beacon St., Boston 16, Mass.
Dr. Michael A. Luongo (*P* 1946), Harvard Medical School, 25 Shattuck St., Boston, Mass.
Dr. Richard G. Nilges (*a.r.s. NS* 1951), 700 North Michigan Ave., Chicago, Ill.
Dr. Ruth E. Stauffer (*a.r.p. N* 1949), Sudbury Road, Concord, Mass.

Brief bits:—

Dr. Edward B. Benedict, Endoscopist on our staff, delivered two lectures recently. On October 18 he addressed the medical staff of Revere Memorial Hospital on the subject "Endoscopy as applied to general practice", and on November 6 he spoke to a luncheon group at the Harvard Club on "Endoscopy".

Dr. Bradford Cannon, Assistant Surgeon at M.G.H., has returned from a trip to the meeting of the American Society of Plastic and Reconstructive Surgery, held in Denver and Colorado Springs, and the meeting of the American College of Surgeons held in San Francisco. At Colorado Springs Dr. Varaztad H. Kazanjian, Honorary Surgeon on our staff, was the recipient of an award presented by the Society, and Dr. Cannon spoke about Dr. Kazanjian's place in American Plastic Surgery and his many contributions to the field. At the meeting in San Francisco, Dr. Cannon presided at one of the sessions of the Forum on Fundamental Surgical Problems and at the Symposium on Plastic Surgery.

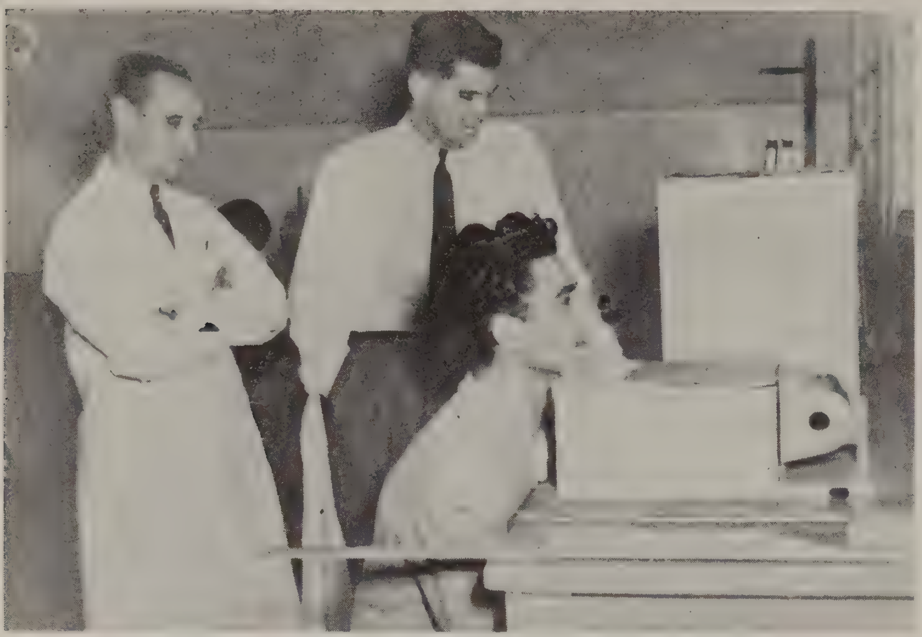
Dr. Chester N. Frazier, Chief of our Dermatology Service, gave a lecture on "Nutritional influences on the physiology of the skin: Observations on the metabolism of vitamin A" at the Karolinska Institute, Stockholm, Sweden, on September 6. Recent visitors to Dr. Frazier's department include Dr. John A. Milne, from the Department of Pathology, Glasgow Infirmary, Glasgow, Scotland, and Dr. Hans Zehetner of the University of Vienna, Austria.

Dr. Howard B. Sprague, Associate Physician at M.G.H., is Chairman of the Scientific Council of the American Heart Association. He returned recently from a trip to the west coast, where he was guest lecturer at the California Heart Association Scientific Symposia held in San Diego, Los Angeles, and San Francisco.

* * *

In our September issue we published a letter from Dr. John B. Stanbury, Assistant Physician at M.G.H. and now in charge of our Thyroid Clinic, telling us about the arrival in South America of the thyroid group sent from this hospital last June. Now, at Dr. Means's suggestion, Dr. Stanbury gives us this report of the further activities and experiences of the group, up to the time of their departure for home.

The Argentineans are extremely patriotic people. The morning of our first day in Men-



Left to right — Drs. Juan Itoiz and John B. Stanbury — engaged in making measurements of thyroid function in an iodide-deficient patient in Mendoza.

doza was spent, first, in viewing the flag which San Martin, the liberator of Argentina who corresponds to George Washington in this country, took with him when he crossed the Andes from Mendoza to liberate Chile from the Spaniards early in the nineteenth century. After appropriate sentiments had been expressed we were driven to a curious, isolated hill which is about 1500 feet high and stands just at the edge of the city. This hill is irrigated and has been developed into a park. On the top of the hill stands a magnificent commemorative statue to San Martin. We then went to view the rooms which had been set aside for our laboratories at the Central Hospital. These were found to be more than adequate in every way. A certain amount of plumbing was necessary and a few minor difficulties were encountered in making proper arrangements for setting up the various pieces of apparatus, but that was all; and the big event occurred in the afternoon when we went to the airport to see our equipment arrive in an Argentine Air Force plane.

There had been considerable difficulty in making prior arrangements for transportation of this equipment from Buenos Aires through the Argentine customs and to Mendoza. However, the Argentine government was very interested in our project and had arranged that our equipment was to be removed from the ship on which it had been transported from Boston, placed upon the Argentine Air Force plane, and flown to Mendoza. This was characteristic of the cooperation we received from the Argentine government and from the Argentine Atomic Energy Commission throughout our entire stay. Anything and everything which we needed, within reason, was provided for us. It would be difficult to imagine more favorable circumstances than those under which we worked.

Our first shipment of radioactive iodide—the first ever to be received in Argentina—came two days later, and three days after our arrival we made our first measurements on patients. For the next seven weeks we made observations on patients every day, and our studies encompassed approximately 125 persons. Many of these were measured every day for as long as four weeks.

Our expedition attracted a considerable amount of attention in the Argentine press. For the first weeks that we were there, hardly a day went by without an article of some sort in the papers, both local and national, about our expedition. This served the excellent purpose of keeping alive the interest of our patients in the project. The result was that with only two exceptions every patient kept his appointment every day.

We were able to make quite a number of interesting observations bearing on the physiology of the iodide-deficient thyroid gland. Many measurements were made to show the extraordinary rapidity with which these patients accumulated the tracer doses of radioactive iodide in their glands and the tenacity with which they held onto it. We also observed the effect of added iodide and added thyroid on patients with iodide deficiency, and the effect of thyrotropic hormone on iodide-deficient thyroid glands. These data are now in the process of analysis.

There was very little time for recreation and amusement because our work program was a heavy one, and the result was that we had insufficient opportunity to see as much of the countryside and as much of the Mendocinas as we should have liked. Everybody was extraordinarily cordial to us, doing everything possible to see that we had a pleasant and profitable time.

At the conclusion of our seven weeks in Mendoza we were flown southward for approximately a thousand miles in an Army Air Force plane to Bariloche. Bariloche is in the southern Andes and is the great summer and winter resort area of the Argentine. It is a lake district, with indescribably beautiful snow-capped mountains rising sheer from the water's edge. It has been well developed for summer and winter sports. Unfortunately, the only day available to us for visiting the ski areas turned out to be rainy, so we were unable to ski. The snowfields are reached by a tramway, very similar to the one at Cannon Mountain. The hotel at the bottom of the tramway is as luxurious as one could imagine. We spent one day in Bariloche making a long boat trip down the chain of lakes, and on our last day there we had a long conference with Ronald Richter, the controversial physicist of Argentina, who is said to have developed a new process for the industrial applications of atomic energy.

Our next stop was Buenos Aires, where we spent four very hectic days. Brownell [Gordon L., M.D., Associate in Physics on our staff] and I gave lectures at the Medical School, and Riggs [Douglas S., M.D., Department of Pharmacology at Harvard] gave one at the Institute of Endocrinology. We also gave an informal conference—one of our most memorable and enjoyable experiences—at Dr. Houssay's Institute. One interesting episode during our stay in Buenos Aires was an hour-long conference with General Peron. To all appearances he seemed a most affable and interested person.

Our trip to Montevideo was by overnight boat. Here again we gave a series of conferences and also visited various medical centers. We were particularly impressed by the laboratories of Dr. De Robertis, who spent several years at the Massachusetts Institute of Technology and who was well known to many people at the M.G.H. Dr. Riggs gave a lecture at the Institute of Endocrinology where Dr. Morato works. Dr. Morato spent last year here with Dr. Allan Butler, as a Clinical and Research Fellow. Dr. Brownell lectured there, also, and my lecture in Montevideo was at the Medical School.

My most interesting experience in Montevideo was a trip up the coast through the beautiful Uruguayan countryside. I found it very reminiscent of the farmlands of Ohio and Indiana, except that every few miles one would pass a group of Gauchos dressed in their Sunday finest and riding on horseback, or a group of natives in a wagon, all sipping mate from their gourds. One disappointment in our trip was our failure to get to Sao Paulo. This was occasioned by weather which made it impossible for our plane to land. Consequently, we had two extra days in Rio.

Here again we all gave lectures and conferences and visited with the workers in experimental medicine. We were particularly interested in the Instituto del Biofisica where Carlos Chagas is chief. The group there impressed us as being active and up-to-date. We also visited the Instituto Oswaldo Cruz where a wide variety of laboratories is concentrated. This Institute is particularly noted for its work on Chagas' disease. We saw several cases of this disease in the small hospital maintained by the Institute, and we also met an Amazonian native with blastomycosis. He had arrived only a few days before and was said to be wearing the first clothes he had ever worn in his life. Rio, of course, is one of the most beautiful cities in the world, without any question. We never tired of snapping photographs or admiring the scenery.

Our last stop was at San Juan in Puerto Rico where we gave two conferences each for the Medical Society of Puerto Rico. It was here that we gave our first formal talk on results obtained in Mendoza. As soon as our conferences were completed Riggs returned to his family in Pennsylvania, Brownell's wife joined him and they went to St. Thomas for a few days' vacation, and my wife and I returned to Boston after two or three days at the Caribe.

This account reads like a travelogue. It would be impossible to recount all our adventures and impressions in anything less than a volume or two. What impressed us most on our entire trip, however, was the pleasantness and cooperative spirit of the Argentineans and the complete lack of anti-Americanism among them. Certainly, it is possible to approach these people at a scientific level. It is unfortunate that it is more difficult to approach them at diplomatic and political levels. Argentina is an enormously important country to us. It seems essential that some way be worked out to increase the mutual understanding between the two countries.

This brief but welcome letter has come from Dr. Ronald C. Bishop (*M* 1945).

I certainly enjoy getting The News each month. It forms a strong link with some very pleasant past associations.

At present I am an instructor in Medicine here at the University of Michigan. My plans for the future remain somewhat uncertain.

Regards to all at the General.

A short note has come from Lt. Col. Gustav G. Kaufmann, MC, USAR (*a.r.p.* 1941). It gives us his new address—U.S. Army Hospital, Camp Edwards, Falmouth, Mass.—and says, in part:

I failed to send you my change of address, as an early return to civilian life had been anticipated. However, it appears as though I shall continue on here at Camp Edwards for a time.

It is always a pleasure to receive The News and to read of the various developments and other bits of information.

THE NEWS

No. 108 Boston, Mass. January 1952

ORTHOPEDIC SERVICE

Since the last report on Orthopedic Service affairs in THE NEWS of July 1949 there have been a number of changes in the Visiting Staff. Dr. Carroll B. Larson left us in July 1950 to assume the position of Professor of Orthopedic Surgery at the State University of Iowa Medical School and Chief of the Orthopedic Service at the University Hospitals in Iowa City. He succeeded Dr. Arthur Steindler in these positions, becoming the Director of an Orthopedic center in Iowa which has gained worldwide recognition. As Dr. Larson was a medical student at Iowa, this represents the return of the native. We wish him well in his new position.

Dr. William N. Jones (*a.r.s. Or.* 1947) and Dr. Thornton Brown (*r.s. Or.* 1949) have joined us as junior members of our Visiting Staff.

Last year a group of Dr. Smith-Petersen's patients joined with his colleagues and former pupils in raising the Smith-Petersen Appreciation Fund. The Conference Room on White 5, with some additional adjacent space, has been remodeled, refurnished, and redecorated. We now have a most comfortable and attractive room, which is primarily for the use of the house staff but which also serves for seminars and staff meetings. There is a smaller adjacent room for reading, record work, and research. The office of the Chief of Service, the secretary's office, and a small working library room complete the unit which has been in operation since May 1, 1951. Air conditioning makes it a pleasant retreat in the hot summer weather. It is a useful and felicitous expression of our respect and affection for Smith-Pete. His portrait, painted by Randolph Aufranc, will soon be displayed in the room which has been unofficially christened "Smith-Pete's Joint".

It is interesting to note that our research efforts are involving more and more cooperative projects with other departments within and without the Hospital. A few examples may be noted:

1. Surgery in rheumatoid arthritis: Drs. Aufranc, Brown, and Jones are working in the Arthritis Clinic with Dr. Bauer's Medical Service representatives, studying the indications for surgery and the end results of various types of operations in rheumatoid arthritis. Their work in this difficult field should prove to be of great value.

2. Low back pain: Supported by funds from the American Mutual Insurance Company and from private sources, our work in this field continues. A booklet, *Syllabus on industrial low back pain,* has been printed, which describes the method of history taking and physical examination in cases of low back disability. It includes notes on the interpretation of signs and symptoms, and a tentative diagnostic classification of industrial back injuries.

Everyone who works in this field recognizes that psychosomatic problems are very common. The doctor who takes the history and does the physical examination often obtains numerous bits of evidence which allow him to conclude that there is "a large functional overlay" — yet the findings on which such a conclusion is based are usually inadequately recorded. The Department of Psychiatry (Dr. Barry) and the Orthopedic Department (Dr. Brown) are now engaged in a combined attempt to determine the recognizable and objective signs and symptoms which accompany psychosomatic back problems and to classify the types of disorders encountered.

Back braces and various types of belts and corsets are time-honored therapeutic devices used by the orthopedic surgeon for the treatment of disorders of the spine. We have been unable to discover adequate scientific evidence of the relative effectiveness with which the various types of braces and corsets immobilize the spine. For the past year a study of this problem has been under way, involving the Department of Civil Engineering at Massachusetts Institute of Technology (Professor Hansen), the MGH Brace Shop (Mr. Buschenfeldt), and the MGH Orthopedic Department (Dr. Norton). Various braces are being tested under standard conditions on volunteer subjects. None of the braces so far tested effectively immobilize the lumbo-sacral spine. It appears that our vague concepts and clinical impressions may be replaced by valid scientific data, as the result of studies in this field.

3. Fractures of the carpal navicular in military personnel: Under the auspices of the National Research Council and aided by a grant from the Veterans Administration we have completed a study of the end results of fractures of the carpal navicular in military personnel. Dr. Hanelin of the Department of Roentgenology, Dr. DeLorme of the Department of Physical Medicine, Dr. Musnick, past Research Fellow in Psychiatry, Drs. Arthur Thibodeau and William Elliston of West Roxbury Veterans Administration Hospital, and the author of this article participated in this study. The report summarizing our findings is now in press.

4. Tendon transplantation in the lower extremities: The National Foundation for Infantile Paralysis has for the past two years supported a clinical end result study of the results of tendon transplantation in the lower extremities in polio patients operated on at the Massachusetts General Hospital. Drs. Reidy and Broderick have reviewed all of our cases and an article on the pertinent findings is now in preparation.

The research projects noted above give some idea of the variety of investigation in which the Orthopedic Department participates. Clinical research of this type is valuable and will be continued. We need to work also in the fields of gross and microscopic anatomy, pathology, physiology, and biophysics. We are actively seeking means to relate our department's activities to these basic disciplines, and we hope to be able to point to progress along these lines in our next report. We know that a sound research program is necessary in order to study our basic problems and to prevent overemphasis of the purely technical aspects of our training program.

Joseph S. Barr, M.D.,
Chief of Orthopedic Surgery

Brief bits:—

Dr. Edward B. Benedict, Endoscopist on our staff, gave a talk on "Cancer of the stomach", as part of a symposium conducted by the Missouri Society of Pathologists, at the Ellis Fischel State Cancer Hospital, Columbia, Missouri, on December 1.

Dr. Milton Henry Clifford, Assistant Physician at M.G.H., has been elected as a representative to the Life Insurance Medical Research Fund by the Association of Life Insurance Medical Directors. Dr. Clifford is Associate Medical Director at the New England Life Insurance Company.

Dr. C. Guy Lane, a member of our Board of Consultation and past Chief of our Dermatology Service, was elected President of the American Academy of Dermatology and Syphilology at the Academy's annual convention, held in Chicago last month.

New addresses:—

Dr. Richard C. Batt (*r. p. R.* 1940), 210 Glen St., Glens Falls, N. Y.
Dr. George Clymer (*Bd. of Cons.*), 77 Eton Road, Longmeadow, Mass.
Dr. Chester W. Fairlie, Jr. (*W.M.* 1942), 85 Jefferson St., Hartford, Conn.
Dr. John F. Hogan (*M.* 1949), Nashville City Health Dept., 802 Second Ave., South, Nashville 10, Tenn.
Lt. Col. Frank A. Mantz, Jr., MC, USAR (*res. fel. Path.* 1949), Percy Jones Army Hospital, Battle Creek, Mich.
Dr. Winfield S. Morgan (*r. p. Path.* 1951), Department of Zoology and Comparative Anatomy, University Museum, Oxford, England.
Lt. Robb H. Rutledge, MC, USAFR (*a. r. S.*), 2141 East 42d St., Savannah, Ga.
Dr. William J. Shriber (*a. M. & a. Phys. M.*), 42 Holman Road, Auburndale, Mass.

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary notes with regret the death of Dr. Walter Brackett Lancaster. A graduate of Harvard Medical School, Dr. Lancaster joined the staff of the Infirmary in 1897 as a Clinical Assistant in Ophthalmology. He became a Surgeon here in 1920 and a Consulting Surgeon in 1923. At the time of his death, Dr. Lancaster's work, *Refraction and motility,* was in the process of publication.

Last month we mentioned briefly the special honorary citation conferred upon Dr. Varaztad H. Kazanjian at the meeting of the American Society of Plastic and Reconstructive Surgery held in Colorado last October and said that a review of Dr. Kazanjian's medical career would appear later. At the time of the presentation, Dr. Bradford Cannon spoke about Dr. Kazanjian's many contributions to the field of Plastic Surgery. Here, with some additions, is what Dr. Cannon said:

In 1915 and 1916, before the United States entered World War I, reports came back to this country from time to time of some marvelous things that were being accomplished in the care of injuries of the face and jaws at a British military hospital in France, manned, in part, by personnel from the Harvard Medical School. The name of a certain Major Kazanjian kept cropping up, and by the time the United States entered the war in 1917 his name was familiar to most of those interested in this particular field. Today that Major — Varaztad H. Kazanjian — is recognized internationally as one of the great pioneers in plastic surgery.

Dr. Kazanjian was born in Turkish Armenia in 1879. Encouraged by relatives at home and by letters from abroad to leave Armenia and investigate the opportunities in America, he came to the United States in 1895. In 1900 Dr. Kazanjian became a citizen of the United States and decided to enter the field of dentistry, the alternative choice being a career in engineering. Endowed with a natural manual dexterity, this choice of dentistry was not surprising.

After graduation from the Harvard Dental School in 1905, Dr. Kazanjian was associated with the Prosthetic Laboratory there. In 1912 he entered Boston University Medical School, withdrawing in 1913 when called to be Head of the Prosthetic Department at the Harvard Dental School. At that time, hospital facilities for the treatment of jaw fractures were not available and many patients came to the Dental School, where they were assigned to the Prosthetic Department for treatment. Dr. Kazanjian accepted the challenge of these cases. Over 400 fractures were treated by him during these two years and he made an enviable record. He was one of the first doctors in this country to abandon the unwieldy interdental splint and to adopt the simpler method of intermaxillary wiring.

When the opportunity came in June 1915 to go with the First Harvard Unit to join the British Expeditionary Forces in France as Dental Chief, Dr. Kazanjian was singularly well qualified to serve. At that time there was no Dental Corps in the British Army, and only 15 dentists were available for all the troups. Dr. Kazanjian filled this unrecognized need and laid the foundation for one of the most remarkable services rendered in military hospitals.

Here was a dental surgeon, of unusual ability in prosthetic restoration, suddenly confronted with dozens of soldiers with extensive mutilations of the bones and soft tissues of the face and jaws. With very little previous experience on his part or on the part of other living authorities to guide him, he was given the responsibility for the proper care of these men. That he accepted this responsibility and carried out his duties brilliantly was soon recognized.

Dr. Kazanjian undoubtedly set the standard and formulated the principles of treatment of these particular injuries —principles which were followed so successfully by others in World War I and even World War II. His became the first organized Maxillo-Facial and Dental Unit of the British Expeditionary Forces in France. It continued to function under Dr. Kazanjian, at the official request of the British War Office, until February 1919.

Knowledge of the accomplishments of the Unit spread rapidly through the British Army, and more and more wounded were sent to it. Medical officers were assigned as observers for periods of from two to three months, for the purpose of establishing similar services elsewhere. Dr. Kazanjian was referred to by one English writer as "The Miracle Man of the Western Front". He was made an Honorary Major in the Royal Army Medical Corps, and for his services of nearly four years was decorated by King George V as "Companion" in the Order of St. Michael and St. George. In addition, Dr. Kazanjian was mentioned several times in dispatches. These certificates all bear the signature of Winston S. Churchill.

On his return to the United States in 1919, it was obvious to Dr. Kazanjian that in order to continue with the surgery he had so successfully carried on during the years in France, a gap in his training must be filled. Therefore, he entered the Harvard Medical School in the fall of that year, and received his M.D. degree in 1921.

One incident in his medical school career should be recorded. At a surgical clinic conducted by Dr. Harvey Cushing, two high-ranking officers from the Royal Army Medical Corps were to speak. On glancing up at the students, one of these officers grasped his companion's arm and pointed. They both climbed up the steps and literally dragged a very reluctant student to the floor of the theatre. Dr. Kazanjian was introduced as the one who had taught these guests the technique they were to demonstrate.

Dr. Kazanjian has been appointed to the staffs of many hospitals in New England since 1919. In 1922 he joined the staff of the Eye and Ear Infirmary as a Clinical Assistant in the Department of Laryngology, and in the following years an ever-increasing number of plastic cases were treated at the Infirmary. The Hospital's records consistently cite Dr. Kazanjian's "startling" results in treatment of face, neck, and scalp. In his annual report of 1930, Dr. Harris P. Mosher, then Chief of Laryngology at the Infirmary, reported: "Dr. Kazanjian's . . . work continues to increase in complexity and brilliance."

During this period a Plastic Clinic was established at the Massachusetts General Hospital, under Dr. Kazanjian. This clinic eventually merged with the service in plastic surgery offered at the Infirmary, and from that time has been a joint project of the two hospitals. Patients came to the clinic from considerable distances, for it was a pioneer of its kind in the New England area. In 1931 Dr. Kazanjian was named Surgeon for Plastic Operations at the Eye and Ear and was Special Consultant in Plastic Surgery at the General. Today he is a Consulting Surgeon at both hospitals.

His long teaching career at Harvard began in 1906 with his appointment by the Faculty of the Harvard Dental School as Assistant in Mechanical Dentistry; from 1907 to 1909 he was Assistant in Prosthetic Dentistry; and from 1909 to 1916 he was Demonstrator of Prosthetic Dentistry. In 1913 Dr. Kazanjian was appointed Head of the Department of Prosthetic Dentistry, where he was actively engaged until he left for France in 1915. Since his return to the United States in 1919 he has received the following appointments by the Faculty of Medicine at the Harvard Medical School:

1919-1923	Professor of Military Oral Surgery
1923-1941	Professor of Clinical Oral Surgery
1941-1947	Professor of Plastic Surgery. The Chair of Plastic Surgery was created at that time.
1947-	Professor Emeritus of Plastic Surgery

For several years Dr. Kazanjian has been Visiting Lecturer in Maxillo-Facial Surgery at the Graduate School of Medicine, University of Pennsylvania.

During these years Dr. Kazanjian gathered about him a staff and students interested in the care of deformities of the mouth and jaws, as well as in problems associated with plastic surgery in general. At his clinics, methods of preparation of oral and facial prostheses were developed and appliances constructed for splinting fractures and for post-osteotomy jaw fixation. While the surgical approach has always remained uppermost in Dr. Kazanjian's teachings, he makes expert use of the dental appliance when indicated.

Papers reporting his original work have appeared all through Dr. Kazanjian's medical career. In 1949, in association with Dr. John M. Converse, he published *The surgical treatment of facial injuries.* This book drew from a background of more than thirty years of practice.

During his many years as surgeon and teacher, Dr. Kazanjian has persistently sought, and won, recognition for Plastic Surgery in a professional environment that has been traditionally reluctant to accept any of the sub-specialties of general surgery.

Last October, at a meeting in Colorado Springs, the American Society of Plastic and Reconstructive Surgery presented Dr. Kazanjian with an honorary citation—

> . . . In recognition of his leadership in the organization and development of the specialty of plastic surgery and his outstanding scientific contributions to the advancement of its practice.

Dr. W. Morton Grant was selected as recipient for the initial annual award of the New England Ophthalmological Society, presented to a resident of New England who has made a contribution of outstanding merit to Ophthalmology. Dr. Grant received the award for his work on measurements of pressure in the eye in relation to the study of glaucoma. The presentation was made at the Society's meeting on December 19 at the Infirmary.

Several Eye and Ear staff members were speakers at this meeting. Dr. Parker Heath, Director of the Pathology Laboratory, gave a clinico-pathological discussion; Dr. Robert H. Monahan read a paper on "Channels in the crystalline lens capsule"; and Dr. Edwin B. Goodall presented "A biographical sketch of John Dalton". Dr. Albert E. Sloane demonstrated a Collapsible Maddox Cross.

Dr. Bernard Zonderman of the Winthrop Foundation and Miss Helen Patton, speech therapist of the Foundation, took part in a panel discussion on "The auditory speech program of the partially deafened child", held at the New England Speech and Hearing Convention on November 24. Miss Patton presented a speech therapy demonstration with two of her young pupils.

Dr. Ernst Froeschels was a recent visitor at the Infirmary and one of the guest speakers at the New England Oto-Laryngological Meeting held here in late November. Dr. Froeschels, now practising in New York, is a former Professor of Phoniatrics at the University of Vienna.

Dr. Robert H. Monahan, Fellow in Pathology, working under Dr. Parker Heath, has left the Infirmary and will practise in St. Paul, Minnesota, in association with Dr. T. J. Edwards. Dr. Monahan will also instruct at the University of Minnesota Medical School, in the Department of Ophthalmology.

On Friday, November 23, Dr. Frank H. Lahey, head of the Lahey Clinic in Boston, delivered a lecture entitled "Inflammatory and malignant lesion of the colon and rectum", thereby initiating the winter series of educational lectures sponsored by our Surgical House Staff. It is the purpose of this series to bring, each month, an outstanding man from another hospital to talk on a subject of general surgical application and to have a member of our own Visiting Staff lead a discussion period following each paper.

The MGH Surgical House Officers cordially invite the House and Visiting Staffs to attend this series. The lectures will be given on the third or fourth Friday of each month, at 5 P.M., in the Bigelow Amphitheatre. Announcements of each speaker and his subject will be posted on the bulletin boards here in the hospital.

The Board of Trustees, at their meetings on November 16 and 30, voted:

To establish a special fund to be known as the Tracy Burr Mallory Memorial Fund, to be used for some suitable memorial in the new Pathology Building.

To appoint:

Dr. James C. Appleton as Assistant Resident in Anesthesia for three months, beginning January 1;

Dr. John C. Nemiah as Assistant in Psychiatry;

Dr. Peter E. Sifneos as Resident in Psychiatry rather than Assistant Resident, to begin January 1;

Dr. Jacob H. Swartz to the Board of Consultation;

An additional Intern on the Children's Medical Service, to be rotated through an assignment in clinical laboratory service.

CORRECTION: Due to a typographical error in a Trustees' vote sent us last month, we reported in the December issue that Dr. Merle A. Haanes had been appointed Assistant in Psychiatry. Dr. Haanes was appointed Assistant in Dermatology, beginning last October 15.

At their meetings on November 21 and 28, and December 5, the General Executive Committee voted to appoint:

Dr. Javier Correa as Clinical and Research Fellow in Medicine, effective as of December 1, 1951;

Dr. Donald S. Fredrickson as Research Fellow in Medicine, effective as of October 1, 1951;

Dr. John Gergely as Research Fellow in Medicine, effective as of October 1, 1951;

Dr. Charles L. Leach as Clinical Fellow in Surgery, assigned to Endoscopy, for the period December 1, 1951 through February 29, 1952;

Dr. Sergio A. Leiseca as Graduate Student Assistant in Surgery for a period of one year, beginning November 1, 1951;

Dr. John F. Muxworthy, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning August 1, with assurance of reappointment for a second year. In addition to his duties in Anesthesia, Dr. Muxworthy will work on Dr. Beecher's Antitussive Study;

Dr. Stuart Ragland, Jr. as Clinical and Research Fellow in Medicine for the period October 1, 1952 through September 30, 1953;

Dr. Kurt F. Schmidt as Fellow in Anesthesia for two years, beginning April 1;

Dr. Peter A. J. Smith as Research Fellow in Dermatology, effective as of December 1, 1951;

Dr. George J. Warren as Clinical Assistant in Urology, for service in the Out-Patient Clinic, beginning November 1, 1951.

The Committee also voted to extend the appointment of Dr. John A. Benson, Jr. as Clinical and Research Fellow in Medicine for another year — July 1, 1952 through June 30, 1953.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Cardiology

Bland, E. F., and Jones, T. D.
Rheumatic fever and rheumatic heart disease: A twenty year report on 1,000 patients followed since childhood.
Circulation 4:836-843.

Chapman, W. P., Hamlin, H., Freshwater, D. B., Livingston, R. B., Sweet, W. H., Poppin, J. L., and Emery, F. J.
Present evidence concerning the relationship of the cerebral cortex and/or subcortical areas to the regulation of blood pressure and heart rate in man.
1er Congrès, Mondial de Cardiologie 1:77, Paris, J. Baillière et Fils.

Endoscopy

Benedict, E. B.
How the endoscopist can help.
G.P. 4:34-40.

General Surgery

Raker, J. W., Wight, A., Michel, A. J. D., and Cope, O.
A clinical and experimental evaluation of the influence of ACTH on the need for fluid therapy of the burned patient.
Ann. Surg. 134:614-616.

Neurology, Neurosurgery, and Psychiatry

Stokholm, H., and Cobb, S.
Book review: Fundamentals of psychoanalysis, F. Alexander, New York, W. W. Norton, 1948.
Psychosom. Med. 13:267-269.

Nursing Education

Sleeper, R.
We study our basic program: A report of an experimental program which provides for an eight-months period of internship in nursing practice.
Am. J. Nursing 51:681-683.

Ophthalmology

Sloane, A. E.
Analysis of methods for measuring diplopia fields: Introduction of device for such measurements.
A.M.A. Arch. Ophth. 46:277-310.
Sloane, A. E.
Massachusetts vision test.
Guildcraft 25:21-32.
Sloane, A. E.
Refraction Clinic.
Am. J. Ophth. 34:1443-1444.

Orthopedic Surgery

Cave, E. F.
Nonbony injuries to the knee.
Surg. Clin. North Am. 31:1355-1368.

Proctology

Speare, G. S.
Melanosis coli: Experimental observations on its production and elimination in twenty-three cases.
Am. J. Surg. 82:631-637.

Radiology

Robbins, L. L., and Land, E. H.
Application of the Land method of film processing in roentgenology: Preliminary report.
J.A.M.A. 147:1217-1219.
Wyman, S. M., and Scholz, F.
A preliminary report on radiography in rapid sequence.
Radiology 57:748-751.

* * *

RADIOLOGY DEPARTMENT

At the annual meeting of the Radiological Society of North America, held at the Palmer House, Chicago, December 2—7, an exhibit presented by Dr. Stanley M. Wyman and Dr. William R. Eyler was awarded Second Prize. The title of the exhibit was "Sequestration of lung associated with anomalous systemic pulmonary artery". The material included roentgenograms and colored prints of pathologic specimens illustrating the salient features of the condition.

At a meeting of the Society held December 4, Dr. Wyman read a paper dealing with the material presented.

At the annual meeting of the American Roentgen Ray Society, held in Washington last September, Dr. Eyler and Dr. Robbins gave a Refresher Course entitled "Roentgen examination of the acute abdomen".

Dr. Robbins was in Minneapolis from October 29 to November 3, participating in the Course on the Chest at the Center for Continuation Study at the University of Minnesota. He gave three lectures and took part in Case Conferences; and on November 2, at the fall meeting of the Minnesota Roentgen Ray Society, he presented a paper on the application of the Land method of processing in roentgenology.

In November, Dr. Robbins spent a week at the Tripler General Hospital in Honolulu, as Consultant in Radiology, at the request of the Surgeon General of the U.S. Army.

In a publication which so often features letters and reports of distant travels it seems a little out of place to describe merely a jaunt across the river to M. I. T. However, for me it was a new world and perhaps some of the rest of you will find this account of my experiences there interesting.

One of the phenomena we observe most frequently is the healing wound. We read about the role of vitamins, hypoproteinemia, infection, the alarm reaction, etc. in wound healing, and watch the yearly parade of new ointments, applications, etc. as reported in the journals. During his experiments on biological effects of radiation, Dr. John R. Loofbourow, Professor of Biophysics at M. I. T., made some interesting observations. He demonstrated that irradiated yeast cells released or perhaps synthesized some unknown products which stimulated the growth of normal yeast. The same sort of process has been observed in tissue cultures, with regenerating amphibians, with embryos, etc., and many years ago Alexis Carrel formulated the hypothesis that leukocytes secrete unknown substances (trephones) which stimulate healing.

This was a matter of some surgical interest, and Dr. Loofbourow agreed that it would be worth while to re-examine Carrel's hypothesis. So in January 1948 we started out. We were able to separate the red from the white cells in blood without even the trauma of centrifugation, merely by adding fibrinogen. The red cells formed rouleaux which settled out, leaving the white cells in the supernatant fluid. However, we needed larger amounts of starting material than was practicable with blood, so we went back to the yeast, which, of course, we could buy by the pound.

The fluids released from the damaged yeast stimulated the oxygen consumption of normal yeast, as well as its growth. But these kinetic studies, as will be published by Mr. S. J. Adelstein (H. M. S. 1952), did not offer the clues regarding mechanisms, as we had originally hoped. Studies of the radioactive phosphorous turnover of the nucleotides performed with Mr. M. J. Abbate (currently at C. H.) taught us a lot about P^{32}, but will have to be repeated with improved ion exchange methods.

In speculating about possible mechanisms of stimulation of cellular growth our attention was drawn to the work of Dr. William F. Loomis and Prof. Fritz Lipmann on mitochondria. These little intracellular factories burn 40-odd fatty acids and Krebs cycle substrates producing ATP, which seems to be the chief source of energy for all cellular activities and chemical syntheses. They showed that dinitrophenol, and later, aureomycin, diminished the energy yield (ATP), while oxidation proceeded unimpaired. Prof. C. Martius's recent lecture at M.G.H. (September 1951) suggested that the mitochondria may be the site of action of thyroxin. This may be true for other drugs, hormones, etc., including our x factor. Indeed, our fluids did stimulate oxidation and ATP formation, but only by replacing the adenosine-5-phosphate nucleotide. So we were still no further along with our main problem.

The most direct attack, of course, was fractionation of the fluids. However, Dr. Loofbourow's experiments had indicated that the unknown growth factor seemed related to the nucleotide fraction. The chemical separations for nucleotides had given Dr. Loofbourow contradictory results, and meanwhile the sensitive and powerful methods of ion exchange chromatography had been applied very successfully by Dr. Waldo E. Cohn (formerly of the Huntington). After a trip to his lab at Oak Ridge, we built an automatic fraction collector which operated day and night during the week necessary for each analysis, and we were able to separate 7 distinct fractions.

Even though Dr. Churchill extended my leave of absence another year, I was unable to finish the project. Dr. E. D. Thomas, currently at P. B. B. H., had meanwhile taken a spontaneous interest in the problem. He refined the method so that 2 new fractions were separated and finished the identification of the fractions, using paper chromatography. We were disappointed that none of the nucleotides thus isolated stimulated growth, and we still do not know the nature of Dr. Loofbourow's "wound hormone". However, several other interesting things came out of the analyses, and ion exchange will be a very useful method for study of nucleic acid.

M. I. T. is a warm and congenial place, and I enjoyed the friendly interest and stimulation of the chief, Professor F. O. Schmitt, and many of the junior members of his department who have been or later became connected with M.G.H., including Jesse F. Scott (Research Fellow in Medicine), Jerry Gross (Research Associate in Medicine), M. A. Jakus (Retina Foundation), Robert D. Griesemer (Dermatology 1949), William F. Loomis (Research Fellow in Biochemistry 1948) and his technician, Helen Vavoudes. Professor Loofbourow's wife, Dorothea (past Assistant in Medicine at M.G.H.), was well known to all of us here, and Professor Loofbourow shared her warm human insight and interest in broader medical problems. Their death, a week apart, was a great personal tragedy. Although a top-flight physicist, Professor Loofbourow never seemed perturbed by a surgeon's ineptitude.

The role of the surgeon in research is, I suppose, something every surgeon decides for himself. I believe that the methods and findings of the basic scientists can be applied to surgical problems, and at M. I. T. I learned that it is fun to try to accomplish this.

On November 1, 1950 I returned to the Surgical Service here.

Falls B. Hershey, M.D.,
1st Assistant Resident in Surgery

As you know, our Archives files contain the hospital service records of every member of the MGH house and visiting staffs, from 1821 up to and including the present time. Among these records are many letters, newspaper clippings, and other items which supply interesting information of a personal nature. To augment this material, in 1949 The News began to publish short biographical sketches, called "Bioglets", of new members of our house staff. These sketches are attached to the individuals' records and may prove to be just as valuable to future historians of the Hospital as our earlier records have been.

But, with all this coverage, one group here at M.G.H. has not received comparable attention. We are speaking of those from countries outside the United States who are working or studying here on fellowships or through similar arrangements. Frequently, in conversations with these men and women we chance upon most interesting bits of information concerning past experiences, and it is our desire and hope to publish as many of these accounts in the future as space will permit. To launch the plan with an excellent illustration of what we mean, this is what we learned about Dr. Thip Pholpoke, here now as a Graduate Student Assistant in Surgery:

"Dr. Thip" is a native of Thailand. In November 1950, as a Major in the Thai Expeditionary Force in Korea, he headed a surgical team which worked its way up through the middle of the peninsula as far as Pyongyang, just in time to meet the first onrush of the Chinese which broke the U.N. lines and sent them reeling back. In March of 1951 he returned to Thailand. In June he was sent to France as his country's official delegate to the Thirteenth Congress of International Military Medicine and Pharmacy. From there he came to the United States. After two years' study in this country, he will return to Thailand to serve in the Army Medical Service.

"Dr. Thip" graduated from Chulalongkorn University, Bangkok, in 1936; during 1937 he was an Intern and attended the Basic Course for Medical Officers at the Military Hospital and Army Medical Department in Bangkok; from 1938 to 1940 he was a Resident in the Third Military Command Hospital at Nakorn Rajsima; from 1940 to 1946 he served as Regimental Surgeon in various regiments and divisions; and from 1947 to 1950, when he was sent to Korea, he was Assistant Surgeon at the Military Hospital in Bangkok.

A question concerning his whereabouts during World War II brought this reply. "I was in the jungle part of the time, among those in the thin lines spread out along Thailand's border." Then he added, "Our people are freedom-loving people. The word 'Thai' means 'free', literally."

See what we mean? Many of us are in almost daily contact with visitors here from other lands but are in complete ignorance of anything concerning them except their immediate professional activities. We once published a long list of the many countries represented here at M.G.H., but there is so much more, and of greater interest to us, than the mere name of an individual's homeland. So — if you are here from a country outside the United States, please inform your editor of that fact very soon, and *do please* include also an outline of your previous professional work and any of your personal experiences which would be of interest to our readers and a worth-while addition to your service record here in the Archives file.

We hope to be able to continue this new feature in The News. Whether we can or not depends upon the responses to this suggestion. We already have in mind a fitting insigne to head the new section. It might well be a miniature drawing of the globe—done in Mercator projection, in order to include the countries in both hemispheres. Do we hear an artist volunteering for that job?

♣ ♣ ♣

PODIATRY CLINIC

During November of 1929 a Podiatry Clinic for the care of diabetic and circulatory patients was established as a result of the combined efforts of Dr. Arthur W. Allen and the late Dr. Washburn, past Director of the Massachusetts General Hospital.

The Podiatry Clinic, now beginning its twenty-third year, developed gradually, at first caring for a few patients weekly and progressing to its present activity. Originally, patients were referred from the Diabetic and Circulatory Services only; then the Dermatological and Orthopedic Services were added to the list, resulting in an individual Podiatry Clinic for the use of the entire Out-Patient Department. The average number of patients treated each week is about twenty, plus Staff Clinic patients and student nurses. The personnel of our group consists of a supervising nurse, a student, and one podiatrist.

All patients with foot ills are seen Thursday mornings, when each patient is taught routine foot care and warned against improper treatments. The foot liability of these patients can be very high. Cooperative patients have avoided hospitalization and major foot and leg surgery because of the routine acquired in this Clinic.

Like all new ventures, the Podiatry Clinic has had its ups and downs. Having been with the group since its inception, I know that many hours of hard work have been exerted to standardize this Clinic. Our major problem was to find a suitable location. I don't believe that any other clinic in the Hospital has changed its physical situation as often as has ours.

Podiatry being so very important to both vascular and orthopedic difficulties of the lower extremities, it was sensible to have the foot service easily available to either or both. It was finally decided to move Podiatry to the Orthopedic Clinic, and a resulting workable clinic evolved.

With an increase in our personnel, additional foot problems could be treated and more patients could be seen. A one-man clinic is restricting.

I am happy to have groups of student nurses visit the Clinic each week and hope we are able to add something to their "Foot Care" program. The nursing care given to circulatory patients' feet is most important.

In conclusion, I extend an invitation to all to visit our Thursday morning Podiatry Service. It has given me great pleasure to have been with the Clinic since its birth, and I hope I shall be able to continue on at M.G.H. for some time to come.

John F. Kelly, D.S.C.,
Head of Podiatry Clinic

This letter from Dr. Hugh Chaplin, Jr. (*M.* 1948) needs no qualifying adjective. It speaks for itself. It is our hope that, besides its interest value, it will serve the purpose of not only stinging the consciences of all of you who have failed to write that long-overdue letter to your News, but will cause you enough discomfort to nag you into action.

From his present address — 28A Keswick Road, East Putney, London SW 15, England, Dr. Chaplin writes:

> I want to begin by saying something trite—but I make no apologies, for most trite things are eminently *true* — and that is to emphasize how much pleasure each copy of The News brings to me via its monthly trans-Atlantic journey. Until I left M.G.H. I never really appreciated what wide coverage The News gives to the over-all activities of the Hospital, and all the details are music to the ears of its devoted friends, however far away they may be.
>
> Though it has been only just a year since I departed from the West Medical Service and from the U.S.A., a lot seems to have happened both there and here in those swift months. I imagine with pleasure the hum of activity in the new Research Building, which was not completed when I left, and I wonder with mixed feelings at the fate of the OPD Dispensary.
>
> But, perhaps you will be interested in a few thoughts from England — for these have been months of great change on this little island. From a general point of view, two things are of particular interest: the recent change in the Government, and the economic crisis England faces. It is difficult to inter-

Perham
Boston

No. 34 in a series of Staff photographs
Dr. Varaztad H. Kazanjian, Honorary Surgeon at the Massachusetts General Hospital and Consulting Surgeon for Plastic Operations at the Massachusetts Eye and Ear Infirmary

pret with certainty the meaning of the end of Socialist rule in this country after its stormy but persistent survival through the postwar years. One thing is certain: it does *not* mean a major change in public sentiment or point of view. The Conservatives will have to maintain many of the "socialist reforms", and they will have to govern with an infinitesimal majority in the House of Commons. (The Socialists polled more votes in this election than in any previous one.) I think the changes wrought by the recent election express the British people's desire for a firmer stand in foreign affairs than the Socialists were interested in maintaining, plus a faint hope that a change in government might work some miracle in the economic crisis in which England finds itself. The nation is tottering on the brink of economic disaster—the result of two major wars, combined with the shrinkage of the Empire and the difficulty of maintaining exports in the face of rising costs of all imports. The English have taken hitch after hitch in their belts to meet this problem — they eat less meat now than at any time during the war, they cannot buy a new car without three to five years of waiting, they simply cannot buy such things as cashmere sweaters, fine tweed, etc., for these items are rigidly restricted for export only. Taxation has wiped out many of the wealthy families and will wipe out all of them if it remains as now for another generation. Income is so highly taxed that it is impossible for anyone to amass a large fortune these days. The added burden of pulling their weight in European rearmament may prove to be the last straw — in fact, it is commonly held that England simply cannot do it without increased American aid. All these things, plus the tension in the Near East, the seemingly endless attrition in Korea, and the inexorable mounting of inflation put the nation under heavy strain. Let us hope that under Churchill and with U.S. aid they will find their way out of this sea of troubles — for England is the strongest ally of the United States, and the consequences of a bankrupt and beaten England are too alarming to contemplate.

Medically, this year has been fascinating from many aspects. I shall not attempt in this letter to evaluate "socialized medicine" as it exists in England. Space is too limited. Two comments may give some perspective to the problem: first, the extent of the benefits guaranteed under the plan have recently been curtailed — charges are now being made for spectacles and dentures, and it is likely that free medicines, prostheses, etc. will also be more strictly controlled; secondly, there is no suggestion that the whole program will be shelved — the majority of the people and, I think, of the physicians, also, feel that the program represents an improvement over preexisting conditions and deserves further trial.

Two things in connection with the teaching hospital with which I have been associated have struck me in particular. First, the relation of the student to the entire hierarchy of the medical staff, from the intern right through to the professor, is a distinctly remote one. There are exceptions to this, of course, but the friendly informal rapport enjoyed by medical students at American schools, and at the M.G.H. in particular, simply does not exist here — and a great pity it is. I suppose it is merely a less extreme aspect of the "Continental" professor-student relationship which Bob Berg told us about on his return from Sweden last year — but, in any event, I do not think it has anything to recommend it over the American system. Secondly, the position of nurses in England, especially their relationship to staff and visiting physicians, is markedly different from what I had been used to. Here, the nurses are not known by name to most of the doctors with whom they work closely, they hesitate to offer suggestions, and active cooperation and mutual consultation between physicians and nurses is a rarity. The quality of nursing care, as far as the patients are concerned, is very high, but the doctor-nurse relationship is almost nonexistent. This is a situation which is foreign to those of us who trained at the M.G.H., and I'm sure we all share Miss Sleeper's enthusiastic campaigning for maintaining and increasing the benefits which are to be obtained from close cooperation between physician and nurse.

English medical research, judging from what I have seen of it, is of a very high order — honest, carefully planned, critically executed, and productive of many significant advances. The group with whom I am fortunate to be working is entirely delightful and stimulating.

I find that I am to be placed on active duty for the U.S. Public Health Service, to continue my work over here in England for another year. I look upon this as a fine opportunity and anticipate another happy and fruitful year. Do not misinterpret any of my criticisms as bespeaking a basic displeasure with England or the English. London is a fascinating city in which to live, and English traditions are inspiring and basically identical with American traditions, in the main. Though I shall miss getting back to see the M.G.H. as soon as I had hoped, I shall be happy in the anticipation of doing so in 1953, and I shall continue my work here quite content among the warmly hospitable and cordial English friends I find all round me.

Best regards to all my friends over there

A card from Dr. Benson B. Roe (*W.S.* 1943) announces the opening of his office for the practice of General and Thoracic Surgery, at 536 Mason Street, San Francisco 2, California. Dr. Roe adds this note:

Will write you a decent letter when I get settled down and caught up on essentials.

Have just opened my office here. Have been appointed Assistant Clinical Professor of Surgery at the University of California.

It is good to receive The News and to keep up with friends.

Dr. John W. Smillie (*E.S.* 1944) sent us a new address on his subscription card —Division of Ophthalmology, Box 32, University of Minnesota Hospital, Minneapolis 14, Minnesota — and enclosed the following letter:

The News is most welcome because, in addition to keeping us informed as to the progress of M.G.H., one also learns about the locations and activities of former associates.

After doing EENT work for two years at the Out-Patient Clinic in Washington, D. C., the U.S. Public Health Service reassigned me to the Ophthalmology Division of the University of Minnesota Hospital. This is the second year of my eye residency and I am now a Surgeon (Lt. Commander) in the USPHS.

Dr. Robbins was a recent guest here in our X-ray Department.

THE NEWS

No. 109 Boston, Mass. February 1952

PHYSICAL MEDICINE DEPARTMENT

Since our last report for THE NEWS, the tenth anniversary of the opening of the Physical Medicine Department has passed, so perhaps it is appropriate to review its progress over the past decade. The Department still occupies the same space originally assigned to it, which was formerly the nurses' and house officers' dining room and kitchen on the second floor of the Domestic Building.

Service to patients: During the first year of operation the Physical Therapy Department quickly took on a full treatment load for the space and staff available. Sixty percent of the patients at that time were out patients, and the Orthopedic Service referred about sixty percent of all its patients. Therapeutic exercise of a standardized type was the most popular treatment procedure, local heat applications and sedative massage preceding it in most prescriptions. Only ten percent of physical procedures were of the more complicated variety, including electrotherapy. Eighty percent of the treatment load at that time came from either the hospital wards or the Out-Patient Department. At present thirty-two percent of new patients are referred from the Baker Memorial or are ambulatory Baker patients, usually industrial accident cases. Four percent are referred from the Phillips House. During the war years there was a decrease in staff personnel and in the number of treatments given, many patients simply receiving instruction for home therapy. This is brought out by the average number of treatments per patient, which dropped from 13 to 9. At the same time there was a decrease in the number of out patients from 12,000 to 6,500 per year.

The Occupational Therapy Department antedated the Physical Therapy division but became physically combined with it when the Department opened in the Domestic Building, except for a shop in the psychiatric ward. From the beginning, attempts were made to correlate the two services and to provide medical direction for both. This culminated in the forming of the Physical Medicine Department in 1944, combining the two technical divisions—the close coordination of the two therapies being quite apparent, as thirty percent of the treatments given were a combination of both techniques. The term "physical medicine" was more appropriate, as twenty percent of referrals were found to be for diagnostic or prognostic purposes rather than for therapy, only.

There was a rapid increase in the number of patients referred and treatments given after the war, reaching a peak in 1947. At the same time a change occurred in the type of procedure utilized. The most signal technical advance was the introduction of a new exercise method developed by Dr. Thomas L. DeLorme, a fellow in Physical Medicine. The term "progressive resistance exercise" was coined here to describe it. Funds were obtained from the Pope Foundation to aid in the development and study of this method of exercise. It was found that a wide application of this method is safe and that this is a most efficient way to develop muscle power. There has been a growing emphasis on different types of therapeutic exercises in addition to the use of progressive resistance, particularly the special technique used in gait-training for neurological patients and those with artificial limbs. There has also been an increase in the number of patients with arthritis referred for supervised exercises. In Occupational Therapy the trend has been away from diversional activities, with more emphasis on treatments to develop better range of motion, and skill or strength—the terms *kinetic* and *energic* being used to describe these methods. Expansion in this department also included some music therapy by a part-time worker for the Massachusetts General Hospital and also a part-time occupational therapist for Storrow House in Lincoln.

During the past three years there has been a definite emphasis placed on medical rehabilitation procedures. A most striking example of this is in relation to the Amputation Clinic, which is a team project of the Orthopedic, Surgical, and Physical Medicine Departments, together with the Social Service Department and representatives from the Department of Vocational Rehabilitation and the different local limb manufacturers who attend the Clinic. For hospitalized patients, such as those with arthritis, hemiplegia, or other neurological conditions, efforts are made to evaluate the patient's ability to perform the acts of daily living and also in a limited way to test manual skills in relation to prevocational guidance.

Since June of 1951 a more complete rehabilitation service has been available to patients in the Massachusetts General Hospital, including the Baker Memorial and Phillips House, because of the location of the Bay State Medical Rehabilitation Clinic in what was formerly Ward I. It is now possible to give a full day's treatment devoted to physical rehabilitation in this Center. The Physical Therapy section is so designed that group practice in gait-training and mat work for paraplegics is available, and in Occupational Therapy the shop is especially designed to analyze occupational skills in relation to possible employment or greater self-independence for the more handicapped patients. Rehabilitation counseling is also provided. There is no duplication of the more complicated physical therapy procedures, such as hydrotherapy, diathermy, and ultraviolet irradiation, which are available to the Bay State patients in our Physical Medicine Department when needed.

It is now possible to hospitalize patients for purely rehabilitation purposes in the Baker Memorial or Phillips House or on the Massachusetts General Hospital wards and give them proper medical direction throughout their period of medical rehabilitation and, through contacts which are made with other agencies, direct them to vocational rehabilitation and employment, although no vocational training is supplied in the Bay State Clinic. There are already, on the average, about ten hospitalized patients who are seriously injured or handicapped and referred for the purpose of rehabilitation because of the combined services available from the medical staff of the Massachusetts General Hospital, the Department of Physical Medicine, and the Bay State Medical Rehabilitation Clinic. These patients come to us, for the most part, from the United Mine Workers of America and various insurance companies in this area.

Personnel: The Medical Director and the physical therapy supervisor are the only members of the Physical Medicine Department who have remained here since the opening, although the assistant head physical therapist has been here nine years. We have had a fairly rapid turnover of the younger staff members, as the Department is a popular one for recent graduates to get experience under proper supervision. The most significant change in personnel has been due to the organization of a fellowship training program, aimed to prepare young physicians for the American Board of Physical Medicine and Rehabilitation. There has been developed an affiliation with the Physical Medicine Section of the Veterans Administration Hospital in Framingham, so that the three years required by the Board may be divided into either two years at the Massachusetts General Hospital and one year at Cushing for those fellowships originated at the Massachusetts General Hospital, or two years at Cushing and one year at the Massachusetts General Hospital for those originated at the Veterans Administration. At the beginning, fellowships were available through a grant by the Baruch Committee on Physical Medicine to the Harvard Medical School for training and research in this field. At the present time, most of the fellows receive stipends from the National Foundation for Infantile Paralysis. To date, there have been five fellows who have completed their full three years of training. Another will do so within six months, and several others have been associated with us for shorter periods of from three months to one and one-half years. Our graduates include one full professor, two assistant professors, and two others with lesser academic rank.

Education: Educational activities, however, have been largely in the training of physical and occupational therapists. The three approved schools for physical therapists and the one for occupational therapists in Boston all send their students for training in our Department. We also have accepted students for affiliation from schools in Virginia, Pennsylvania, New Hampshire, Canada, and occasionally elsewhere. There is still a marked shortage of both physical and occupational therapists and also of physicians specializing in Physical Medicine and Rehabilitation. Therefore, we expect that this aspect of the activities of the Physical Medicine Department will be one of the most important during the coming years, as it has been in the past.

Research: Some clinical research has been done in the Department since its opening, primarily in the field of electrophysiology. Grants have been received from the National Foundation for Infantile Paralysis to study neuromuscular dysfunction in poliomyelitis, and cooperative studies have been made with the Brain Wave Laboratory over a number of years. Other projects have included appraisal of peripheral nerve injuries inflicted in World War II, under the leadership of Dr. James C. White in the Neurosurgical Department, and a cooperative research with the Psychiatric Department on fatigue in psychoneurotic patients, through a grant from the Baruch Committee on Physical Medicine. Other projects have included the study of quantitative methods for measuring muscle strength, using an electronic strain gauge, and the development of progressive resistance exercises, as previously mentioned. Our fellows have also worked on short-time studies which have been reported previously.

In summary, one can say that the past decade has been one of impressive growth in Physical Medicine and Rehabilitation at the Massachusetts General Hospital. We have witnessed the metamorphosis from scattered, unorganized, non-medically directed therapeutic techniques to a Physical Medicine Department with all the activities of an individual medical specialty except a ward service (like Radiology), but including a limited number of private rehabilitation beds. Achievements during this period included diagnostic and therapeutic services to over 25,000 different patients, who received more than 300,000 treatment visits. Clinical training has been given to approximately 800 therapists, and didactic lectures to 500 students. An accepted residency training program has been established, and 13 fellows have received graduate training during the past six years. Research grants totaling nearly $100,000 have made possible the studies of 18 different topics related to Physical Medicine, and 80 medical papers and 2 textbooks have been published.

Arthur L. Watkins, M.D.,
Chief of Physical Medicine

* * *

The following letter has been received from The New York Academy of Sciences:

> It will interest you to know that Joseph C. Aub, M.D. and Henry K. Beecher, M.D. were among the 99 distinguished scientists who were elected to Fellowship in The New York Academy of Sciences on December 5, 1951, at its annual meeting held at the Waldorf-Astoria Hotel in New York City.
>
> Each candidate for this honor was nominated to Fellowship by the Council of the Academy from among the current 6,536 active and sustaining members of The New York Academy of Sciences, in recognition of his outstanding scientific achievements.
>
> The New York Academy of Sciences, organized in 1817, is the fourth oldest scientific society in the United States, and its present membership is located in all forty-eight States, the District of Columbia, and forty foreign countries.

Dr. Henry K. Beecher has been made a Chevalier of the Legion of Honor by Decree of the President of the French Republic. Official notice of the award was transmitted by the French Ambassador, Henri Bonnet, and the presentation was made by the Consul General, M. Chambon.

Dr. Kurt H. Thoma, a member of our Board of Consultation and Professor *Emeritus* of Oral Surgery and Oral Pathology at Harvard Medical School, was awarded the Callahan Memorial Medal in Cleveland, Ohio, last November. The award was made "in recognition of the high merit of scientific contributions made to humanity and the healing professions" by Dr. Thoma.

* * *

OVERSEAS MISSIONS

Dr. Paul D. White left early in January for Pakistan and India, on behalf of the Point IV Program of the State Department. He will spend a short time in Athens *en route*.

Dr. Donald S. King leaves early in February for the Far East for a four-weeks' tour of the Army hospitals in Japan and Korea, as Consultant to the Surgeon General of the U.S. Army.

Dr. Edward F. Bland also leaves in February for a similar visit to the Army hospitals in Germany and Austria, under the auspices of the Surgeon General.

Dr. King and Dr. Bland made similar tours in 1949—Dr. King to the Far East and Dr. Bland to Germany and Austria.

THE NEWS is hoping to receive reports of their findings from these three doctors very soon after their return home.

* * *

The third Edward Pierson Richardson Lecture, in Clinical Science, was given in the Bigelow Amphitheatre on January 21. The speaker was Frank G. Young, M.A., D. Sc., F.R.S., Sir William Dunn Professor of Biochemistry at the University of Cambridge, England. The subject of Professor Young's address was "The anterior pituitary gland and diabetes mellitus".

* * *

STAFF WIVES

Doctors from other countries and their wives were guests at a tea in the Medical Staff Room on January 15.

This was the first of a series of teas to be given by the Staff Wives, who meet the first Wednesday of each month in the Archives Room, Moseley Building. At their January meeting Mrs. Manuel Quijano of Mexico, whose husband is working in the Department of Surgery, received her MGH Volunteer pin from Mrs. Courtney, Chief of our Volunteer Service. Other Staff Wives are enjoying their work in the Volunteer Service.

The February 6 meeting was preceded by a tour of the hospital conducted by Mrs. Weiss, Community Relations Consultant, and lunch in the Nurses' Cafeteria.

All members are urged to be present at the next meeting.

* * *

Contributions totaling $465 were received by THE NEWS during 1951. This figure represents outright gifts, over and above the subscription fee.

A note of thanks is always sent to each such contributor when his gift is received, but THE NEWS takes this opportunity to again thank its many friends for their kind generosity.

The Board of Trustees, at their meetings on December 14 and 28, voted:

To award a Dalton Scholarship to Dr. Carl W. Gottschalk for six months, January 1 through June 30, to pursue studies "pertaining to the measurement of renal interstitial pressure and the factors influencing it";

To grant Dr. George L. Nardi a Dalton Scholarship for one year, effective January 1, to carry out special research;

To accept the resignation of Dr. Arthur S. Keats from the position of Assistant Anesthetist, as of December 17, 1951;

To continue Dr. Thorkild Waino-Andersen as Clinical Fellow in Anesthesia for one year, beginning May 18;

To grant leave of absence to Dr. Paul C. M. Zamecnik, with pay, for approximately one year, from January 1, to pursue special studies.

To appoint:

Professor W. Melville Arnott of Birmingham, England, as Honorary Physician pro tem on his arrival here January 6, for a period of approximately three weeks;

Dr. Joseph L. Braudo as Assistant Resident on the Children's Medical Service for one year, beginning February 1;
Dr. Edward Dunn as Third Assistant Resident in Surgery, beginning July 1;
Dr. Lawrence J. Essember as Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Alexander D. Kenny as Assistant Chemist, to begin on his arrival from England and continue until September 1;
Dr. John D. Leidholt as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;
Dr. Jean Lepoire as Second Assistant Resident in Neurosurgery from January 1 through June 30;
Dr. Clare K. Marshall as Assistant Resident in Neurology for one year, beginning July 1;
Dr. James A. O'Shea as Clinical Associate to the Children's Medical Service;
Dr. George M. Perrin as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. John S. Robey as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. Alfred L. Skinner, Jr. as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. Elizabeth H. Sprague as Intern on the Children's Medical Service for one year, beginning July 1;
Miss Mary M. Sullivan to the Advisory Committee of the School of Nursing, as of January 1.

At their meetings on December 12, 19, and 26, the General Executive Committee voted to promote:

Dr. Thomas C. Peebles from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period July 1, 1952 through June 30, 1953;
Dr. Paul M. G. St. Aubin to the position of First Assistant Resident in Radiology, effective as of January 1;
Dr. Robert T. Sceery to the position of Chief Resident on the Children's Medical Service, for the period July 1, 1952 through June 30, 1953;
Dr. Stanley C. Ulick from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period July 1, 1952 through June 30, 1953;
Dr. Chiu-chen Wang to the position of Resident in Radiology, effective as of January 1;
Dr. Richard H. Watson from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period July 1, 1952 through June 30, 1953.

To reappoint:

Dr. Samuel Brendler as First Assistant Resident in Neurosurgery for the period of one year, beginning January 1;
Dr. Remedios K. Rosales as Resident in Neuropathology for a period of six months, beginning January 1.

To appoint:

Dr. James H. Averill as Clinical Fellow in Medicine, assigned to Cardiology, beginning January 1;
Dr. Vernon G. Bugh as Clinical Fellow in Psychiatry for a period of six months, beginning January 1;
Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, effective as of December 1, 1951;
Dr. Carl F. Essig, Jr. as Clinical Fellow in Neurology for a period of one year, beginning January 1, with the intention of reappointment for a second year.

The General Executive Committee also voted to assign the title Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, to the group of men working with Dr. Edward B. Benedict, who are registered at the Harvard Medical School Postgraduate Course.

ALLERGY CLINIC

In October 1947 an excellent article appeared in THE NEWS, summarizing the history and activities of the Allergy Clinic from its inception. Its author, Dr. Francis M. Rackemann, was the founder of this venture which, in 1919, was one of the first out-patient clinics in this country given over to the study and treatment of allergic disorders. For thirty years Dr. Rackemann guided its destinies and brought this clinic to a point where it not only handled as large a load as 7 percent of all the patients in the O.P.D., but became one of the leading groups of its kind.

Within the past four years Dr. John L. Fromer, Dr. Richard R. Evans, Dr. Irving H. Itkin, and Dr. H. Walter Jones have joined our medical staff. Drs. Jeremiah E. Greene, William B. Clapp, Raymond J. Savignac, Leo B. Burgin, Francis L. Weille, Elizabeth DeBlois, and John W. Irwin—all "old-timers"— complete the medical group. Mrs. Alice Dalrymple and Miss Tyyne Lamsa, R.N., have been faithful clinic helpers. Backed by our clinic secretaries—Mrs. Hannah Robertson, Mrs. Eleanor Tebbetts, and Mrs. Elizabeth Feeley—and assisted by help from Miss Mary J. Graham, they have teamed well with the doctors in enabling the clinic to function efficiently four mornings a week throughout the year.

Innovations in the handling of the clinic include group conferences with patients, permitting the physician to outline to many patients at a time the principles of allergic cleanliness in their homes and to illustrate and discuss with them such details as dust proofing of bedding or self administration of aerosols and of hypodermic subcutaneous epinephrine. An appointment system has been introduced both for patients and for doctors. Surprisingly enough, this seems to be working very well, resulting in increased efficiency for all concerned.

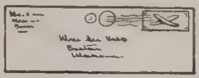
The allergy section of the Medical Service does not consist of the OPD Allergy Clinic alone, but also embraces a well-equipped laboratory situated on the 5th floor of the Domestic Building. Here Miss Graham and, more recently, Miss Priscilla Gordon, make extracts and vaccines for use in the clinic and for such staff members as may require them. An international exchange of technicians has been arranged between our laboratory and that of Dr. A. T. Hansen in Rigshospitalet in Copenhagen. Miss Graham is leaving now to spend a year in Denmark, to learn technical aspects of research in capillary physiology, while Miss Ina Gram-Petersen of their staff joins us in work along similar lines. In our laboratory, also, a research program is carried on by one or more clinical and research fellows as part of their training in allergy. Nine such physicians, so trained in past years, are at present practising this branch of internal medicine in various parts of the U.S. and in Canada. Dr. Wilfred Leith, the most recent of these fellows, held such a position in 1950, coming from and returning to Dr. Bram Rose's clinic in Montreal.

Dr. John W. Irwin, a five-year member of our team, is now working on a U.S. Public Health sponsored grant entitled "Circulatory changes in anaphylactic shock". This study involves direct observation of various mammalian organs, including the liver and lung, by means of the binocular microscope aided by illumination furnished directly to the living tissues through a quartz rod. Circulatory changes in the capillary network of the lung are at present being observed and are being recorded by colored moving pictures.

Recently completed clinical research projects have been described in currently published articles on various topics, such as the effect of ACTH on the immediate type skin test and passive transfer reaction in man, meningitis due to hypersensitivity to pantopaque, and penicillin allergy. A paper now in press on the subject of maintenance cortisone dosage in severe bronchial asthma outlines the results of a one-year attempt to keep such patients symptom free with carefully controlled intramuscular and oral therapy.

During the past two years the Allergy Clinic staff has held a monthly dinner meeting, having as its guests leaders in other specialties and in the basic sciences. This group is not solely interested in the affairs of its own clinic and laboratory, but will welcome opportunities for discussion of related problems by physicians in any department in the hospital.

Walter S. Burrage, M.D.,
Head of Allergy Clinic



New addresses:—

Dr. Randolph L. Anderson (*Or.* 1927), 1208 Kanawha Blvd., Charleston 1, W. Va.
Dr. James H. Averill (*M.* 1947), House of the Good Samaritan, 25 Binney St., Boston, Mass.
Dr. George A. Culver (a.r.p. *An.* 1950), Jefferson Davis Hospital, Houston, Tex.
Lt. Boy Frame, MC, USAF (*M.* 1949), 63d Fighter Interception Squadron, Oscoda Air Force Base, Oscoda, Mich.
Dr. John Homans (*S.S.* 1904), 205 Beacon St., Boston, Mass.
Dr. David Hurwitz (a. *M.*), Wyman House, Mount Auburn Hospital, 330 Mount Auburn St., Cambridge 38, Mass.
Commander William J. James, MC, USN (r.s. *N.S.* 1949), U.S. Naval Hospital, Chelsea, Mass.
Dr. Lewis W. Kane (*W.M.* 1941), 205 Beacon St., Boston, Mass.
Dr. Carroll B. Larson (*Or.* 1938), Children's Hospital, State University of Iowa, Iowa City, Iowa.
Major Roy W. Leeper, MC, USA (r.p. *D.* 1950), TUSAG, JAMMAT, APO 206 A, c/o Postmaster, New York, N. Y.
Dr. Alexander G. Matoltsy (res. assoc. *D.*), Dermatological Laboratory, Massachusetts General Hospital, Fruit St., Boston, Mass.
Dr. John D. Reeves, Jr. (r.p. *R.* 1951), University of Pennsylvania Hospital, Philadelphia, Pa.
Dr. John F. Tannheimer (*M.* 1944), 333½ West Main St., Ionia, Mich.
Dr. Chiu-an Wang (*W.S.* 1944), 306 Sze Hoi Bldg., 12-14 Queen's Road, Central, Hong Kong, China.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. LeRoy A. Schall, Chief of the Oto-Laryngological Service, was a guest speaker at the third Pan-American Congress of Oto-Laryngology and Broncho-Esophagology held in Havana, Cuba, January 20-23. Dr. Schall presented a paper, written jointly with Miss Anita Mangiaracine, Infirmary Bacteriologist, on "The role of antibiotics in treatment of sinusitis". Dr. Schall also gave an instructional course on "Neoplasms of the nose and nasal accessory sinuses".

At the same conference, Dr. George Kelemen, Assistant Surgeon in Oto-Laryngology, presented an instructional course on "Embryonic hearing organs after maternal rubella".

The Board of Managers announce the promotions of Dr. Charles Kent and Dr. Edward F. Lawlor from Assistants in Oto-Laryngology to Assistant Surgeons in the Department.

Dr. Marvin Posner and Dr. Irwin T. Mancall completed their terms of residency on February 1. Dr. Posner will return to Hartford, Connecticut, for private practice and Dr. Mancall will begin private practice in Albany, N. Y.

Some 120 ophthalmological journals have been sent by the Lucien Howe Library to ophthalmologists in Japan. Previously, in the years immediately following World War II, the Howe Library acted as agent for the distribution of wartime American publications on ophthalmology to various foreign centers and investigators.

When information reached the Library last summer that there was a real need in Japan for recent, first-rate ophthalmic literature, Mr. Charles Snyder, the Howe Librarian, placed an appeal for publications in the *American Journal of Ophthalmology.* The cooperative response to this appeal enabled the Library to send over 100 journals to Japan, covering the last five years of the *American Journal of Ophthalmology* and the *A.M.A. Archives of Ophthalmology.*

The literature was sent to the Hiroshima Ophthalmological Society through Dr. Robert M. Sinskey, formerly associated with the Howe Laboratory at the Infirmary and now serving in the armed forces with the Atomic Bomb Casualty Commission in Japan. Dr. Sinskey is the one who first informed the Howe Library of the Japanese specialists' need for recent ophthalmic literature.

Through the New England Ophthalmological Society, the Howe Library is now conducting a second drive for ophthalmic literature, to obtain material that will eventually reach Kurachi, Pakistan.

Dr. Robert R. Trotter, who finished his residency in Ophthalmology last August, has written a very nice letter to The News. He gives as his address SIRI Program, c/o Public Health & Welfare, USCAR, APO 719, c/o Postmaster, San Francisco. His letter reads:

> It was pleasant to receive the September issue of The News. I shall not subscribe now, for my address is anything but permanent. But I am a good potential customer and will be on your list before long.
>
> My efforts are currently directed toward a case-finding survey for trachoma and other eye diseases, principally on Okinawa, but also on Amami Oshima (the northern island with such pronounced wishes to return to Japanese domination), and on Miyako and Yaeyama to the south. In addition to examining the eyes of several thousands of people, a sanitary survey is being carried on coincidentally, to learn some fundamental things about the orientation of the Ryukyuan people toward good sanitation and hygiene. It is hoped that the information obtained will be helpful in planning for education in matters of health.
>
> I find the island beautiful, especially in the north-central and northern regions. November and December are the driest months of the year. The weather is quite crisp (three blankets at night), but the days are lovely and sunny. We pray for drought, for the people do not come to our examining points readily in a good Okinawan rain!

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Allergy

Luce, J. C., Leith, W., and Burrage, W. S.
Pantopaque meningitis due to hypersensitivity.
Radiology 57:878-881.

Anesthesia

Cohen, E. N., and Beecher, H. K.
Narcotics in preanesthetic medication: A controlled study.
J.A.M.A. 147:1664-1668.

Cardiology

Counihan, T. B., Rappaport, M. B., and Sprague, H. B.
Physiologic and physical factors that govern the clinical appreciation of cardiac thrills.
Circulation 4:716-728.

Dermatology

Lever, W. F.
Pemphigus: A histopathologic study.
A.M.A. Arch. Dermat. & Syph. 64:727-753.

General Medicine

Harwood, R.
Diabetic acidosis: Results of treatment in 67 consecutive cases.
New England J. Med. 245:1-9.

Neurology, Neurosurgery, and Psychiatry

Bakay, L., Selverstone, B., and Sweet, W. H.
Intravascular distribution of Na^{24} injected intravenously in man.
J. Lab. & Clin. Med. 38:893-903.

Brown, M. R.
"Wetherbee Ail"—The inheritance of progressive muscular atrophy as a dominant trait in two New England families.
New England J. Med. 245:645-647.

Miles, H. H. W., and Cobb, S.
Neurocirculatory asthenia, anxiety and neurosis.
New England J. Med. 245:711-719.

Verzeano, M.
Time patterns of speech in normal subjects. II
J. Speech & Hearing Disorders 16:346-350.

Viets, H. R., and Brown, M. R.
Medical progress: Diseases of muscles.
New England J. Med. 245:647-653.

Surgery—Reconstructive

Weisman, P. A., and Cannon, B.
The failure of heat treatments to prolong the survival of skin homografts in guinea pigs: A pilot experiment.
Plast. & Reconstruct. Surg. 8:428-429.

Weisman, P. A., Wight, A., Quinby, W. C., Jr., and Cannon, B.
The failure of adrenal cortical hormones to prolong the survival of homologous skin grafts.
Plast. & Reconstruct. Surg. 8:417-427.

* * *

THE GET-ACQUAINTED DEPARTMENT

In our January issue we made an appeal to all doctors who are here from countries outside the United States, to tell us something about their personal experiences in their home lands and, in a general way, to give us a comparison, as they find it, between the practice of medicine and surgery as it is carried on here in the U.S. and methods and procedures in effect in their own countries. We are hoping for many responses to our appeal, in time for the next issue of The News.

But there is no reason why this request should be limited to this one particular group. We came to that conclusion the other day during a conversation with Dr. Nathan E. Silbert, Clinical Fellow and Graduate Student Assistant in Dermatology on our staff. Dr. Silbert had come to our office to subscribe to The News and here is what came out, quite inadvertantly, during our brief talk:

Dr. Silbert was born in a house at the corner of North Anderson and Fruit Streets. "Even as an infant," he said, "one of the first things I ever saw was the old Bulfinch Building."

After graduating from Revere High School in 1926, Tufts Premedical School in 1928, and Kansas City University College of Physicians and Surgeons in 1933, Dr. Silbert practised medicine in Somerville until 1941. In 1942 he joined the Army Medical Corps, served under General Patton in the Third U.S. Army, and was discharged as Major in 1946. On return from overseas, he spent 14 months on the Allergy Service here at the General and then reopened his office in 1947 for the practice of medicine, limited to allergic diseases, at 214 Ocean Street, Lynn. "Since 1948 I have been carrying on clinical research in the treatment of allergic disorders with massive doses of vitamin C and sodium ascorbate, particularly in the symptomatic treatment of bronchial asthma where the benefits derived by massive doses of vitamin C have more than justified the continued use of this therapy," he said. In September of 1951 he addressed the First International Congress of Allergists at their meeting in Zurich, Switzerland, and delivered a paper on "Vitamin C, its sodium salt, in a new physiologic approach in the symptomatic treatment of asthma, seasonal and perennial allergic vasomotor rhinitis". While in Europe he visited many of the leading allergists and leading allergy clinics. On January 21 he addressed the Third Pan-American Congress of Oto-Rhino-Laryngologists in Havana, and in April he is to read a paper at the Annual Meeting of the American College of Allergists. Dr. Silbert is the author of many published articles dealing with his specialty.

At our request, Dr. Silbert sent us the following excerpt from his address delivered at the Pan-American Congress in January:

Phenergan Hydrochloride, a phenothiazine derivative, and one of the most potent antihistamines known at the present time, is a compound of high potency, with powerful pharmacologic action and more prolonged effect than most of the histamine antagonists in common use.

The primary aim in the therapy of allergic disease is to either remove the causative sensitizing agent or allergens from the patient's environment or daily routine, or to proceed with desensitization techniques which will give substantial immunity to the offending allergens. This aim is not always immediately possible or practical, but until such time as desensitization therapy is feasible the patient deserves our every effort toward symptomatic relief. To date, the best symptomatic relief for these patients has been obtained with antihistamine drugs. In every instance possible in this series, desensitization therapy was carried out concomitantly with antihistamine therapy. Phenergan Hydrochloride produced relief of symptoms in practically all cases within one-half hour and could be maintained indefinitely on continuous dosage. A single dose of Phenergan was found to maintain symptomatic relief from a minimum of four hours to a maximum of twenty-four hours. No other antihistamine in our experience has exhibited such prolonged action.

Phenergan Hydrochloride is a highly effective antihistamine. Its action is rapid in onset and its beneficial effects are often maintained from four to twenty-four hours from a single dose. In a series of 216 cases which we studied, 88.42% of the patients received relatively good lasting symptomatic relief during which time definitive therapy could be started. Its unusual effectiveness combined with its low order of toxicity gives Phenergan Hydrochloride a definite place in the armamentarium of the physician.

* * *

Here is a list of some of the special items of equipment now being used in the new Research Building:

METTLER "GRAMATIC" BALANCE Room 506

The Mettler "gramatic" balance is the latest development in instruments for quick and easy weighing of small objects. In contrast to the conventional type, this balance has only one pan, and all weights are added or removed automatically by turning dials on the front of the case. The final accurate weight is read directly on an illuminated scale. A difference of two one-hundredths of a milligram (about one-millionth of an ounce) can be detected.

COUNTERCURRENT DISTRIBUTION Room 508

At the Rockefeller Institute for Medical Research, Dr. Lyman Craig has developed a powerful method for separating natural products, which are often sensitive and delicate and must be handled very gently. The procedure, known as countercurrent distribution, employs thousands of individual extractions with chemical solvents, and two types of apparatus have been devised for carrying it out. One is made of stainless steel and the other largely of glass.

SEPARATION COLUMN Room 401

This is a device whereby amino acids can be separated. The relative proportions occurring in proteins can thus be determined. A mixture of amino acids obtained from a protein is placed on the top of the starch column and the amino acids migrate down through the starch at varying rates, so that they come out as separate individuals on the bottom of the column. There is an automatic drop counter which determines how many drops will go into each test tube before the turntable moves on to the next tube.

AUTOMATIC SCALER Room 401

This is a device for counting and recording the amount of radioactivity in series of samples in an automatic way which saves the time of one person. It is possible for the investigator to load up the sample changer with 24 samples at night and find the answers all printed out for him in the morning.

ROTATING STILL Room 417

The rotating still is used in the preparation of concentrated solutions of hormones. It has the advantage that evaporation of solvents takes place rapidly because of the continual exposure of fresh surfaces, both at the heated and cool ends of the still. For this reason concentration may be carried out at relatively low temperature, thus avoiding the damaging effects of heat on the more sensitive hormones.

LYOPHILIZER Room 417

This apparatus is used for the simultaneous evaporation of 26 samples of hormone solutions from the frozen state. These solutions are placed in the small flasks and immersed in the freezing bath. When freezing is completed, the vacuum pump is started and evaporation commences. The solvent vapors are caught in the 2 large traps which are maintained at -70°C. This apparatus permits the concentration of a large number of samples under very mild conditions.

WARING BLENDER Room 319

A unique adjunct to the biochemists' ever-expanding armamentarium is the Waring blender. This clever device, now as commonplace in the research laboratory as the egg beater in the kitchen, is the rather frivolous invention of a well-known interpreter of popular song, Fred Waring, who disguised it as an accessory to bartending. In the laboratory it serves to break tissues down into their finest components, making even the most minute particles accessible to the searching analyses of modern biochemistry.

PHASE MICROSCOPE Room 318

Living cells have, in general, little or no natural color, and relatively little internal detail can be seen with the ordinary microscope. Because of this, technique of fixation and staining came into use in cytology and histology. The phase microscope employs a unique optical device whereby differences in refractive index become translated into shades of gray; thus uncolored structures within living or fixed cells which differ in refractive index become clearly visible.

BECKMAN SPECTROPHOTOMETER Room 317

All chemical compounds will interact with radiation in a number of ways. One of these is the absorption of radiation. The Beckman spectrophotometer is one of the instruments available which is designed to measure the absorption of radiation in the visible and ultraviolet portion of the spectrum. The determination of shape of the absorption affords a clue as to the nature of the absorbing molecules and if this is already known then the amount of absorption can be used to calculate the amount of the compound present. This method is characterized by high sensitivity and relative simplicity.

ELECTRON MICROSCOPE Room 217

This instrument is used to study the structure of materials whose units are too small to be resolved by the light microscope. These include biological objects such as viruses, minute structures in cells, large protein molecules, and organized groups of such molecules as in muscle and tendon. It can also be very effectively used in the study of physical chemical reactions between large molecules as in the formation of fibers such as collagen. The electron microscope has a resolving power about 1000 times greater than the light microscope and magnifications of 300,000 times are feasible—in contrast to a maximum of about 2000 times for the ordinary microscope.

SPINCA PREPARATIVE ULTRACENTRIFUGE Room 217

This instrument serves in the preparation of materials for further chemical or physical analysis by permitting the separation of extremely small particles from a fine suspension. The rotor in use at present can handle 162 cc. and does not require balancing of the specimen tubes. The speed is easily regulated between 0 and 40,000 revolutions per minute, producing a maximum centrifugal force of 144,700 times gravity. The instrument is refrigerated, and the rotor runs in a vacuum to reduce friction. The entire operation is automatic. Speed and time of operation are set beforehand on dials, and acceleration and braking are performed automatically.

TREADMILL Room 125

This electrically driven treadmill has been used for the purpose of studying muscular and nervous exhaustion. It permits a man to walk or run at an absolutely constant rate, either on the level or uphill. It can be used to study breathing and oxygen utilization during exertion and can be used to study and

No. 35 in a series of Staff photographs
Dr. Raymond D. Adams, Chief of Neurological Service

test nervous and muscular fitness of sick and well subjects.

"HOT" LABORATORY

The "hot" laboratory is designed for the handling of large quantities of radioactive material. Three hoods of special design—air filters, lead shielding in base, and external controls—are available for radioactive work. All laboratory benches have stainless steel tops and the hot sink is of stainless steel. Three lead safes are available for the storage of radioactive material.

BIOGLETS

Dr. Leon I. Charash, Assistant Resident on the Children's Medical Service — born in Irvington, New Jersey, September 12, 1927; B.A., Cornell University, 1946; M.D., Cornell Medical College, 1950; Intern, Bellevue Hospital, New York City; home, Irvington, New Jersey.

Dr. John O. Esslinger, Assistant Resident in Orthopedics — born in Fulton, Missouri, January 2, 1925; M.D., St. Louis University Medical School, 1948; undergraduate work, Westminster College and Yale University; Intern and one year as Graduate Assistant Resident in General Surgery, Grace Hospital, Detroit, Michigan; one year as Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts.

Dr. Hans J. Harder, Assistant Resident in Anesthesia — born in Wilhelmshaven, northwest coast of Germany; Friedrich-Wilhelm University, Berlin, and Rupprecht-Carl University, Heidelberg, 1938-44, with Army service in Russia, 1941-45; Prisoner of War in Germany, 1945-47; Surgery, Rudolf Virchow Hospital, West Berlin, 1948-50; Anesthesia, since 1950.

Dr. Rhett Talbert, Assistant Resident in Neurology – born in Greenwood, South Carolina, March 30, 1921; grade school education, Allendale, South Carolina; A.B., Wofford College, Spartanburg, South Carolina, 1942; M.D., Medical College of the State of South Carolina, 1945; Intern, Medical College of Virginia Hospital, Richmond, Virginia, 1945-46; U. S. Army: Medical Corps, Fort Sam Houston, Texas, and Lowry Field, Denver, Colorado, 1946-48; discharged with rank of Captain; Resident in Internal Medicine, Medical College of Virginia, 1948-51, during which period, in addition to clinical service, worked with the Department of Oncology in thyroid diseases, with radioactive isotopes; basic course in use of radioactive isotopes, Oak Ridge, Tennessee, January 1950; home: Allendale, South Carolina; married; one son, age 6 months.

Brief bits:—

- Dr. Bradford Cannon, Associate Visiting Surgeon on our staff, spoke at the Warren, Ohio, Medical Society recently. His subject was "Some recent advances in Plastic Surgery".
- Dr. Stanley T. Soholt (sr. r.s. *Or.* 1951) announces the opening of his office at 115 Duane St., Redwood City, California, for the practice of Orthopedic Surgery.

Mr. Hamilton, the efficient custodian of our Parkman Street parking lot, gives a prize each year to the person he regards as having done the best job of careful and considerate parking during the preceding twelve months. This year the prize—a box of candy—went to Dr. Helen S. Pittman, Associate Physician on our staff.

A write-up announcing the award, together with a picture of Mr. Hamilton and his comments on the comparison between men and women parkers appeared recently in one of our local newspapers.

* * *

STORROW HOUSE

Every time we stop at Storrow House, the MGH convalescent unit in Lincoln, on an errand which we think will take no more than a few minutes' time, we end up by staying the entire day. The beauty and atmosphere of the house and its surroundings, both natural and man-made, conspire to make it very difficult for one to get away; and the conversations with the patients at the dinner table out there, in the living room, or on chance meetings about the grounds are not only highly interesting but are of such a quality that the talks are not to be soon forgotten. For instance, on one of our recent visits we found among the patients a padre, a colonel from Guatemala, a cheese manufacturer from Denmark, a 28-year-old surgeon from South America, a retired sea captain, three people from Iceland, and others from Switzerland, British Columbia, Sweden, the Philippines, Barbados, Texas, and New York. All these on one visit, alone. This group, at the dinner table, suggested a United Nations assembly.

Whether you are convalescing, in need of a rest, or just "want to get away from it all"—or if you know anyone in need of such—we recommend most highly and without reservations our Storrow House in Lincoln. Once you see the place you will understand our enthusiasm.

An air-view photograph of Storrow House and its environs is on the bulletin board near the foot of Treadwell stairs. A booklet containing information and pictures may be procured from the Director's Office, and arrangements for admissions may be made through the General Hospital Admitting Office.

The spring of the year is particularly lovely out there. The trails through the woods, with sprinklings of wild spring flowers under the trees, are a veritable panacea. We have too long failed to keep that promise we made to ourselves—a week end at Storrow House.

THE NEWS

No. 110 Boston, Mass. March 1952

PSYCHIATRIC SERVICE AFFAIRS

The detailed reports from the various subdivisions of the Psychiatric Service show that this past year has run along at much the same pace as the previous three years. The wards B7 and B8 have been full most of the time and there has usually been a waiting list. In the Out-Patient Department, we have had to refuse many patients because there are not enough psychiatrists to carry out therapy on all the patients who need it. Therefore, many patients had to be satisfied with brief advice. It must be frankly admitted that for some there is no solution to their problems because of the social, economic, and psychological situations. For others, occasional visits for advice and encouragement are of supportive value, and help the family physician to carry these patients along for years.

Teaching activities have been expanded by the addition to the clinic staff of Dr. Elizabeth Zetzel, who visits the clinic on Monday and Thursday afternoons as a consultant in psychotherapy. Under her impetus a new emphasis has been placed upon the evaluation of new patients, diagnostically and therapeutically, at the initial interview.

The admissions to the Psychiatric Service (as shown in Table I) are mostly patients from the Psychiatric Out-Patient or from the medical wards of the General Hospital, where their symptoms have been diagnosed as neurotic. A few psychotic patients come to the service, either as emergency problems from the Emergency Ward or as diagnostic problems. As soon as a diagnosis can be made and when the emergency is over, these patients are transferred to an appropriate institution. The psychotic problems numbered 16, as opposed to 117 neurotic and psychosomatic problems. A glance at the list of patients boarded on B8 (Table II) shows that this small ward has been even more active than last year. It has taken a great burden off the other wards in terms of disturbed patients, difficult nursing, and risk of accident. For a hospital of this size, the disturbed ward for psychiatric emergencies should have eight or ten beds rather than the four (sometimes five) that we now have.

A new development has been a special clinic for alcoholic patients in the Out-Patient, directed by Dr. Volta R. Hall, with a consulting service in the General Hospital under Dr. Leon Miller, a Clinical Fellow who sees the patients, works up the cases, and consults with Dr. Hall about referral and treatment. This service for patients suffering from alcoholism has long been needed. It is beginning in a conservative way, because it is desirable to keep it a service for Massachusetts General Hospital patients and for selected referrals from various agencies. If it were thrown open to all comers, we would be overwhelmed. With the financial help of the Commonwealth of Massachusetts, it is making a good start.

The Psychiatric Service for Children

This work is directed by Dr. Lucie J. Jessner, as a cooperative enterprise of the Psychiatric and Children's Medical Services. It is growing rapidly and has overflowed its allotment of space. Fortunately, new quarters are now being built, so this active unit can continue to grow and fulfill the great need for child psychiatry in the community, and the even greater need for training child psychiatrists to go to other parts of the country.

The figures for the year give an idea of the activity:

Intake applications	250
Cases seen for diagnosis and consultation (waiting list about 50)	200
Cases seen for psychological testing	165
New cases accepted for treatment	72
Total cases being treated	188

The fact that patients on the waiting list often have to wait over three months before they can be studied and that only about one-quarter of them can be accepted for treatment shows the need for expansion.

Many cases of psychosomatic disorder are seen (allergy 19, arthritis 8, colitis 3, peptic ulcer 3). Disturbances in growth and development are an especial interest (22 cases). Neurotic reactions are common, and psychoses are rare (2 cases of schizophrenia). Feeding, training, and learning difficulties are often treated (21 cases).

The patients come largely from Massachusetts (93 percent) and 85 percent are first seen in the Children's Medical Department. The psychiatrists and pediatricians who come to the unit for training are from many of our States, as well as from Finland, Israel, and Australia. In all, 15 physicians have received training this past year. They have been sent here by the U.S. Public Health Service, the Veterans Administration, the Rockefeller Foundation, and various smaller organizations.

The research activities of the members of the Psychiatric Service for Children center around: (1) the study of the conflicts, fears, and fantasies of children with psychosomatic disorders; (2) the psychological effects of hospitalization and surgical operation upon children; (3) the effects of disabilities, such as blindness and restriction of activity because of rheumatic heart disease, upon children's psychological development.

Psychiatric Research

1. Language in manic patients: This is a piece of work that has been under way for two years and was reported at the meetings of the American Neurological Association last June. The research has been done by Drs. Lorenz, Cobb, and Waldfogel, and Mr. Johnson. The more mathematical parts of the language analysis will be presented in a paper in which they will be combined with the results from patients with leukotomy and gyrectomy.

2. Language before and after leukotomy: This research is being carried on with Dr. J. C. White and his neurosurgical associates, and by Drs. Bonner, Cobb, and Waldfogel, and Mr. Johnson. A paper was presented in December at the meetings of the Association for Research in Nervous and Mental Disease, in New York. This work is closely integrated with #3 and #4, below.

3. Behavior before and after orbital gyrectomy: This is a project carried on primarily by Drs. William H. Sweet of the Neurosurgical Service and Frances J. Bonner of the Psychiatric Service, on a grant from the U. S. Public Health Service. The behavior of these patients is studied by a complex battery of psychological tests and by special examinations of their language. Dr. Waldfogel is doing a large part of the psychological studies. Mrs. Edna Barrabee is carrying on a sociological study.

4. Psychological study of patients with intractable pain: This work is being done largely by Drs. Bonner, Waldfogel, and Cobb. The study includes patients from #2 and #3, above, but is a more general investigation aimed at learning the relationship of pain and suffering, not only to the patient's lesion, but to his whole personality. In this is included the effect of psychotherapy on patients with severe and prolonged pain, in order to find out how many of them may be relieved by psychotherapy and thus spared neurosurgical operation or withheld from surgical intervention because of personality difficulties that might lead to postoperative psychosis or behavior trouble.

5. Psychological effects of ACTH and cortisone: This is an investigation being carried out by Drs. Lincoln D. Clark and Gardner C. Quarton, in cooperation with Dr. Bauer. A preliminary report was read last January and will appear shortly in the New England Journal of Medicine. The work is being enlarged and Dr. Albright's group is being brought into it.

They have cooperated especially in our investigation of the mental aspects of Addison's disease. The main work is to record the medical and psychiatric changes seen in patients after the use of these hormones, with special attention paid to those who become psychotic for brief or longer periods.

6. Psychosomatic studies: These are being carried out along the general pattern of comparing the medical examinations of a given group of patients with the data from interviews and a battery of psychological tests. Conditions under special study at present are:

- A. Coronary thrombosis in middle-aged males (Drs. Miles and Waldfogel)
- B. Rheumatic fever (Drs. Holder, Brazelton, and Waldfogel)
- C. Asthma (Drs. Coolidge, Jessner, and Miller)
- D. Children's reactions to operation and hospitalization (Drs. Jessner, Blom, Miller, and Waldfogel)
- E. Thyroid disorders (Drs. Quarton and Stanbury)
- F. Low back pain in relation to orthopedic surgery (Drs. Barr, Barry, and Nemiah)
- G. Rheumatoid arthritis (Drs. Blom and Miller, and Miss Nichols)
- H. Ulcerative colitis (Drs. Blom and Jessner)

7. Study of the factor of conscious control in neurotic and psychotic patients: This is in connection with tests involving conflicting stimuli being carried on by Dr. Waldfogel; preliminary work has already been done and is encouraging.

8. Psychiatric study of blind children suffering from retrolental fibroplasia: Work being done in connection with the Massachusetts Eye and Ear Infirmary and the Perkins Institution for the Blind, on a group of 300 children with this disorder; a study is being made of rehabilitation by means of improving their contact with the world and with key persons in their environment (Dr. Jane Hallenbeck).

Stanley Cobb, M.D.,
Chief of Service

Table I

Patients discharged from the Psychiatric Service — 1951

1.	Hysteria	32
2.	Depression	20
3.	Anxiety state	11
4.	Mixed psychoneurosis	9
5.	Behavior disorders	16
6.	Addiction problems	10
7.	Obsessive-compulsive neurosis	7
8.	Tic	3
9.	Psychosomatic reaction (asthma 1, colitis 2, dermatitis 2, others 2)	7
10.	Hypochondriasis	2
11.	Schizophrenic reaction	9
12.	Manic reaction	2
13.	Epilepsy	7
14.	Alcoholic psychosis	3
15.	Cerebral arteriosclerosis	2
16.	Cerebral tumor	1
17.	Intractable pain	15
18.	Diagnosis deferred	2
	Total	158

Table II

Patients from other Services, boarded on B8

1.	Toxic conditions (delirium, alcohol, barbiturate, etc.)	20
2.	Suicidal attempt	17
3.	Manic-depressive reaction (manic 2)	11
4.	Schizophrenic reaction	29
5.	Psychoneurosis	20
6.	Reactions related to endocrine disorders (ACTH 1, cortisone 5, Cushings's syndrome 3)	9
7.	Psychosomatic reactions (asthma 1, hypertension 4, peptic ulcer 1)	6
8.	Senile dementia	5
9.	Cerebral vascular disease	6
10.	Cerebral trauma	2
11.	Cerebral tumor	2
12.	Epilepsy	4
13.	Huntington's chorea	1
14.	Diagnosis deferred	20
	Total	152

The Vincent Club presents
"The 1952 Vincent Show"

for the benefit of The Vincent Memorial Hospital, Wednesday, March 26 – Saturday, March 29, at New England Mutual Hall, 225 Clarendon Street, Boston.

Evenings at 8:30. Saturday matinee at 2:30.

Tickets on sale beginning Monday, March 10, at the box office, New England Mutual Hall.

This is The Vincent Club's sixtieth Anniversary, so come — have fun — and help us celebrate!

On the recommendation of the Hospital Committee of the Trustees, the Board of Trustees, on December 28, 1951, voted:

1. That the retiring age for a full-time physician who does not hold a tenure appointment at Harvard will be June 30th following his sixty-sixth birthday, in conformity with the Harvard Medical School and Massachusetts General Hospital rule for full-time Harvard appointees.

2. That there be created seven positions in the Hospital in which tenure of office would be guaranteed, under conditions similar to those governing the tenure appointments at the Medical School*, until retirement age. The seven positions recommended are:

One Pathologist other than the Chief (The Chief of Pathology has tenure under the Harvard system.)
One Clinical Pathologist
The Chief of Radiology
One Radiologist other than the Chief, to be Executive Officer of the Department
One Radiologist other than the Chief, for therapy
One Anesthetist other than the Chief, to be Executive Officer of the Department (The Chief of Anesthesia holds tenure by virtue of the Harvard system.)
One Assistant Director

3. That, in contra-distinction to the Harvard system, other full-time men in these Departments might continue to be employed by the Hospital after eleven years of service, even until retirement age, but without guarantee of tenure.

4. That candidates for these seven tenure positions should be considered by an ad hoc committee appointed by the General Executive Committee to report recommendations to the General Executive Committee, which, in turn, would recommend candidates to the Board of Trustees.

The Board of Trustees, at their meetings on January 11 and 25, and February 6, voted:

To accept the resignation of Mr. Raymond S. Quick from the position of Assistant Physicist;
To change Dr. Patricia H. Benedict's title from Assistant in Gynecology to Assistant in Medicine;
To continue the appointment of Dr. H. Eugene Patterson as Assistant Resident on the Children's Medical Service from October 15, 1951, to February 15, 1952.

To appoint:

Dr. Allan L. Friedlich, Jr. as Assistant in Medicine, effective immediately, and to permit him to see a limited number of private patients at the Hospital;
Dr. Martin L. Guzman, Jr. as Administrative Resident, beginning February 11;
Dr. Raymond A. Giusti as Second Assistant Resident in Pathology for one year, beginning July 1;
Dr. Marianne R. Johnson as Assistant Anesthetist, to begin about April 1;
Dr. David Kahn as Assistant Pathologist, to begin July 1;
Dr. Winfield S. Morgan, III, as Assistant in Pathology to July 1;
Dr. George L. Nardi as Assistant in Surgery, as of January 1;
Dr. Alexander C. Ritchie as Second Assistant Resident in Pathology for one year, beginning September 1;
Dr. Edgar B. Taft as Assistant Pathologist, beginning July 1;
Dr. John B. Tallon as Second Assistant Resident in Radiology, to begin July 1;
Dr. William R. Waddell as Assistant in Surgery, as of January 1;
Dr. Howard S. Yaffee as Assistant Resident in Dermatology, beginning July 1.

At their meetings held during January, the General Executive Committee voted:

To promote Dr. Crawford S. Brown to the position of First Assistant Resident in Dermatology, effective as of July 1;
To promote Dr. Fa-Chi Dunn to the position of First Assistant Resident in Dermatology, effective as of July 1;
That Dr. John S. Bray's title of Graduate Student Assistant be changed to that of Clinical Fellow in Medicine, assigned to Cardiology, for the period beginning February 1 and ending September 30.

To appoint:

Dr. John R. Brooks as Clinical Assistant in Surgery, to assist Dr. Leland S. McKittrick, effective as of January 1;
Dr. Philip R. Dodge as Research Fellow in Neuropathology for one year, beginning July 1;
Dr. Louis R. Eicholz as Research Fellow in Surgery, for the period February 1 through

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*To be presented in detail at a later meeting.

June 30;

- Dr. Sanford T. Freedman as Clinical Assistant in Orthopedic Surgery, effective as of January 1;
- Dr. Anne F. Godley as Clinical Assistant in Medicine, effective as of January 16;
- Dr. Francisco J. S. Lara as Research Fellow in Biochemistry for one year, beginning January 2;
- Dr. Anne R. O'Donnell as Clinical Assistant in Radiology, effective March 1;
- Dr. Winston S. Rickards as Clinical Fellow in Psychiatry for one year;
- Dr. George P. Vryonis as Graduate Student Assistant in Pathology, for the period January 1 through February 29;
- Dr. Earle W. Wilkins, Jr. as Clinical Assistant in Surgery, to assist Dr. Richard H. Sweet, effective as of January 1;
- Dr. Robert S. Wren as Clinical and Research Fellow in Orthopedic Surgery, for the period January 1 through January 31.

* * *

DIABETES CLINIC

Diabetes occupies a rather unique position among the chronic diseases. For one thing, it is at present incurable; for another, it is affected by almost every act and event in the life of its victim. Serious complications in seemingly remote systems of the body may develop with dramatic suddenness or may appear and progress insidiously over a period of years. Since the discovery of insulin in 1921, there have been no major changes in the treatment of diabetes, although some refinements have been developed and the natural history of the disease is more fully appreciated. During the last decade two important features of diabetes have been recognized. The first of these is its prevalence: an estimated 1,000,000 cases under treatment in this country, and an estimated 1,000,000 cases whose diabetes has not yet been detected. This latter group, ¾ of 1% of our population, presents a tremendous challenge to the medical profession—a million persons, most of them symptom-free at present, who in the next ten years will come to us for treatment of serious disease. Another important fact seems now well established: The incidence of many of the serious complications of diabetes—not only diabetic acidosis and insulin shock, but also infections, diseases of the eyes, the peripheral nerves, the kidneys, and even degenerative vascular diseases—is much reduced by meticulous control of the blood sugar. My own experience in this field has led me to the belief that a large majority of diabetics—perhaps 80% of them—fall far short of meticulous control, and that there are two main reasons for this: There is the patient himself, who is ignorant of, or indifferent to, the future, and whose appetites and social customs, plus the general stresses of everyday life, quite overwhelm whatever tendency he has toward control of his disease. And there is the busy practitioner, too preoccupied with the problems of acute illness to pay more than scant attention to the patient who, though seemingly quite well, shows "a trace of sugar". The doctor, moreover, often freely admits that he feels unsure of himself in treating diabetes; he is a little vague about diet prescription, and unduly afraid of giving adequate doses of insulin. For many reasons, then, both patient and doctor tend to remain complacent about the state of mediocre control—until irreversible and crippling complications finally appear. We are confident that the attitude of the patient will change for the better with our perseverance, as it has in many other diseases. Much depends upon the practitioner, who must first become convinced that adequate control is an important measure in preventive medicine, and that only a slight additional effort is needed to achieve it.

Let us turn now to a consideration of some of these problems as they apply to the Diabetes Clinic of the M.G.H. Our clinic has the responsibility of caring for the diabetes of perhaps 1,000 persons, and we estimate that around 2,500 clinic visits are made annually. Most of the patients have been followed for several years, and a few have been faithful attendants for 20 years or more. The Diabetes Clinic means a great deal to these patients: it is where they know they can get expert advice, and where they ruefully confess that they have not followed it. They look to us for help in other matters, too: emotional crises, financial problems, and a wide variety of medical and surgical disorders. The bond that develops between doctor and patient through long association makes us feel that we are a Special Clinic in more than one sense.

One particular problem of the Diabetes Clinic is the patient's need to have access to the doctor at other times than during clinic hours. When complications develop between visits, he should be able to contact the hospital and obtain the advice of the doctor most familiar with his case. A service of this sort was for a long time available to our patients. It was discontinued about a year ago, over my vigorous protest, but I am convinced that it had great value in forestalling catastrophic illness, and it is my earnest hope that we can soon re-establish such an important feature of our program.

Another special problem has been constantly with us since just after Pearl Harbor. We are understaffed. One or two visiting physicians, and one or two house officers, attempt to take care of the many problems of 20 to 30 patients in an afternoon. Occasionally 40 to 50 patients appear for treatment. On days when the doctors are few in number, or the roster of patients is unusually large, we cannot possibly do an adequate job with each patient. We would welcome additional recruits to our clinic, and we feel that they would find the experience gained there extremely valuable. We feel, too, that the teaching potentialities of our clinic are not being fully utilized. In the Nutrition Clinic, right across the corridor from us, Miss Chase and her assistants would gladly teach any interested physician or medical student all that he needs to know about diets for diabetics. The physicians in the Diabetes Clinic (Dr. John Homans, Jr., Dr. H. Walter Jones, and I) would also welcome any visitors, and would be glad to give informal instruction from our large group of interesting cases. The clinic meets on Tuesday and Friday afternoons. Come up and see us some time!

Reed Harwood, M.D.,
Head of Diabetes Clinic

* * *

When I was told that I might write "anything I wished to" for publication in THE NEWS, my reaction was, "Hot dog! I'll sound off on that mass exodus of hospital personnel, known as 'The Coffee Hour'." I finally abandoned that idea, however, when I realized that I might start a chain reaction leading to eventual collapse of the entire staff and possible interruption of hospital service to hundreds, perhaps thousands, of patients. The consequences of withholding morning nourishment would undoubtedly take its toll and many would drop by the wayside; others would be psychically traumatized at the prospect of three hours of uninterrupted labor; but by far the most devastating effect would be a latent and slow dissolution of our forces when such a large group of people would be forced to rise one hour earlier in order to eat breakfast. Sleep, we know, is essential, and I shudder to think of the result of depriving people of the essentials of life. There are laws forbidding it. Deprivation, plus the withdrawal of the stimulation of morning coffee, would be too much. All this serves as a proper introduction to the subject of nutrition but has nothing to do with what follows, except to inform you as to what I am not going to say.

It has been suggested that many might be interested in something about a clinical research program concerning the use of emulsified fat intravenously for caloric supplementation that is being carried out on the wards of the hospital. There are several general features of this work that are of interest. First, it is a cooperative effort between the house staff of the hospital and the Department of Nutrition of the Harvard School of Public Health. Second, the clinical trial of a new preparation of this sort, as we have used it, carries with it the knowledge of its immediate usefulness to the patients who receive it. Third, the clinical application of this means of intravenous feeding is a first-class example of the fruition of basic research.

The fat project started almost 10 years ago and has gradually become one of the principal investigational programs of the Department of Nutrition. This work has been carried out by two dozen or more investigators, under the direction of Dr. Frederick Stare. The project arose and has been sustained by the recognition that there is quite a large and increasing number of patients who need more calories than we have previously been able to give by the intravenous route. Our wards contain many patients who cannot eat. There are patients for whom utilization of orally ingested food is unsatisfactory, as for example in cases of severe diarrhea, ulcerative colitis, sprue, and patients with intestinal fistulae. There are patients in whom oral ingestion of food is deleterious and rest of the gastrointestinal tract is desirable. There are also patients for whom the time for correction of nutritional deficiency is limited, for example in preparation for surgery. And, finally, there is a group of patients for whom caloric intake is important to prevent destruction of body protein and the accumulation of nitrogenous waste products, as for example in uremia.

The intravenous administration of water, electrolytes, glucose, protein hydrolysates, amino acids, blood and its derivatives, and the water-soluble vitamins constitute a remarkable group of materials that can be presented to the body for its metabolic needs. They fall short in one main regard. They do not supply enough calories. This defect arises from the fact that both proteins and carbohydrates yield only 4 calories per gram and neither substance can be infused in concentrations of more than 5 to 10 percent. They are thus limited by the quantity of fluid a patient can tolerate. From a practical standpoint, adequate total parenteral nutrition seems impossible unless sufficient calories can be given. The chief advantage of the use of fat in parenteral nutrition resides in its contribution to the energy intake. Since oil-in-water emulsions do not exert any osmotic effects, high concentrations of fat may be used. This, coupled with the high caloric content of fat, makes it possible to introduce considerable quantities of energy into relatively small volumes of intravenous mixture. Fat is not irritating to the veins and is not excreted by the kidneys, regardless of the rate at which it is administered.

The work on intravenous fats has been concerned with two broad aspects of the problem. First, the preparation of emulsions suitable for intravenous administration and, second, the utilization of such fat. Emulsions have been prepared with various types of homogenizers and with sonation. The high-pressure dairy homogenizer has given the best emulsions. The homogenizer is used at pressures ranging from 2500 to 5000 pounds per square inch and produces an emulsion with particle size below one micron, which, so far as can be told, is quite comparable to chylomicrons. One of the principal problems has been stabilization. This is difficult under ordinary conditions and becomes more so because of the extra "breaking" impetus of sterilization by autoclaving. Although sterile emulsions can be prepared without autoclaving, it has seemed that stable preparations that can be autoclaved needed to be attained before this form of therapy could be widely applied. These difficulties are pretty much past history now, for the emulsions prepared during the past year and a half have been unquestionably stable for long periods of storage and during transportation.

The workers at the Medical School tested a large number of emulsifiers, stabilizers, and wetting agents long before "clinical emulsions" were even considered. A phospholipid preparation obtained from soy beans has been most useful. It is nontoxic in low concentrations when properly purified. This compound, in combination with a polyglycerol ester of oleic acid known as "demal", serves as the emulsifier-stabilizer system of the emulsions now being used clinically. We have worked with emulsions containing 10 to 25 percent fat (usually 15 percent), and have used coconut oil, corn oil, peanut oil, olive oil, and butter fat. There is no synthetic triglyceride available in sufficient quantity for our purposes, but some day the preparation of such compounds should solve some of the problems of uniformity, contamination, etc. that are largely responsible for reactions now. The emulsions are made isotonic with 4.3 percent dextrose and water and have a pH of 6.7 to 7.0 without added buffers.

The utilization of fat emulsions introduced intravenously has been studied in many ways. Several litters of puppies have been reared, having had emulsified fat as their principal caloric source. Balance studies on animals and patients have demonstrated its utility, and triglycerides labeled with isotopic carbon have shown its ready availability for caloric needs. As much as 90 percent of injected radioactivity can be recovered in the expired carbon dioxide, the actual quantity depending upon the triglyceride used and the nutritional state of the animal. The most convincing evidence, however, has come from clinical observation of the patients receiving emulsions. There is no question about the beneficial effects of adequate caloric supplementation nor about emulsified fat as a means of supplying such.

The principal problem at present concerns the elimination of minor pyrogen and other reactions. The major sources of pyrogens have, we believe, finally been eliminated by purifying the starting materials and by protecting them from possible sources of pyrogens all along the line. Space does not permit me to describe the immense effort that has gone into this single phase of the project. At one time, for example, it involved the procurement of unbroken coconuts from the Pacific Islands, their transportation here, and the eventual extraction of their oil under semi-aseptic conditions. Several drug houses, the oil industry, and chemical firms have been involved at one time or another.

During the past year we have infused approximately 150 patients. They have largely been surgical patients, in poor nutritional condition, who were candidates for or convalescing from major operations. In most instances the fat they received has been a supplement to other forms of parenteral therapy, but in a few cases it has without doubt been life saving. One patient was maintained for 9 weeks without any oral intake, and several others have been carried along for periods of more than a month.

Pyrogen data have been collected during each infusion. It has been possible to carry out a detailed evaluation of hepatic function in 25 patients who received daily fat infusions for intervals up to 36 days, and liver biopsies have been obtained from some patients undergoing upper abdominal operations. This information has confirmed previous animal studies along identical lines. There has been no instance of hepatic impairment attributable to infused fat and, in fact, several patients with known hepatic damage prior to fat administration have shown evidence of improvement.

In describing our participation in the development of this new method of therapy I have not meant to imply an exclusive role in its clinical application. Similar work is being carried out at the Peter Bent Brigham Hospital and, of course, the larger load falls upon the Department of Nutrition of the Harvard School of Public Health. Neither have I intended to minimize similar important work being done by several other groups in other parts of the country.

It is worth emphasizing that this work is being carried out by the house officers and the nursing staff, and all of those who have participated can take pleasure in having contributed to this aspect of medical knowledge.

William R. Waddell, M.D.,
Assistant in Surgery

[When Dr. Waddell finished his residency here on December 31, he was the oldest ranking member of the house staff in terms of years of association with M.G.H. (interrupted by the war), having concluded his internship in 1944. For that reason, we felt that Dr. Waddell would have something of particular and timely interest to contribute to THE NEWS, as a sort of end-of-term paper. The above article proves conclusively that our assumption was correct, and we are planning on another article, from a similar source, for our next issue.—*Editor*]

Brief bits:—

Dr. J. Maxwell Chamberlain (*N.S.* 1934 & *W.S.* 1937) announces the removal of his office to 39 East 75th St., New York 21, N. Y., for the practice of Thoracic Surgery.

Dr. Earle M. Chapman, Associate Physician on our staff, addressed the Richmond County Medical Society in Augusta, Georgia, on January 17. His subject was "Disorders of the thyroid". On March 5, Dr. Chapman spoke at the Second National Cancer Conference, sponsored by the American Cancer Society, in Cincinnati.

Dr. Philip E. Meltzer, Surgeon in Oto-Laryngology at the Massachusetts Eye and Ear Infirmary, has been invited to give a series of lectures for the Oregon Academy of Ophthalmology and Oto-Laryngology, to be held in Portland, Oregon, from March 24 to 28. The subjects of his lectures will be "Middle ear disease and its relation to the postnasal space"; "The clinical aspect of otosclerosis and its therapy"; "The labyrinth: A discussion of normal and altered function"; "Errors in diagnosis by omission and commission". Dr. Meltzer will show a film depicting direct adenoidectomy.

Dr. Fred A. Simmons, Assistant Surgeon at M.G.H., gave a paper on "The correlation of the testicular biopsy with the semen analysis in the infertile male" at the Conference on the Biology of the Testes, at the New York Academy of Science, New York City, on January 26. Dr. Simmons has been elected a member of the Boston Surgical Society, and has been appointed a member of the Advisory Committee of the Robert L. Dickinson Research Memorial, established to promote research in scientific aspects of human fertility.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Robert L. Goodale, Surgeon in the Department of Oto-Laryngology, gave a paper before the Eastern Section Meeting of the American Triological Society in New York City last month. The subject of this paper, written jointly with Miss Anita Mangiaracine, Infirmary Bacteriologist, was "Clinical observations on the use of autogenous vaccine made from cultures of coagulate positive hemolytic Staphylococcus aureus".

Dr. David G. Cogan has been appointed a Consultant at the Los Alamos Scientific Laboratory of the University of California. He plans to travel to Los Alamos for two weeks' consultation in March regarding problems in radiation and its effects on the eyes.

Dr. Robert J. Brockhurst, who completed his residency at the Infirmary on November 1, 1951, has been appointed as Assistant in Ophthalmology.

Dr. Piero Perone of Livorno, Italy, began his residency on March 1. Dr. Perone studied at the University of Pisa and the University of Bologna, where he specialized in ear, nose, and throat work. He is now on a Fulbright Grant.

Dr. Knud Kristian Dreisler of Copenhagen is visiting the Infirmary. An ophthalmologist himself, he is particularly interested in the Eye Service here and the work of the Howe Laboratory. Dr. Dreisler is a graduate of the University of Copenhagen and formerly practised in that city. From 1949 to 1951 he worked in Ethiopia as one of the four eye specialists in the country.

CORRECTION: After graduation from the Infirmary on February 1, Dr. Irwin T. Mancall left for Hartford, Connecticut, to begin private practice there. Dr. Marvin Posner, also a February 1 graduate, will practise in Albany, N. Y. By mistake, we reversed these addresses in our copy submitted for the February issue of THE NEWS.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

This is the last issue of THE NEWS in which 1951 titles will appear, for the purpose of this column is to inform our readers of current or very recent articles written by MGH and E & E staff members.

The following new titles have been received:

Anesthesia

Keats, A. S., D'Alessandro, G. L., and Beecher, H. K.
A controlled study of pain relief by intravenous procaine.
J.A.M.A. 147:1761-1763.

Cancer Research

Aub, J. C., and Nathanson, I. T.
Neoplastic diseases.
Ann. Rev. Med. 2:343-366.

Bucher, N. L. R., Scott, J. F., and Aub, J. C.
Regeneration of the liver in parabiotic rats.
Cancer Research 11:457-465.

Emerson, W. J., Zamecnik, P. C., and Nathanson, I. T.
Effect of sex hormones on hepatic and renal lesions induced in rats by a choline-deficient diet.
Endocrinology 48:548-559.

Engel, L. L., Slaunwhite, W. R., Jr., Carter, P., and Olmsted, P. C.
A relation between phase composition and partition coefficients for the estrogens.
J. Biol. Chem. 191:621-625.

Glinos, A. D., Bucher, N. L. R., and Aub, J. C.
The effect of liver regeneration on tumor formation in rats fed 4-dimethylaminoazobenzene.
J. Exper. Med. 93:313-324.

Hoagland, M. B.
Effect of beryllium on plant phosphatase. (Abstract)
Federation Proc. 10:198.

Keller, E. B.
Turnover of proteins of cell fractions of adult rat liver *in vivo.* (Abstract)
Federation Proc. 10:206.

Loftfield, R. B.
The alkaline rearrangement of a-haloketones. II. The mechanism of the Faworskii reaction.
J. Am. Chem. Soc. 73:4707-4714.

Loftfield, R. B.
Y-chlorobutyraldehyde and its diethyl acetal.
J. Am. Chem. Soc. 73:1365-1366.

Nathanson, I. T.
Sex hormones and castration in advanced breast cancer.
Radiology 56:535-552.

Nathanson, I. T., Engel, L. L., and Kelley, R. M.
The effect of ACTH on the urinary excretion of steroids in neoplastic disease.
In Clinical ACTH, Philadelphia, The Blakiston Company, 1951, vol. 1—Research, pp. 54-64.

Nathanson, I. T., Engel, L. L., Kennedy, B. J., and Kelley, R. M.
Screening of steroids and allied compounds in neoplastic disease.
In Symposium on steriods in experimental and clinical practice, Abraham White, Editor, Philadelphia, The Blakiston Company, 1951, pp. 379-405.

Siekevitz, P., and Zamecnik, P. C.
In vitro incorporation of 1-C^{11}-DL-alanine into proteins of rat-liver granular fractions. (Abstract)
Federation Proc. 10:246.

Slaunwhite, W. R., Jr.
Graphical analysis of twenty-four transfer countercurrent distribution.
Analytic. Chem. 23:687-688.

Slaunwhite, W. R., Jr., Ekman, G., Engel, L. L., Nathanson, I. T., Pincus, G., and Carlo, J.
The separation and analysis of urinary oestrogens: A comparative study.
ACTA Endocrinologica 7:321-329.

Slaunwhite, W. R., Jr., Engel, L. L., Olmsted, P. C., and Carter, P.
The fluorescence and extinction and partition coefficients of estrogens.
J. Biol. Chem. 191:627-631.

Zamecnik, P. C., Loftfield, R. B., Stephenson, M. L., and Steele, J. M.
Studies on the carbohydrate and protein metabolism of the rat hepatoma.
Cancer Research 11:592-602.

General Medicine

Chapman, E. M.
Psittacosis: A case in Cape Cod.
J.A.M.A. 147:1343-1344.

Maloof, F., and Chapman, E. M.
Responses to radioactive iodine therapy in hyperthyroidism, with special reference to cardiac problems.
J. Clin. Endocrinol. 11:1296-1322.

Gynecology and Obstetrics

Meigs, J. V.
Radical hysterectomy with bilateral pelvic lymph node dissections. A report of 100 patients operated on five or more years ago.
Am. J. Obst. & Gynec. 62:854-865.

Meigs, J. V.
Removal of the pelvic lymph nodes in cancer of the uterine cervix. Transperitoneal (Taussig) and retroperitoneal (Nathanson) dissection.
Gynécologie Pratique 2:115-126.

Meigs, J. V.
The results of surgical treatment of cancer of the cervix uteri.
Am. J. Roentgenol. 65:698-708.

Sturgis, S. H., DeMuylder, E., and Meigs, J. V.
The uptake of labelled phosphorous by cancer of the cervix.
Ann. Surg. 133:305-312.

Wheelock, F. C., Fennell, R. H., Jr., and Meigs, J. V.
Carcinoma of the ovary: Clinical and pathological evaluation.
New England J. Med. 245:447-449.

Neurology, Neurosurgery, and Psychiatry

Selverstone, B., and White, J. C.
Evaluation of the radioactive mapping technic in the surgery of brain tumors.
Ann. Surg. 134:387-396.

Nursing Education

Perkins, D., and Heslin, P.
Nursing service and nursing education advance together with the team plan.
Am. J. Nursing 52:185-188.

Ophthalmology

Johnson, C. C.
Some practical points in ptosis surgery.
Am. J. Ophth. 35:108-109.

Oto-Laryngology

Evans, M. G.
The treatment of acute suppurative otitis media: The relative merits of chemotherapy and myringotomy in avoiding surgical mastoiditis.
Ann. Otol., Rhin. & Laryng. 60:638-647.

Dr. Edwin B. Dunphy
Chief of Ophthalmology, Massachusetts Eye and Ear Infirmary

STAFF WIVES

All MGH Staff Wives were invited to a morning coffee in the Walcott living room on Thursday, February 14. Dr. Clark extended an official welcome to us and spoke of the many ways in which the doctors' wives can be of service to the hospital. Our group has two representatives on the new Coordinating Committee, which includes members from the various agencies already functioning in the hospital. Miss Sleeper spoke on hospitality and told about several of her interesting experiences in Europe last summer. Mrs. Bauer gave a summary of what the group has attempted this year and outlined tentative plans for the future.

The March 5 meeting was held in the Archives Room.

All who can attend the April 2 meeting are urged to have lunch with the members at noon in the Nurses' Cafeteria. Please call Mrs. Weiss's office (LA 3-8200, Ext. 828) by March 31 if you wish to be included in the hospital tour at 11 A.M. This is an excellent way to become acquainted with the hospital.

At the February meeting the following members were elected to the executive committee:

Mrs. Walter Bauer, Chairman
Mrs. Joseph Aub
Mrs. Richard Sweet
Mrs. Bradford Cannon
Mrs. Dana Farnsworth
Mrs. Dean Clark
Mrs. J. C. White
Mrs. Augustus Thorndike
Mrs. Howard Ulfelder

New addresses:—

Dr. Harold E. Elrick (*M.* 1944), Research Institute, Montreal General Hospital, Montreal, Canada.

Dr. Joseph A. Holmes (*Path.* 1936 & *E.S.* 1938), 94 Russell St., Waltham 54, Mass.

Lt. John W. Littlefield, MC, USNR (*M.* 1948), U.S. Naval Hospital, Great Lakes, Ill.

Dr. John S. Rhodes (*r.s. U.* 1935), 700 West Morgan St., Raleigh, N. C.

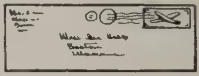
Dr. Thomas S. Risley (*E.S.* 1942), 1 Monument Sq., Beverly, Mass.

Dr. John D. Stoeckle (*M.* 1949), Research and Development Board, Department of Defense, Washington 25, D.C.

Capt. Masao Yatsuhashi, MC, USAR (*W.S.* 1945), 8059th AU, c/o Postmaster, San Francisco, Calif.

CORRECTION

Dr. John Homans (*S.S.* 1904) is at 1180 Beacon St., Brookline; Dr. John Homans, Jr. (*W.M.* 1942) is at 205 Beacon St., Boston. The notice that came to us of a new address for Dr. Homans, Jr., which we published in the February issue of The News, omitted the Jr.



Ever since World War II three names have appeared in the MGH Directory with only "In military service" as their addresses. When the Archives Department took over the work of preparing the Directory section of the soon-to-be-issued MGH Annual Report, we decided to locate these men and procure their present addresses. In two of the three instances the task was simple, but in the case of Dr. George F. Sutherland, Resident Physician in Psychiatry at McLean in 1941, we ran upon a snag. None of our leads produced the information we wanted; the A.M.A. Directory lists two George F. Sutherlands, and we had no way of knowing which was our man. But, nothing daunted, we still kept at it and by devious routes, including a letter to a man in British Columbia who "might just possibly be an uncle of one of these George F.'s", we finally tracked down the man we were seeking. (Missing Persons Bureau please note!)

This is the reply, in part, to our letter to Dr. George F. Sutherland of Baltimore, the subject of our search:

> I am now living in Baltimore and my present official title is Chief, Division of Psychiatric Education and Training, Department of Mental Hygiene, State of Maryland, located at 2218 North Charles St., Baltimore 18, Md. I am to establish a postgraduate school in the State of Maryland's mental hospital, so that M.D.'s may train there to become psychiatrists.

We regret that Dr. Sutherland's present address was not secured in time for it to appear in the coming MGH Directory, nor was that of one other of the three men mentioned above—that of Dr. Hewitt I. Varney, Resident Physician in Psychiatry at McLean in 1938, whose address is 1835 Eye St. NW., Washington, D. C.

This short note came from Dr. William J. Kerr (*W.M.* 1916), from the University of California Hospital, San Francisco 22:

> I was on sabbatical leave of absence for the period January 1 through December 31, 1951, in the mountains of California—not for purposes of health, although it has helped to get the water out of my muscles and the cobwebs from my brain. In April 1951 I was Visiting Professor at the Vancouver General Hospital for a week with Dr. George F. Strong.

THE NEWS

No. 111 Boston, Mass. April 1952

SOCIAL SERVICE DEPARTMENT

The thirty reports from the staff members of the Social Service Department—assigned to every clinical service, the two private pavilions (Baker Memorial and Phillips House), the Emergency Ward, and several research projects—show service to 9559 patients in 1951. They show concrete evidence of continuing awareness and understanding of the social and environmental aspects of illness and the utilization of the "social laboratory"in all three functions of the Hospital—care of patients, teaching, and research.

The number of patients served has remained fairly consistent in the past three years, but a significant trend is revealed in further analysis of the figures. There is a marked increase of over 704 more patients referred in 1951 for long-range, complicated social adjustment plans than in 1950. These patients require continuing, comprehensive casework service over months, and sometimes a year or more. On the other hand, there is a decrease of approximately 900 referrals for immediate, limited services which may be carried through in a few hours or days and which are often more appropriately handled by case aides or other Hospital departments, such as Admitting, Nursing, or the Record Room. The corollary to this changing and discriminating type of referral is the increasing accumulative case loads for each worker. This is true in practically all the services but has been most apparent in the General Surgical Services, where the surgeons and Miss McHugh and the surgical Social Service staff have together recognized the long-term, complicated adjustment problems for patients with diagnosis of malignancy and those who have undergone amputations, mutilations, or major surgery.

There are several factors which may account for this change. Our tools for understanding and dealing with human adjustment problems of illness have increased with the advances in medical treatment and rehabilitation, with the growing understanding through psychiatry of human dynamics, and with community efforts to increase facilities for assisting patients in meeting their problems. We are setting our goals higher in terms of rehabilitation and relief of suffering and are no longer satisfied to send the patient on his way after a good, immediate, patching-up job. There are still many times when we fall short of the goal or even fail completely, but as the medical team continues to work together, coordinating and utilizing the special knowledge of each member, we shall come nearer to helping patients in the satisfactory management of their illnesses and handicaps.

There are the usual major problems of chronic disease, rehabilitation, financial insecurity, work adjustments, and terminal care noted in the 1951 reports. Various services and departments present special problems.

Neurological Service

On the Neurological Service, with 452 referrals, the largest group referred to Social Service was made up of patients with problems related to epilepsy; the second, those with brain tumors; and in the third, the numbers were equally divided between patients with cerebral vascular accidents, multiple sclerosis, Parkinson's disease, and language disabilities. As to the ages of those referred to us, the largest group was made up of patients between 40 and 50, the second largest those between 20 and 30. Because of the chronic, progressive, and often terminal nature of the neurological conditions in these age groups, the social problems were serious in terms of 1) patient's and family acceptance and adjustment to the disability, 2) continued employment and maintenance of family income, 3) provision for chronic or terminal nursing care.

Orthopedic Service

Problems of rehabilitation and the costs of medical care are highlighted in the report of the orthopedic workers. On top of expensive, long hospitalization, patients and their families must meet or be assisted to meet costs of braces, often $60 to $150, six to eight weeks of nursing home care at $30 or more a week, special shoes, bicycle exercisers, and, later, frequent transportation back and forth for physical therapy and rehabilitation.

Costs of medical care

Because of the concern of the admitting officers and the social workers that realistic rates and credit payment plans be made in view of the total costs of illness, the social workers on all services are sharing with admitting officers information about all these extra costs and how they are being met. These facts are noted on the Hospital account cards and give a far more accurate picture of the total costs of the illness and a sounder, more realistic basis for establishing credit.

In analyzing the $22,824 for ancillary medical costs for which the Social Service Department was responsible because of its financial assistance to patients in 1951, there were two hopeful trends. Patients were paying on time a greater amount than in previous years, and payments by Departments of Public Welfare increased materially.

Psychiatric Service

Due to the able leadership of Miss Sylvia Perry, Supervisor of the Psychiatric Social Service unit, there has been a steady and sound expansion in service to patients, teaching, and research. With a stable and experienced staff, the workers have kept a balance between all three functions and have maintained a high standard of service to an increasing number of patients in both the Children's and the Adult Divisions. Simmons and Smith College Schools of Social Work have recognized the Department as a valuable training center—Smith College, particularly, for its advanced third year students. Both Miss Perry and Miss Grace Nichols have taught classes at the two schools on temporary assignments. Research studies, in cooperation with the doctors, have been continued on children's reactions to T and A operations. Miss Beatrice Talbot completed her work with the Rheumatic Fever Project and contributed information concerning and understanding of the mothers' reactions toward their children who are afflicted with rheumatic fever. Other studies with asthmatic and arthritic children have continued under Federal Grants. Three students wrote theses of considerable value to the Department.

A study of referrals to Social Service from the Psychiatric Ward for the past three years shows constructive, realistic use of the social worker. The majority of patients were referred for help with employment, living arrangements, or help for other members of the patient's family who were bringing pressure upon the patient. Patients were referred for realistic social problems, and the social work consisted both of modifying directly environmental pressures and in helping patients toward some modifications of their feelings toward environmental difficulties when little change could be made in their social situations.

Baker Memorial and Phillips House

In view of the formation of the MGH Associates, it is interesting to note increased referrals to Miss Duguid from both Baker Memorial and Phillips House, and 48 referrals of patients from the private offices of the staff for direct service and consultation. A full range of social complications may attend sickness wherever it strikes, and need for social service help is not limited to the low economic groups.

Besides the regular on-going services of the Department, several new ones have been added.

Alcoholic Clinic

With the establishment of the new Alcoholic Clinic, under Dr. Volta Hall, Miss Martha Sherwood was assigned as full-time social worker in the Clinic and is paid through funds from the Massachusetts Department of Public Health. Miss Sherwood's main responsibilities to date have been to interview patients at intake for social information useful to the doctors in screening the patients who can be helped by treatment, to work with patients already under treatment by helping them directly with employment or family difficulties, or to work with relatives, particularly the wives who need assistance with their own problems and help toward understanding the patient's problems and aiding him in meeting them.

Emergency Ward

At the request of the Hospital Administration in their study and reorganization of the Emergency and Overnight Wards, a social worker was assigned in November 1950 for a two-month study period of four days a week. Mrs. Anne Krush, an experienced former staff member, studied the problems of patients and their families in this anxiety-laden traffic center of the Hospital. With the Administration and members of the Emergency Ward staff, she made recommendations which would improve the care of patients and our relationships with families and the public in this key place of the Hospital. Following this, it was agreed that a social worker, full-time in the Emergency Ward, should be continued permanently. A complete year's experience during 1951 has demonstrated the value of this decision, both in direct social services to patients and their families and in better understanding by all our personnel of patients' needs and the handling of them under tension and anxiety in an emergency situation. Earlier referrals are resulting in better and quicker discharge plans and fewer readmissions.

Adult Cardiac Service

Miss Clara Cory has been assigned for over a year to the Adult Cardiac Service, through funds from the Massachusetts Department of Public Health. The adjustment to cardiac disability with which patients are often suddenly confronted involves many disruptions of family and work life. We hope to study the meaning of the disease and the variety of patient-reactions to this illness, as we now have one worker available who can become better acquainted with the patients and follow through with them in their adjustments. For four months, March through June 1951, under funds from the Massachusetts Department of Public Health, a special survey was made on the vocational and employment needs of patients with cardiac disability. Mrs. Abigail Peck, experienced in vocational counseling, worked with Miss Cory in interviewing and following patients referred for work adjustment. While the survey was of necessity brief, several conclusions may have validity as to need for:

1. Defining more accurately actual work capacities of the cardiac patient
2. Evaluation of the patient's vocational potentialities by a team composed of a cardiologist, psychiatrist, vocational counselor, and social worker, such as is done in Dr. Goldwater's work classification unit in New York
3. The considered timing of referral for work adjustment and retraining at the point when the patient has accepted his disability realistically and is more adequately prepared to undertake retraining or change of job
4. Increased facilities in the community for vocational testing and guidance, retraining, and employment placements

It is to be hoped that a work classification unit for cardiacs may be established in Boston some time in the near future.

Team work and Medical-Social Rounds

Miss Dorothy Kellogg, Supervisor of Social Service for the Medical Wards, writes in her report, "The purpose of casework service is to help to establish useful relationships between people and their medical services in the Hospital and in aftercare. . . . Social Service is available, as called upon by doctors, when supportive planning with the patient and family or social group is needed to make hospital care effective and to safeguard its results." This purpose cannot be accomplished without the combined efforts and shared knowledge of the medical team. One of the most effective methods for carrying this out is the weekly Medical-Social Rounds, which have become an integral part of almost every service in the Hospital. While the services vary in their organization of Rounds, the Pediatric and Medical Services have developed their Rounds to a most satisfactory degree, from the standpoint of social service participation.

This year the Pediatric Rounds have been expanded to include—in addition to house staff, nurses, social workers, and medical students—the visiting pediatrician, a visiting child psychiatrist, and a Public Health Nurse.

In a brief survey of the regular weekly Rounds held on all four Medical Wards the following interesting facts were revealed: During 1951 there were 76 different doctors and 66 fourth year medical students from our Medical Services who took regular part in the Medical-Social Rounds in the course of their rotation. Twenty-six different visiting men, 5 residents, 16 assistant residents, 23 house officers, and 6 doctors from the Arthritis Service were included in this number. With such wide participation by the medical staff with nurses, social workers, and other special visitors, one can see the potentials in patient care and in teaching and research as knowledge is shared. Miss Kellogg cites one example—that of a young woman, mother of four children, treated on the Medical Wards for alcoholic cirrhosis. Without effective teamwork treatment in the Hospital and in the community, her four children would have been sent away, the home broken, the patient rehospitalized, and the husband and relatives placed under severe and heartbreaking strain. For an entire year the patient and home have been kept intact, with evidence of continuing good results.

We have much yet to learn about patient-care in its broadest aspects; but these Rounds—described by Dr. Bauer as the time when the entire ward team engages in considering all aspects of patient-care and how the practice of medicine with its allied services can benefit the patient, his family, and the social group—go far in helping us all to approach more nearly our goals for rehabilitation of the patient.

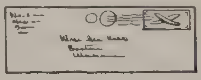
Josephine C. Barbour,
Chief of Social Service

* * *

Dr. Henry K. Beecher, Chief of our Anesthesia Service, has recently been made an Honorary Member of the Royal Society of Medicine, London, England.

On February 14 the Buffalo Surgical Society awarded the Roswell Park Medal to Dr. Edward D. Churchill, Chief of our General Surgical Services, "in recognition of his achievements in the science and art of surgery and his invaluable services to the medical profession and humanity." The award was made by the president of the Society, Dr. John D. Stewart. Dr. Stewart received his surgical training at the Massachusetts General Hospital, where he subsequently served as an active member of the full-time staff until August 1941, when he left to accept the Professorship of Surgery at the University of Buffalo.

Dr. Robert S. Schwab, Associate Neurologist on our staff, has gone to France to address the medical faculty at the University of Montpellier. He will speak on some of the investigations which have been made into the subject of fatigue in human beings. This work has been done at the Massachusetts General Hospital, under the sponsorship of the Office of Naval Research of the U.S. Navy. Dr. Schwab will deliver his lecture in French.



New addresses:—

Dr. John R. McDaniel (*E.S.* 1940), 902 Edmond St., St. Joseph, Mo.
Dr. Henry D. Moorman, Jr. (*W.S.* 1943), 431 Thirtieth St., Oakland 9, Calif.
Dr. Nathan D. Munro (*E.S.* 1942), 740 W. Michigan Ave., Jackson, Mich.
Dr. Kenneth L. Stout (*r.p. D.* 1935), 4418 Vineland Ave., N. Hollywood, Calif.

MALLORY MEMORIAL FUND

The Trustees of the Massachusetts General Hospital have voted "to establish a special fund to be known as the Tracy Burr Mallory Memorial Fund, to be used for some suitable memorial in the proposed new Pathology Building."

Contributions to this fund may be sent to the Treasurer, Massachusetts General Hospital, 45 Milk Street, Boston.

HYPERTENSION CLINIC

The average number of patients in the Hypertension Clinic is falling off. In the year or two following the war, a daily attendance of twenty-five to thirty patients was usual. Often there were more. Effort was required to keep the case load at a figure to insure efficiency both in clinical study and in routine care. Latterly the pressure has been less, due in part to the increased cost of the hospital out-patient visit and of laboratory study. Frequently, the cost of special tests, X-rays, electrocardiograms, appears to be a hardship for many patients. Unless absolutely essential for routine management, it does not seem fair to ask many of them to accept this recurring financial burden. When required as part of a clinical research, some financial aid is necessary.

Quite often we are requested to make clinical trials of new hypotensive drugs. The manufacturers are ready to supply the drugs. We have "pedigreed hypertensive patients", willing and suitable for a trial of some new drug. We think, and the Research Committee thinks, the manufacturers should pay for the cost of desirable laboratory studies, the patient's clinic fee, and some additional monies in return for the name and fame of the Massachusetts General Hospital. While such cash doubtless is eventually loaded onto each tablet subsequently sold, this seems to be a suitable distribution of the cost of development.

Several hypotensive drugs are under investigation. Dr. Currens and the cardiac catheterization team are interested in the hypotensive effects and hemodynamics of protoveratrine. The hexamethonium compounds are to be tried in the clinic, and our surgical colleagues, including the Peripheral Vascular Clinic, are interested in the same substances. Some work has been done on thalazine. Veriloid, from Veratrum Viride, is generally available for prescription and appears to be helpful in controlling the blood pressure level.

With the cooperation of Miss Meenan, the class method of dietary instruction has been started. Fifteen patients have had a course of fifteen sessions on a balanced reducing diet without special restriction of salt. After completion of this course many of the same patients, with a few additional ones, are now on a moderately low sodium, low fat, moderate to high protein diet. Results on weight and blood pressure levels are being compared with the achievement of the previously studied rice diet.

We would like to know whether or not the class method obtains better cooperation from the patient, saves time, and is more lasting in control of the patient's weight than individual instruction. The group method, with patient-participation in mutual instruction of each other, may have important psychological effects. On severely restricted diets, patient reaction sometimes becomes hostile to the doctor or the clinic. This was observed in the use of the rice diets. It suggested, sometimes, the personality reaction of subjects on a starvation regime. For instance, at a recent session one of the patients reported her pleasure at first losing weight, then her failure to lose, and final disappointment when she gained. Discussion, and questions and answers led in the end to her publicly confessed resentment, her near failure to return to the clinic, and, at last, her conclusion that she was mad at herself for not being able to do what she knew was best for her. The solution may be to provide continuous self-motivation. We would like to find a way to provide independence for the obese of both excessive food intake and continuous medical or dietary supervision.

Mrs. Dorothy Callahan, dietitian, and Mrs. Gertrude Roberts, working on follow-ups and recording the blood pressures, are the mainstays of this interesting project.

During the year we have made another follow-up of our series of patients with hypertension, graded according to severity. No new patients have been added to this study since 1941-42, at which time the average follow-up was four years. With the late Dr. Loofbourow, a restudy of this group was made in 1946-47. The present study, therefore, is a twelve-year one. Predictions made originally, according to severity of organic changes, have been found to be quite accurate and we believe the survival curves add extremely important data to our knowledge of the natural history of essential hypertension in man. This study and the dietary studies are being supported by contributions to the Dorothea Loofbourow Fund from the many friends and patients who miss her counsel, companionship, and care—as do all of us in the clinic.

Studies being carried out by Dr. William P. Chapman, in collaboration with the neurosurgeons of this Hospital, the Boston Psychopathic Hospital, and the State Hospital for Mental Diseases at Howard, Rhode Island, are determining the effect of the electrical stimulation of the cerebral cortex and underlying brain structures on blood pressure, heart rate, and respirations, as well as on the mental and behavior patterns of patients undergoing lobotomy for psychiatric disease. Also, in collaboration with Dr. Helen Deane, Director of Anatomy at Harvard Medical School, Dr. Chapman is making an investigation of the histochemical changes of the adrenocortex in patients with hypertensive vascular disease and in non-hypertensive patients. In progress are studies to determine the possible role of the vagus nerve in initiating the pressor responses from the brain in animals and in man.

Dr. John Denovian is supervising benzodioxane tests in essential hypertension, carrying on the work formerly done by Dr. Henry Kowalski, now on the Boston City Hospital staff. Dr. R. B. Khambatta of Karachi, Pakistan, a graduate student at the Hospital this year, is working with us in the clinic. The hypertension laboratory continues other testing procedures. Dr. Chapman expects to make another study of sympathectomized patients, in cooperation with Dr. Kenneth Evelyn of McGill University Medical School.

What would any clinic be without volunteer workers? The answer is it would not be a clinic. Since the war the volunteers have never, for one day, missed covering our clinic. Mrs. Florence Dodson, Mrs. Arthur Thiessen, and, previously, Mrs. Eleanor Hart, keep our records, greet our patients and us, record the time of our coming and going, chide us when we need chiding, encourage us when we need encouragement. All their ways are ways of pleasantness.

Robert S. Palmer, M.D.,
Head of Hypertension Clinic

The Board of Trustees, at their meetings on February 21 and March 7, voted:

To accept with regret the resignation of Dr. William R. Eyler, effective March 1;

To postpone the retirement of Dr. Joe V. Meigs to June 30, 1956.

To appoint:

Dr. Roy L. Byrnes as Third Assistant Resident in Pathology for one year, beginning July 1;

Dr. Thomas L. DeLorme as Assistant Resident in Orthopedic Surgery for one year, beginning April 1, 1953;

Dr. Charles P. Gore as Assistant Resident in Psychiatry for a period of six months, beginning July 1;

Dr. Sven Hellerstrom as Honorary Dermatologist pro tempore for the month of March;

Dr. Lawrence J. Kunz as Assistant Bacteriologist, in active charge of the Hospital Bacteriology Laboratory from July 1, 1952 through June 30, 1954;

Dr. René S. Mach of Geneva as Honorary Associate Physician pro tempore;

Dr. Thomas F. Paine, Jr. as Chief of Bacteriology from July 1 until the end of his current appointment in Communicable Diseases, namely June 30, 1954;

Dr. John B. Stetson as Assistant Resident in Anesthesia for one year, beginning November 15;

Dr. Jacob Stovner as Assistant Resident in Anesthesia for nine months, beginning July 15;

Dr. Frederick S. Tomchik as Second Assistant Resident in Radiology, beginning January 1, 1953;

Dr. Robert H. Walker as Second Assistant Resident in Surgery for one year, beginning July 1.

At their meetings held on February 13, 20, and 27, the General Executive Committee voted:

To reappoint Dr. Leo Brahm as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for the month of March;

To promote Dr. Richard B. Cohen from the position of Assistant Resident to that of Resident in Pathology for one year, beginning July 1;

To grant Dr. Carlo Mauro the title of Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, to cover the course he is taking under the direction of Dr. Edward B. Benedict;

To give Dr. Lidio Mora the additional title of Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, to cover his work under Dr. Benedict, for the period January 28 through April 28.

To appoint:

Dr. William J. Dowling as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Joachim S. Gravenstein as a Fellow in Anesthesia for one year, beginning April 1;

Dr. Charles H. Ratner as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy;

Dr. Traute Richter as a Fellow in Anesthesia for one year, beginning January 1, 1953.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Dermatology

Lever, W. F.
Diseases of the skin.
In The child in health and disease, 2nd edition, C. G. Grulee, and R. C. Eley, Editors, Baltimore, The Williams and Wilkins Company, 1952, pp. 972-1001.

General Medicine

Jacobson, B. M., and Sohier, W. D.
The effects of ACTH and of cortisone on the platelets in idiopathic thrombopenic purpura.
New England J. Med. 246:247-249.

General Surgery

Hamlin, E., Jr.
Limited excision of Dupuytren's contracture.
Ann. Surg. 135:94-97.

Laboratory Science

Cori, O., and Lipmann, F.
The primary oxidation product of enzymatic glucose-6-phosphate oxidation.
J. Biol. Chem. 194:417-425.

Edwards, W. S.
The effects of lung inflation and epinephrine on pulmonary vascular resistance.
Am. J. Physiol. 167:756-762.

Gregory, J. D., Novelli, G. D., and Lipmann, F.
The composition of coenzyme A.
J. Am. Chem. Soc. 74:854.

Nursing Education

Perkins, D.
A program to develop team leaders.
Am. J. Nursing 52:309-311.

Physical Medicine

Watkins, A. L.
Physical Medicine for the neurologic patient.
New York State J. Med. 52:315-318.

Watkins, A. L.
Practical applications of progressive resistance exercises.
J.A.M.A. 148:443-446.

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To the Editor: Your kind invitation to write an article for THE NEWS made me wonder what I could write that might possibly have general interest for the hospital family. Your words that Dr. Waddell and I were ". . . the oldest ranking members of the House Staff in terms of years of association with the M.G.H." gave me the answer. I began to ponder on why the current formal surgical training is so long, and hoped it was not just due to ineptitude and slowness on the part of today's trainees.

I must admit that your words gave me a bit of a start. I had considered myself relatively young, but on rereading your letter, checking my receding hairline, and answering Harvard's request to choose a retirement plan, I began to feel a bit bent and weary. I put on my slippers, sat before the fire, and mused over my experiences of the past seven years. The fire was warm, my head nodded. . . .

The judge rapped his gavel and looked at the jury. The twelve faces seemed familiar. One, a bit sallow, looked like the old man who had not survived a pancreatectomy. The beaming lady next to him was certainly Myra Owens who was so grateful after her gastrectomy, and the little man behind her with the artificial leg? Wasn't he Antonio, who sang so loudly on the wards? All the faces of the jury—sad, puzzled, smiling—looked familiar.

The judge cleared his throat and addressed the jury: "Ladies and gentlemen, you are to decide if current surgical training is guilty of embezzlement. Is it using time wisely or spending it foolishly? Are five, six, or seven years justified and necessary as a period of formal training, or are economy and efficiency lacking? This is for you to decide."

The courtroom was hazy. Over the buzz of voices the prosecuting and defense attorneys scowled at each other.

The prosecution rapidly presented its facts. In vehement tones it pointed out that the most capable and brilliant surgeons of today had had very little hospital training, but that many significant contributions of clinical and physiological importance have been made by these men who had cut the "apron strings" of the hospital after a short period of formal training. Over the shouted objection of the defense, the present-day program was described as impractical, time-consuming, and unnecessary.

The defense attorney, in turn, belabored the shorter training program of twenty years ago as inadequate. He pointed out that men trained in that era had little spare time, were forced to carry a heavy work-load, were resistant to new ideas, and failed to make any important contribution to surgery as they grew older.

The debate was hot and furious. The judge pounded his gavel incessantly, the room was in an uproar over the angry protestations of the two attorneys.

Through the din, a voice rose clearly: "Gentlemen, if you will forgive me, I do not think there is much to try."

The two attorneys glanced at each other suspiciously. Was this a trick? Neither of them had called this man. The old gentleman went on, the courtroom was strangely silent.

"There is really not much difference in the aims of surgical training today as compared with those of twenty years ago. We were then, and are now, trying to give our young men a basic training in surgery. Granted a certain amount of technical ability, and dexterity will come later with experience. Through the years many new fields of surgery have been developed. With better anesthesia, fluid and blood replacement, and chemotherapy, more operations are made possible than were dreamed of a generation or two ago. Our senior surgeons of today are the men responsible for this. In turn, the young surgeon today must be exposed to a longer period of training, so that he too may emulate his predecessors and continue to develop new techniques."

Both attorneys had seated themselves. They no longer glared at each other, but were staring attentively at the speaker.

"The primary function of a hospital is the care of the sick, and any institution accepting the responsibility of caring for the sick also assumes the responsibility of training physicians. This training today must necessarily be longer, for we have a far greater fund of basic knowledge and experience to impart. Would it not be proper to ask ourselves how much longer the training period will be in the future, rather than to attempt to justify the length of past or present formal training?"

As the old gentleman finished his speech he turned and walked slowly toward the door.

"But who are you?" asked the judge. "Why are you concerned with this trial?"

"Because I am the spirit of Hippocrates," was the quiet reply, as the courtroom door closed softly behind him.

The defense attorney accepted the proffered cigar of the prosecutor. Smoke filled the courtroom. . . .

I woke with a start. The fire had gone out and the room was cold. And so to bed.

George L. Nardi, M.D.,
Assistant in Surgery

HOUSE STAFF CLUB

For some time the Hospital administration has been considering plans for the establishment of space in the Hospital where the house staff could entertain guests, hold informal meetings, and provide recreation in a pleasant atmosphere. At a recent meeting of the Board of Trustees the suite of rooms on the thirteenth floor of the White Building was chosen for this new House Staff Club.

Following the Trustees' action, Dr. Clark appointed a committee from the house staff to outfit and maintain management of the new Club quarters, and the suite of rooms was opened on February 16. At the moment the furnishings consist primarily of pieces of furniture which the Hospital had on hand, and Dr. Clay has made arrangements for obtaining the radio-phonograph formerly used in the Moseley Rotunda. When the plans for the Club were being made, the Ladies' Visiting Committee generously voted us $203 for the purchase of an FM radio and a television set. The former has been used regularly since the opening, and we are in the process of getting the latter within the next month. The committee has asked the house staff to contribute to a fund to help buy more furniture and some non-medical magazines. Gifts of subscriptions to such publications would be greatly appreciated. A recent poll of the house staff included the following as the most popular and worth while: *Time, New Yorker, Life, Saturday Review of Literature,* and *National Geographic.*

The Club is anxious to obtain phonograph records for its growing record library. With the recent change from 78 rpm to long playing records, many of the Visiting Staff or other friends of the Hospital may have records which they consider valuable but which they plan to replace with LP versions. We would appreciate either 78 rpm or LP records for our library. Special funds earmarked for records will be used in the purchase of LP records. We hope to build up a first-rate record collection during the next few years.

On December 15 a House Staff Christmas Party was held in the Club, under the sponsorship of the Distaff Club. It was an overwhelming success, with well over a hundred people attending. We hope to repeat the initial successful venture with an *all* House Staff Party in the late spring, before the house staff changes on July 1.

Recently, the wives of the Visiting Staff organized a spirited drive to decorate the suite, to make the Club one of the most attractive in the United States. In addition to being isolated from the rest of the Hospital, the view from the thirteenth floor up the Charles River is one of the finest in Boston. It is hoped that the Club will become the permanent quarters for a prospective House Staff Organization.

Larry Barrows, M.D.,
Chairman, House Staff Committee

BIOGLETS

Dr. James C. Appleton, Assistant Resident in Anesthesia – born in Hamilton, Ohio, April 7, 1922; B.A., Miami University, Oxford, Ohio, 1943; SV-12, University of Louisville School of Medicine, 1943-46; Intern, Springfield City Hospital, Springfield, Ohio, 1946-47; U.S. Navy: G.L.N.T.S., Great Lakes, Illinois, and Greater Mariana Islands Health Officer and Dependents Service, NOB, Saipan, 1947-49; general practice in western Kentucky, 1949-50 (several months of this year were spent in St. Louis and McKinney, Texas, recovering from poliomyelitis); Resident in Anesthesia, V.A. Hospital, McKinney, Texas, participating in original research in pain control, in collaboration with Dr. F. A. Duncan Alexander, 1950-52.

Dr. Peter E. Sifneos, Resident in Psychiatry —born in Greece, October 22, 1920; graduated from the Sorbonne University, Paris, in General Chemistry, 1940; graduate work in chemistry at the Massachusetts Institute of Technology, 1941, and at Harvard, 1942; M.D., Harvard Medical School, 1946; U.S. Army: served in the U.S. Army of Occupation in Frankfurt-on-Main, Germany, 1948-49, in Psychiatry at the 97th General Hospital; McLean Hospital, Waverley, Mass., 1950-51; married; a daughter, 5 months old.

* * *

STAFF WIVES

As the organization of the MGH Staff Wives has progressed, it has become increasingly apparent that one of the major interests of the group is to promote a closer relationship between doctors and their wives from other countries and the doctors and wives of the MGH Staff.

On Tuesday, March 18, a tea was held in the Medical Staff Room of the Bulfinch Building in honor of these visiting doctors from other countries and their wives. It afforded an excellent opportunity for the two groups to meet and proved to be a most delightful affair. Mrs. Charles Kubik graciously donated the flowers for the occasion, and Mrs. S. Forrest Martin made the lovely floral arrangements.

Many of the Staff doctors and their wives have expressed an interest in inviting more of our visitors to their homes. Mrs. Joseph Aub is chairman of a committee to promote such hospitality. Assisting her are Mrs. Nathan Talbot, Mrs. Bradford Cannon, and Mrs. Howard Ulfelder. Every effort is being made to maintain an accurate list of the doctors who are here from other countries, together with data about their families, interests, etc. Those who would like to invite these visitors to their homes may telephone Mrs. Aub, Belmont 5-1337 or Mrs. Soma Weiss, Lafayette 3-8200, Extension 828. Hospitality of this kind is an expression of personal welcome to our country and an opportunity for all of us to become better acquainted with one another.

The Staff Wives are active in many other ways. For instance, Mrs. Richard Sweet, who is head of the Surgical Dressing Committee, is organizing groups to meet in suburban areas. In these groups those who find it difficult to come in to the Massachusetts General may make bandages for the Hospital by working in their own communities. Anyone who is interested in helping with this important work is asked to contact Mrs. Sweet at Longwood 6-5671.

Miss Sleeper has again appealed to those doctors' wives who are graduate nurses to devote of their free time to the Nursing Service. This would be greatly appreciated, for there is real need of their help.

Mrs. Walter Bauer and Mrs. Richard Sweet represented the Staff Wives at the last meeting of the Coordinating Committee. This committee attempts to integrate the activities of the many volunteer groups within the Hospital.

The regular monthly meeting of the Staff Wives was held on April 2. The next meeting will be Wednesday, May 7. The meetings are held on the first Wednesday of each month, and the wives of all doctors on the Staff are most welcome. Those who have been unable to participate to date are urged to attend meetings whenever they can. Meetings are held in the Archives Room of the Moseley Building at 1:15. Those who come early are invited to meet for lunch at noon in the Nurses' Cafeteria. A table is reserved in the name of Mrs. Walter Bauer, and the cashiers will be happy to direct members to it.

Through the MGH NEWS we will endeavor to keep our readers posted on the activities of the Staff Wives. If your husband doesn't bring THE NEWS home to you, why don't you subscribe yourself? The price is $2 per year, and you will then know what is going on.

* * *

The Institute of Pastoral Care, Inc., has announced that during the coming summer it will again sponsor six- and twelve-weeks' courses in general and mental hospitals, for clergy, theological students, and other professional religious workers.

Supervised training is to be given in the pastoral care of the sick, pastoral counseling of upset and troubled persons, and the dynamics of interpersonal and interprofessional relationships.

The schedule will include some part-time volunteer orderly service, pastoral calls on patients, study and discussion of clinical notes on their pastoral interviews written by the students, observation of clinical procedures, correlated reading, and daily attendance at planned lectures and seminars.

A descriptive folder and application form may be obtained from Rev. James H. Burns, Executive Secretary, Institute of Pastoral Care, Inc., Massachusetts General Hospital, Boston 14, Mass.

Dr. LeRoy A. Schall
Chief of Otolaryngology, Massachusetts Eye and Ear Infirmary

Feby 23, 1827

MASSACHUSETTS EYE & EAR INFIRMARY

The Annual Alumni Meeting will be held at the Infirmary on Wednesday, April 16. As usual, the program will coincide with the New England Ophthalmological Society Meeting on April 15 and the New England Oto-Laryngological Society Meeting on the 16th, both held at the Infirmary. The Infirmary will serve the Alumni Luncheon at noon; the Dinner, as in previous years, will be at the Harvard Club.

Three Infirmary staff members have been guest speakers on "You and your health", a medical education series presented weekly on television by the Massachusetts Blue Cross and Blue Shield. The fifteen-minute programs are designed for the lay public, and are produced with the cooperation of the Massachusetts Medical Society and the Massachusetts Hospital Association.

Dr. LeRoy A. Schall, Chief of Otolaryngology, talked on "Sinusitis" in January. Dr. Virgil G. Casten, Surgeon in Ophthalmology, appeared on the March 3 program, speaking on "Strabismus"; and the following week, Dr. Donald K. Lewis, Associate Surgeon of the Winthrop Foundation, discussed "Poor hearing". The interviews were presented in lay terms, and visual material, such as charts, illustrations, and models, was introduced to take advantage of the television medium.

The Board of Managers have announced the promotions of Dr. Henry A. Mosher and Dr. Karl Riemer from Assistants in the Department of Ophthalmology to Assistant Surgeons.

Recent visitors from abroad were Dr. P. Feldman of Calcutta, India, who was particularly interested in the work of the Department of Otolaryngology, and Dr. Alfred Diab, Professor of Otolaryngology at the American University of Beirut, Lebanon.

This note has come from Dr. James Lincoln Huntington (*S. S.* 1908):

> I have retired from the practice of obstetrics and gynecology to accept a full-time position with the Blood Mobile Unit of the American Red Cross at the sub-station for Western Massachusetts, at Northampton.

This letter, dated February 19, came from Lt. Hermes C. Grillo, MC, USNR (*S.* 1948), from the U.S. Naval Hospital, St. Albans, Long Island, N. Y.

> Must record another change of address — as above — where I am enjoying duty on a very active Thoracic Surgery Service. I hope this will be my last change of address before returning to M.G.H.
>
> I shall look forward to receiving The News here with as much pleasure as at my previous (and somewhat more remote) mailing address — the First Marine Division, Korea.

A postscript, typed in red, is added to each renewal notice we send out, asking for at least a brief note from our subscribers concerning their present interests and activities. The results have been most discouraging to your editor, who tries to report at least once a year on every member of the MGH family. Therefore, we are very grateful to Dr. Clayton H. Hale (r.p. *R.* 1943) for his response to our appeal. Although his message is brief, it indicates a kind consideration of our endeavor, and for that we thank him. Dr. Hale writes:

> On June 1, 1951, I was appointed Professor and Director of the Department of Radiology at the New York State Medical Center at Syracuse.

It pleased us very much to receive this interesting letter from Dr. James Cortázar (gr. stud. a. *M.* 1951). He gives Calle 48 #9-29, Bogotá, Colombia as his home address—office address not definite, as yet. His letter reads:

> The last six issues of The News reached me in Colombia, my country. I know that the mail's cost per year is greater than the amount I paid for my subscription, so I am enclosing a check for $5 instead of $2 in order to continue receiving that excellent publication for another year, this time paying the just amount.
>
> There is nothing much to tell about my activities, because everyone is on an intermediate step. In hospital work I am at the Endocrinology Department of the National Radium Institute and, because of the relation of radium with radioactive isotopes, I also handle Ra. In the future there will be a Radioactive Iodine Department and I will be with it.
>
> Teaching activities are irregular for me now, but soon they will become regular with graduate students studying general endocrinology and radioactive isotopes.
>
> I presented a paper (I-131 and thyroid gland) to the Colombian Society for Endocrinology. They accepted it, and also my name as a member. In that way my private practice is starting as Endocrinologist and Thyroidologist.
>
> Of course, my gratitude to the Thyroid Clinic, and to Drs. Means and Stanbury in particular, is boundless. I wish I could still be there.
>
> The AEC invited me to a course on Nuclear Physics in relation with Medicine. I don't know just when it will be, but if I go I will certainly visit the M.G.H.

THE MASSACHUSETTS GENERAL HOSPITAL 1811 NEWS

No. 112 Boston, Mass. May 1952

THE TENTH BIRTHDAY OF THE BLOOD BANK

On April first the Blood Bank completed ten years of service. As this date is a milestone, perhaps we would do well to review the Bank's history.

The first blood bank in the world was started by the English army during World War I. The first one for civilian use was started by the Russians in the early 1930's. Cook County Hospital opened the first American blood bank in 1935. City hospitals entered this field early for purely economic reasons, as previously they had paid large sums of money to professional donors. The city of New York adopted a system of blood banks for its twenty-six municipal hospitals in 1938. It was estimated that these banks would save the city a million dollars a year.

For private hospitals such as this there was no financial problem to be solved by having a bank; but the proponents of a bank for the M.G.H. felt that there was a real need to have blood on hand for emergencies, that the donors were seriously inconvenienced by the system in vogue, and that the house staff had to spend too much time collecting and typing blood.

The opponents, who were in the majority, felt that banked blood was inferior to freshly collected blood, and there the matter rested until March of 1942. At that time the ranks of the opponents had become seriously depleted because of defections into the armed forces, so Dr. Tracy Mallory was able to obtain approval for a blood bank.

The Bank opened in the cellar of the Moseley Building on April 1, 1942, in a hot and dusty area no longer usable for the care of patients. The staff consisted of one nurse, one technician, and a part-time maid, all supervised by a doctor.

In the beginning everything went wrong. The blood clotted and would not pass through the commercial filters. The rate of pyrogenic reactions was often as high as 12%. Only because of the hopeful tolerance of the General Executive Committee was the miserable organization allowed to continue its existence. Within three months, prefiltering through stainless steel filters had been introduced, clots were completely eliminated, and the reaction rate fell to 2%. Similar filtering methods have since been adopted by many other hospitals.

With the whole-blood problem somewhat solved, the Bank turned itself to the production of plasma needed for treating burns and for stockpiling for civil defense. The administration, having already spent $5,000 in equipping and refurbishing the Moseley basement, told the Bank that if it was interested in such nonsense it would have to raise the money by itself. Because of the generosity of a number of persons the money was raised, a refrigerator and other equipment purchased, and the Bank went into the plasma business. The effort paid off with unexpected rapidity. In November of 1942 the Hospital was flooded with victims of the Cocoanut Grove disaster. The Bank had more than enough plasma to give the patients adequate care. This single episode swept away the last of the opposition to the Bank and it became firmly established as a necessary part of the Hospital.

In its first year the Bank introduced a number of changes. The first of these was a vast improvement in the care of the donor. Under the old system he made one trip to the Hospital to be typed, and another, usually at an inconvenient hour, to have his blood drawn. Under the new system he made but one trip and that at an hour of his own selection. Furthermore, he had a history and a physical examination done by a doctor and his hemoglobin checked by a technician before phlebotomy. Afterward, he was given a rest period on a cot, was fed, and again checked to be sure he had recovered before leaving. Throughout his stay in the Bank he was handled with great courtesy by a group of volunteers who have, from the start, played a very important role in caring for the donors as well as making them feel that their donations are appreciated. Many of the Bank's volunteers have served for quite a few years. Their services are an invaluable part of good care of the blood donor, a field in which this Hospital has been one of the pioneers.

Next, the whole system of blood grouping and cross-matching was removed from the hands of the most junior member of the house staff and was put in the hands of trained technicians. Everything was double checked by two individuals, a safety measure which this Hospital was one of the first to adopt. The Moss system of bloodgroup identification was then in vogue here, but because the International system of Landsteiner was more acceptable scientifically as well as being the government standard, it was decided to change to it. This change was brought about gradually by labeling blood at first with both the Moss and the International codes, then gradually abandoning the Moss label. In this way a complete change-over was effected without any open outcry by the adherents to the Moss method.

A debit and credit system was set up for the wards to ensure an adequate supply of blood, which has always been on a strictly one-for-one replacement basis. For the private patients a charge was made for blood not replaced and the money so collected was used to purchase blood from professional donors. This system worked well, kept up the blood supply on hand, and allowed for purchase of blood in the groups in which the Bank was low.

Another improvement was that of having the patients typed well in advance of the time of transfusion so that the laboratory work could be carried out as an unhurried routine, rather than in a last minute rush fraught with inaccuracies.

The most important advance from the point of view of patient safety was the insistence that blood be cross-matched and ready for use in case of any major operation, so that if hemorrhage should occur in greater amount than anticipated, blood would be ready for transfusion.

At the end of the first year the Bank was operating financially in the black. It had paid off its original cost and had an ample reserve of plasma.

During the war years the Bank was run by Dr. Carroll Miller. Despite a very heavy load of work, constant problems of changing personnel, and an increasing rate of transfusion, he did a very good job of management.

By 1946 the Bank staff had increased considerably and the Hospital transfusion rate had trebled. The latter was largely due to the fact that more radical surgery had become safe, once blood was available, and hence more and more advanced surgery was going on, requiring more and more blood. In this same year, at the suggestion of Dr. Charles Mixter, Jr., the Bank took on a full-time secretary whose job it was to call donors. Her work in the first year increased the excess of blood donations over transfusions from 2% to 10%. Also in 1946 the autotransfusion set was gradually perfected so that blood could be drawn quickly and effectively. This set had been adopted in a number of other hospitals. Other postwar problems have been mostly a result of the changing needs of surgery, the expanding use of blood, and discoveries of new blood groups.

The failure of the clotting mechanism, common among certain individuals with diseased livers after they have been given large amounts of banked blood, was one of the problems which was solved by this Bank with the help of Dr. Robert Linton, before the mechanism of such failure was known. The attack on the problem was first to use direct transfusions when clotting ceased. This was effective, so fresh citrated blood was next tried. This worked equally well and has been used ever since.

Emergencies at night were not taken care of with sufficient speed after the war because of inadequacy of the Bank's staff. After considerable pressure from the Obstetrical Service, the Hospital permitted the Bank to hire night technicians. A more satisfactory system of coverage was developed by employing medical students. These students, seven in number, give full-time coverage for emergencies only. Their employment means that there is always someone in the Bank except at mealtimes on the week ends.

Rapid infusion of blood is becoming of increasing importance in the operating room; before the war this was handled by using a three-way stopcock and a syringe. Such a method is too slow for patients bleeding severely, hence this Hospital sponsored a small rotary hand pump attached to the tubing for the rapid infusion of blood. This pump was designed by Mr. Bruckmann, a graduate of M.I.T., and is now being manufactured by the American Optical Co. for this and for other hospitals. It is the safest method of pressure transfusion for both intravenous and intra-arterial use.

The Bank has assisted Dr. Trygve Gundersen, Surgeon in Ophthalmology at the Massachusetts Eye and Ear Infirmary, in his treatment of patients who have herpes zoster of the trigeminal nerve by providing him with immune plasma from patients who had recovered from the disease. This treatment has been an effective measure in preventing corneal ulcerations.

In 1949 the Bank moved to its present quarters in the Domestic Building.

The most serious problem for the Bank has been one of management. In 1942 it became apparent that the highly technical skill required in investigating certain kinds of blood incompatibilities, particularly those associated with the Rh factor, was not available in our Hospital. Hence, the Bank insisted on becoming a part of the Boston Blood Grouping Laboratory, directed by Dr. Louis Diamond, so that it could avail itself of the skills available there. This has proved to be an excellent arrangement. Although the administration demurred at first to the yearly membership fees of $300 to $500, the Bank has received in return not only many investigations of blood incompatibilities free of charge, but the yearly salaries of three different research fellows, a Beckman spectrophotometer, and about $20,000 worth of testing serum.

After the war, however, the medical coverage by a part-time doctor who could refer his problems to the Blood Grouping Laboratory was not enough. The rate of transfusion and the constantly increasing difficulties with new and rare blood groups demanded full-time medical coverage. After exploring several possibilities the Bank took on a series of fellows for a year or more. This was a temporary but only a partially effective expedient. By 1950 the Bank was giving five times as many transfusions as in 1942. Many new tests had been introduced. Careful supervision of technicians was needed. Investigation of each blood incompatibility required many hours of investigation by a highly competent specialist.

In nine years' time blood banking had changed from being an element of clinical pathology to becoming a highly esoteric specialty all its own; the Blood Bank had grown from a refrigerator vaguely under the suzerainty of the head of the Pathology Department to a vigorous independent department. To meet this need Dr. Morten Grove-Rasmussen, who had spent a number of years in training both at this Bank and at the State Serum Institute in Copenhagen, took on the full-time job of assistant director of the Bank. His appointment is the biggest step forward that the Bank has taken. It means that there is now available in the Hospital an expert in blood grouping and blood banking techniques, the peer of anyone in this country or abroad. It means increased safety of our laboratory work and a new era of investigation in this field where we have always had abundant material for study but no one, heretofore, who could study it. Since his arrival the Bank has already accomplished a number of things.

First, he has set up a "cell panel". In its simplest terms, this is the mechanism for identifying the blood sub-group, Rh factor sub-group, or rare blood group to which a patient has been previously sensitized by pregnancy or transfusion. This "panel" was set up with the help of the Boston Blood Grouping Laboratory and by using material contributed by other laboratories in this country, England, Holland, and Denmark. This "panel" fills a vital need in solving problems of blood incompatibility in the laboratory so that patients may receive blood which will not give them a hemolytic reaction.

Second, he has been able to improve and extend the manufacture of blood testing serum so that we are now able to supply commerical laboratories with high grade testing sera of different types. In return for this, the Bank obtains other testing material free of charge. Worked out in dollars and cents, this means a considerable reduction in the operating costs of the Bank each year. Such a saving means a reduction in the cost of service to the patients and also a lessened expenditure by the Hospital. This saving, in summary, is considerably greater than the salary paid to Dr. Rasmussen. It has also meant that we have been able to stockpile testing sera for civil defense purposes at no expense to the Hospital.

Third, he has been able to conduct research of direct value in the care of patients. Among other things, he has identified a hitherto unknown sub-group of type A.

The Bank has also taken over the supervision of the solution room and of the nurses who administer intravenous therapy. This means a coordinated system of intravenous and transfusion therapy under a single director. Many minor changes have taken place as a result of this, changes which have, in many instances, been instituted as a direct result of suggestions from house staff and nurses. The most important of these changes has been the adoption of a policy of equipping the wards with their daily supplies, on a quota basis, during the latter part of the day. Young Harvard students bring back to central supply the dirty equipment, and replace it with fresh materials up to the amounts that the wards require. This means that the wards start each day with enough supplies for the day's work, the central supply room has all of its dirty equipment ready for cleaning when it opens each morning, and transportation is done by unskilled persons instead of by over-worked nurses. It has also resulted in a considerable saving of equipment previously lost or discarded.

The last of the changes introduced after the war was the establishment of a Bone Bank in 1950 within the confines of the Blood Bank. Fresh bone removed in the operating room from patients free of transmissible diseases, which ordinarily would be discarded during an operation, is now stored for future use. It is largely used in orthopedic operations when fresh autogenous bone is unavailable. This has been a considerable boon to many patients.

Present status of the Blood Bank

At the present time the Blood Bank is an independent department of the Hospital, integrated with the other departments through its director and the Blood Bank Committee. It is now the largest hospital blood bank in New England and one of the largest hospital banks in the country. It provides as complete laboratory investigation of transfusion and certain other hematological problems and as complete a transfusion service as is obtainable anywhere. It acts in an advisory capacity to the Hospital staff on the problems of individual patients.

In addition to its functions within the Hospital it has taken a vigorous part in the transfusion problems of the community. It has endorsed the state-wide Red Cross blood program from the start. Through the Massachusetts Medical Society and the Red Cross Advisory Committee it has done its share in helping that program to function.

It has helped, along with other large banks, in the establishment of a blood clearinghouse for exchange of blood between hospitals, in providing further training for personnel of other hospital banks, and, finally, in the revision of the State Public Health regulations governing the use of blood. It has trained personnel and helped to set up a number of banks in this State, in other States, and in other countries. From the start this Bank has exchanged blood freely with other hospitals so that no one anywhere in need of a transfusion would fail to receive it if we had the blood on hand. Through the State Civil Defense Agency this Bank has participated in the setting up of a system for providing blood and blood substitutes after a disaster.

It has joined other banks in founding the New England Association of Blood Bank Directors, an organization devoted to the improvement of transfusion therapy. It is also a member of the American Association of Blood Banks. It is affiliated with the Blood Bank of the Chelsea Soldiers Home, making the facilities of a large bank available to a hospital whose bank is too small to provide them adequately. It has cooperated with the Post Office employees, veterans' organizations, and others in providing blood for their members.

Plans for the future

In the near future the Bank will need to improve further its service to the Hospital by a number of changes. These include (should a centralized operating room suite be constructed) a new site for its laboratories and storage facilities in close juxtaposition to the operating rooms. Also, a less cumbersome method of blood distribution would be of great service to the doctors and to the ward personnel. The Bank needs to carry out research in many of the problems facing blood banks. It also will have to obtain satisfactory plasma substitutes for use in treating nonhemorrhagic shock.

No change is at present contemplated in its internal workings. Blood collection has been very well handled by the nurses, laboratory work by the technicians. The direction is in the hands of a surgeon, assisted by a highly-trained expert in the field of blood grouping. This seems at present to be a good balance between the clinical and laboratory aspects of transfusion therapy. Because 90% of the blood dispensed is given to surgical patients, it has seemed wise that the clinical problems of the Bank should remain under the direction of a clinician who is in close contact with the surgical patients.

Statistics

The following points are of no medical importance, but only serve to inflame the imagination: Since its start, the Blood Bank has always operated in the black as far as the Hospital's financial structure is concerned. This does not take into account the free service to patients (sometimes 50% in the General Hospital), but does include hospital overhead. The Bank has never lived within its budget, having spent in its early years sometimes as much as three times the amount allowed. The budget for 1942 was $5,000. In 1951 the Bank spent $144,000. It costs the Bank $8.58 to dispense a transfusion, the larger part of this expense going for the salaries of nurses and technicians.

The transfusion rate for this Bank is about 12,000 a year at present. The largest number of transfusions it gave to a single person was 122; the largest number of transfusions given to a single person in a short period of time was 56 in 3½ hours (the latter includes autotransfusions).

At present 30% of the blood that is dispensed comes from the Red Cross, one-quarter from professional donors, and the rest from friends or families of patients.

In ten years the Bank has dispensed over 84,500 transfusions of whole blood and 4,246 transfusions of plasma. During that time it has had two deaths from mismatching. The national death rate from mismatched transfusions is between 1:500 and 1:3,000. The Bank has given out blood at the average rate of a transfusion per hour for ten years. In 1951 it gave out one blood every three-quarters of an hour. The total weight of blood dispensed is 22 tons, or in liquid measure 10,000 gallons. If spread in a band one millimeter thick and one centimeter wide it would twice girdle the earth with a ribbon of red.

Lamar Soutter, M.D.,
Director of the Blood Bank

* * *

Dr. Walter S. Burrage, Associate Physician on our staff, was elected President of the American Academy of Allergy at its Annual Meeting in Chicago on February 20.

Dr. Benjamin Castleman, Acting Chief of our Department of Pathology and Bacteriology, spent the first two weeks of March in Bogotá, Colombia, at the invitation of La Sociedad Colombiana de Medicina Interna and the Universidad Nacional de Colombia. He delivered six lectures and conducted three clinicopathological conferences (MGH cases discussed in Spanish).

Another MGH Case Records Club, of twelve physicians, was discovered in Bogotá, called Martes Orquideas (Orchids on Tuesday), named after a Spanish movie film in which a husband sends his wife an orchid every Tuesday when he does not return home. These physicians discuss a case record every Tuesday but, although orchids are very plentiful there, it could not be ascertained whether their wives receive them every Tuesday.

Word has just come to us that on March 18 Dr. Edward D. Churchill, Chief of our General Surgical Services, was elected Correspondant étranger dans la deuxième Division (Chirurgie, accouchements et spécialités chirurgicales) of the Académie Nationale de Médecine, Paris, France.

Dr. Dean A. Clark, our General Director, was elected President of the New England Hospital Assembly at its Annual Meeting in March.

Dr. Horatio Rogers, Visiting Surgeon at M.G.H., was recently appointed Chairman of the Professional Educational Committee of the State Civil Defense Agency.

On March 17 (Miss Sleeper's birthday, incidentally) ground was broken in the southeast corner of the Bulfinch Yard for a new residence for student and graduate nurses. The building, which is to have 9 floors, is planned to accommodate 155 persons, including a residence director. The basement will provide space for laundry and trunk storage. The first floor will include the more formal social rooms. The roof will be enclosed to make a game room. The 7 bedroom floors are to be divided into 3- and 4-room suites, each with its own bath. On each floor will be a sitting room, with kitchenette and laundryette, opening onto a small sun porch. Included in the building plans is the removal of the Fruit Street section of the brick wall enclosing the Bulfinch Yard, and the placing of gates at the junctions of Fruit Street with Blossom, Parkman with North Anderson, and Fruit with North Grove.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Dermatology

Lever, W. F.
Pemphigus vulgaris.
In Current therapy, Howard F. Conn, M.D., Editor, Philadelphia, W. B. Saunders Company, pp. 569-570.

Neurology, Neurosurgery, and Psychiatry

Cobb, S.
On the nature and locus of mind.
A.M.A. Arch. Neurol. & Psychiat. 67:172-177.
Cobb, S., and Miles, H. H. W. (Editors)
Diagnostic and therapeutic problems in a patient with epilepsy, psychosis and temporal lobe abnormality.
Am. J. Med. 12:238-243.

Pathology

Longcope, W. T., and Freiman, D. G.
A study of sarcoidosis.
Medicine 31:1-132.

Books

Benda, C. E.
Developmental disorders of mentation and cerebral palsies.
New York, Grune & Stratton.
Cobb, S.
Foundations of Neuropsychiatry, 5th edition.
Baltimore, Williams and Wilkins Company.
Miles, H. H. W., Cobb, S., and Shands, H. C. (Editors)
Case histories in Psychosomatic Medicine.
New York, W. W. Norton & Company, Inc.

Miscellaneous

Castleman, B.
Tracy Burr Mallory, 1896-1951.
Harvard Med. Alum. Bull. 26:66-68.

MASSACHUSETTS EYE & EAR INFIRMARY

The Alumni Meeting of the Massachusetts Eye and Ear Infirmary was held at the Hospital on April 16, in conjunction with the New England Ophthalmological Society Meeting on the 15th of April and the New England Oto-Laryngological Society Meeting on the 16th.

Infirmary staff members, alumni, and guest speakers presented papers and participated in group symposia during the two-day conference. Clinic sessions, both surgical and diagnostic, were conducted by Infirmary doctors in the operating rooms and out-patient clinics.

Among the guest speakers were Dr. Hugo L. Blair of the Mayo Clinic, who talked on "Basic aspects of visual field study" and Dr. Jerome Hilger of St. Paul, Minnesota, who presented "Recent concepts and newer therapy in Otorhinolaryngology".

At the Alumni Dinner, on Wednesday evening, Mr. Henry Hixon Meyer, President of the Board of Managers, spoke on the present and future objectives of the Infirmary, including particularly the Hospital's research and teaching programs. Special guest speaker of the evening was Mr. Thomas Scott, who discussed "Red China".

The Executive Committee of the Board of Managers has announced the appointment of Dr. Edwin B. Goodall, as Assistant in Ophthalmology.

Dr. Bernard Zeavin and Dr. Peter Beck began their residencies on the Ophthalmological Service on April 1. Dr. Zeavin is a graduate of University of Manitoba, Faculty of Medicine. Dr. Beck studied at the College of Physicians and Surgeons, Columbia University.

Dr. Merrill I. Lineback completed his residency in Otolaryngology on March 31. He has returned to Atlanta, Georgia, for private practice.

Dr. Paul A. Chandler lectured recently in Roanoke, Virginia, at the twenty-fifth Annual Spring Congress of the Gill Memorial Eye, Ear, Nose and Throat Hospital.

The Board of Trustees, at their meeting on April 4, voted to appoint:

Dr. Mustafa I. Adham as Acting Assistant Resident on the Surgical Service for four months, beginning March 1;

Dr. Abdus-Sattar Adi as Acting Assistant Resident on the Surgical Service for four months, beginning March 1;

Dr. Alexander Forbes as Consultant in Neurophysiology;

Dr. Robert N. Ganz as Assistant Physician on the Children's Medical Service;

Dr. Thomas J. Mathieu as Assistant Resident in Urology from September 1 through December 31, 1952, and as Resident in Urology from January 1 through December 31, 1953;

Dr. John Schaefer as Assistant Resident in Anesthesia, beginning May 1;

Dr. Marion L. Slemons as Clinical Associate on the Children's Medical Service;

Dr. Clifford J. Straehley, Jr. as Resident in Urology from July 1 through December 31;

Dr. Daniel L. Sutherland as Second Assistant Resident in Neurosurgery from March 1 through June 30.

The Trustees also appointed the following Interns for one year, beginning July 1:

Surgery

John D. Constable
Richard R. Curtin
Ira A. Ferguson, Jr.
Donald J. Glotzer
William H. Hendren, III
Charles E. Huggins
Benjamin B. Jackson
John A. Malcolm

Medicine

(subject to the approval of the General Executive Committee)

John T. Binion
Beverly W. Cobbs, Jr.
Herschel D. Collins
Garth R. Drewry
Hugh R. Dudley, Jr.
Patricia A. McIntyre
William L. Morgan, Jr.
James A. Pittman, Jr.
Howard Rasmussen
Kenneth J. Ryan
John B. Thomas
Yang Wang

Children's Medical Service

(subject to the approval of the General Executive Committee)

Susanne J. Lamdin
Robert B. Rosen

At their meetings held on March 14, 21 and 28, and April 4, the General Executive Committee voted:

To accept the resignation of Dr. James L. Buchanan from the position of Clinical Assistant in Surgery, effective as of May 1;

To accept the resignation of Dr. Frederic B. Mayo from the position of Clinical Assistant in Medicine, effective as of June 1;

That Dr. Jean Lepoire's appointment as Second Assistant Resident in Neurosurgery be terminated as of February 29 and that he be reappointed to the position of Research and Clinical Fellow in Neurosurgery, from March 1 through September 30.

To appoint:

Dr. André d'Etchéverry as Clinical Fellow in Radiology for one year, beginning July 1;

Dr. George S. Klein as Research Fellow in Psychology, assigned to Neurosurgery, effective as of March 27;

Dr. John B. Löfstrom as a Fellow in Anesthesia for one year, beginning October 1;

Dr. Rosemary T. Nelson as Clinical Assistant in Surgery, assigned to the Tumor Clinic, effective as of April 1;

Dr. Robert M. O'Neal as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Julio Toriello as Clinical Fellow in Radiology, effective as of April 25;

Dr. Armand Trepanier as Clinical Fellow in Radiology for one year, beginning July 1.

* * *

STAFF WIVES

All MGH Staff Wives are urged to attend the next regular meeting on Wednesday, May 7, at 1:15, in the Archives Room of the Moseley Building. Members who can come early are invited to meet for lunch at noon in the Nurses' Cafeteria.

At the April meeting a progress report was given by the committee appointed to participate in decorating the House Staff Club rooms. Books and phonograph records were collected at morning coffee parties the last week in April in six suburban communities. "Open house" in the Club is planned for early in May.

Mrs. Richard Sweet reported on the surgical dressing group. Doctors' wives have worked each Thursday morning on the ninth floor of the White Building since the middle of February. Mrs. William Waddell, Mrs. Mary Low Taylor, and Mrs. Allen Brailey have made many supplies in their homes. Mrs. Thomas Gephart invited Staff Wives of Newton to make dressings in her home. These supplies are urgently needed, and whatever can be done will be much appreciated.

Mrs. Fritz Lipmann will work with representatives of the Distaff Club and the Ladies' Visiting Committee on housing. Please telephone her at Lafayette 3-5292 if you wish to make your home available to a House Staff family during the summer or at any time you may be away.

Mrs. Charles Kubik will welcome suggestions regarding a supply of seedlings to be sold at the School of Nursing's Flower Shop.

Mrs. Milford Schulz (Belmont 5-1232) is enlisting the help of Staff Wives and others interested in music. She is working with Mrs. Cushing of the Baker Memorial, whose organ music in the Chapel has been enjoyed for many years. Mrs. Cushing gave several organ concerts during Easter week.

Mrs. Walter Bauer reported on the April meeting of the Coordinating Committee. Staff Wives who can devote two hours a week to hospital volunteer work are urged to telephone Mrs. Jack Fife Wright (Lasell 7-0083) or Miss Banks (Lafayette 3-2667), Head of the Rehabilitation Clinic. This Clinic serves civilian adults who have become handicapped by accident or by disease. Here the patients are taught to use the abilities they have left and, therefore, to become more independent. More volunteers are needed to assist the physical and occupational therapists and the rehabilitation counselor.

* * *

A RECENT MEDICAL VISIT TO THE MIDDLE AND NEAR EAST

Early in December I was asked by the State Department to go to Pakistan on a special mission under the Point IV Program. Other consultants were being sent to Pakistan and other countries in South Asia as part of this same program in various fields, including public health, education, agriculture, economics, and engineering.

My mission included several functions. The first was to visit the new medical schools, called medical colleges, which had been established since the liberation and partition in several important centers in both West and East Pakistan. Some of these new medical colleges I visited, in particular the Dow Medical College in Karachi, the Fatima Jinnah Medical College for Women in Lahore, and the Dacca Medical College in East Bengal. I also visited the older King Edward Medical College in Lahore. Other, still newer, medical colleges at Multan and Hyderabad I did not see. The courses at these medical colleges have a duration of five years and will be followed soon by one or two years of internships in the newly developed and growing hospitals. Each class comprises, as a rule, 120 students, making a total of 600 in each school. At each of the medical centers I gave several lectures on cardiovascular subjects.

The second function was that of visiting the major hospitals in Pakistan. These included the hospitals in the larger centers, the main military hospital at Rawalpindi in the Punjab, and several hospitals at Peshawar near the Khyber Pass in the Northwest Frontier Province, including a very fine new construction for tuberculous patients. In East Bengal I saw a small village hospital at Narayanganj which is typical of many of the smaller hospitals in Pakistan and I suppose also in India, needing reorganization and improvement.

The third activity in which I took part was that of the appraisal of facilities for cardiovascular research in Pakistan. I found a number of alert and well-trained young and older physicians, capable of carrying on research, and suggested the development of an active Medical Research Council and an initial research to start off with, which might determine the prevalence of the different types of heart disease in various community groups (poor and well-to-do) in both East and West Pakistan.

Fourthly, I was asked to try to determine the feasibility of arranging for a medical teaching mission or other type of educational aid for Pakistan and India in the relatively near future.

Finally, I found myself involved in the examination of a good many private patients, usually in the evening after the regular program of the day had finished. These private patients afforded me a good deal of information about the incidence of diseases among the well-to-do people in the country, at the same time that I was being shown the kinds of diseases from which the public patients in the hospital wards suffered. The problems of infections and dysentery are still very common. In East Bengal I saw several patients with cholera and kala-azar.

Before my departure from Pakistan I had a conference with the Governor General, an old friend and patient of mine, together with some of his public health officials, concerning my impressions of this most interesting tour of the country.

My visits to the hospitals, examinations of private patients, and conferences with the doctors of the various provinces of Pakistan and in India made me aware of the great frequency of heart disease in that part of Asia, a fact that had been ignored or at least misunderstood only a relatively few years ago. The rheumatic heart cases seemed to be mostly among the poor people in the hospital wards and in the villages. Rheumatic heart disease is said to be the commonest type of heart disease now in both Pakistan and India. On the other hand, I found a considerable amount of coronary heart disease and hypertension among the private patients, and relatively little in the wards. I saw two men in Pakistan who had had coronary thrombosis in their thirties and one young man at New Delhi in India who was recovering from acute coronary thrombosis at the age of 29.

In the midst of my visit to Pakistan I crossed India in order to reach East Bengal. On my way back I stopped in New Delhi in India, where my wife joined me for the last part of my expedition. There we were guests of the Minister of Health, Rajkumari Amrit Kaur, a gifted woman who had been secretary to and a close friend of Ghandi. She told us of some of the serious problems of health in India today, which include the presence of one million lepers in the country and the deaths of 500,000 Indians yearly from tuberculosis, with only 18,000 beds available for tuberculous patients, though even this is an increase of 12,000 beds in a relatively few years. In passing through some of the small villages in India we saw a good deal of malnutrition. We felt that some of this might be counteracted by a change in the customs of the country with respect to the sacredness of cattle and monkeys. Although I visited the Lady Hardinge Medical College at New Delhi, lectured, and saw a few patients, our stay in India was too short for adequate impressions about the medical situation there.

On our return west we visited briefly the American University and Medical School at Beirut, where I saw its new hospital construction. Also, we spent 48 hours in Jerusalem on a special mission to the Hadassah Medical School and Hospital; this had been requested by the Hadassah Medical Organization. There I made ward rounds, which were much enlivened by very alert medical staffs, and gave a lecture. From there we proceeded by way of Cyprus to Athens, where again we stopped for three days to renew acquaintances with the Greek medical faculty and to appraise the considerable improvements in medical care and teaching that were evident, in contrast to the difficult dark days of the guerrilla warfare at the time of the 1948 visit of the Unitarian Service Committee's Medical Mission which included Dr. Chester Jones and me among its members. I revisited a number of hospitals in Athens and the classrooms and laboratories of the University's Medical School, gave two more lectures, and saw a number of private patients. There, as in Pakistan and elsewhere, I found a considerable prevalence of hypertension and coronary and rheumatic heart disease. Finally, a brief stop-over in Rome permitted a reunion with a number of our cardiological friends living there and in Bologna; this was arranged by Drs. Puddu and Posteli who have visited us here at the Hospital in recent years.

In retrospect now, I believe that this visit to the Middle and Near East served a useful purpose.

Paul D. White, M.D.,
Board of Consultation

MEDICAL VISIT TO THE FAR EAST

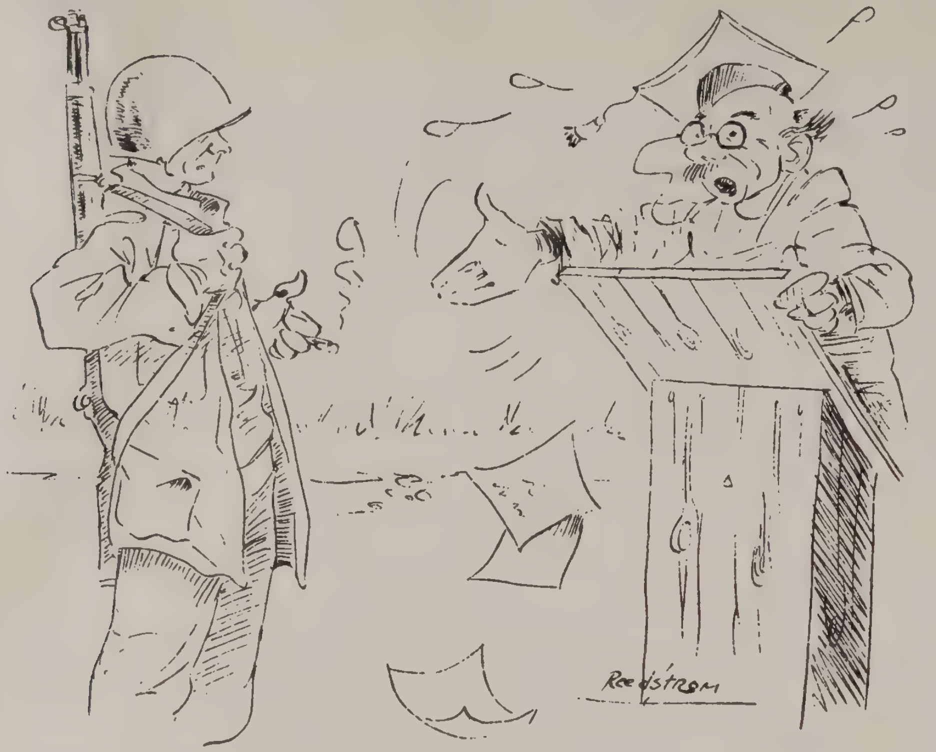
It was confusing to return from a second trip to the Far East as Consultant for the Surgeon General of the Army and find that Boston had had more snow than Korea, that patients previously bedridden with tuberculosis were now dancing in the corridors, and that I myself was being considered a fit subject for study by the U. S. Senate because I was standing in the way of medical progress. Consequently there has been a delay in the attempt to summarize my impressions of the present state of affairs in Japan, Korea, and Okinawa, and the Editor is pushing for my promised observations.

It should be stated first that this trip was a "teaching mission", and not one of a scientific study of problems of military medicine or of inspection of Army hospitals. The teaching was much more carefully planned than at any time before, I believe, and a good part of the time was taken up in attending and taking part in "regional medical conferences". Often I was the only speaker at a conference lasting from two to six hours, and again there would be many other speakers from different parts of the theatre. The attendance varied from forty to two hundred fifty. The most pretentious program was a three-day Postgraduate Refresher Course on "Current concepts in the diagnosis and treatment of diseases of the chest", held at Pusan, Korea. Altogether there were twelve conferences, at seven of which I had no supporters. (I didn't say "no audience".) Besides, there were two talks at Japanese medical schools, twenty "bedside conferences" in U. S. hospitals, and four other conferences with U. S. and Japanese doctors.

The territory covered in Japan was from Sapporo, in the northern island of Hokkaido, to Fukuoka, in the southern island of Kyushu; in Korea, up to and somewhat beyond the 38th Parallel; and much of the length and breadth of Okinawa. (It was a real honor to be made a charter member and honorary president of the 38th Parallel Medical Society.)

The most amazing hospital set-up was that of the combined 3rd and 14th Field Hospitals in Pusan. This hospital cares for the sick prisoners of war. There are about 7,900 patients behind barbed wire, and about 4,700 of these have pulmonary tuberculosis, with 600 with pleural effusion. The U. S. Army doctors are working through the Korean doctors and are doing a remarkable piece of work.

I was impressed, as always, with the high quality of the work in the Army hospitals everywhere. Of course, the young officers are restless and anxious to



Medical Missionary in Korea

pile up points enough to get home, but nevertheless the good work goes on.

There was little time to think of local medical problems, but I was much interested in the plans for further study of the fascinating new entity of "epidemic hemorrhagic fever", and in the success of the new boot in warding off cold injuries. I was disappointed to see that little progress had been made in the handling of infectious hepatitis since Fred Kranes shook his head over the problem in Italy in 1944 and 1945.

The problem of tuberculosis is constantly in the minds of the Army Medical Officers in Japan, because so many of the Japanese war brides are found to have X-ray evidence of this disease. According to our immigration laws, no immigrant with tuberculosis, even "tuberculosis – healed", can be admitted to the United States. In order for a suspected case of tuberculosis, even the wife of a U. S. soldier, to be admitted into the United States, the examining physician must sign a statement that the patient has "pulmonary fibrosis". Even after some months of observation, the conscientious physician has a hard time convincing himself of this state of affairs.

On the last visit I brought a typhoon to Okinawa. This time I escaped by two weeks a heavy earthquake in Hokkaido. So the Devil is still after me, but he'll have to run fast to catch me because I don't know where I'll go next. Maybe I'll stay at home a while and fool him.

Donald S. King, M.D.,
Board of Consultation

During his recent trip to Europe as Consultant to the Surgeon General of the Army, Dr. Edward F. Bland covered 2,400 miles by train, car, and plane in Germany and Austria. In Vienna Dr. Bland addressed a joint meeting of the Medical and Surgical Societies of that city at the University. His subject was "Progress in surgery for mitral stenosis".

BIOGLETS

Dr. Clement A. Hiebert, Intern in Surgery – born in Boston, Massachusetts, June 7, 1926; has spent most of his life in Maine; Navy Air Corps: Radar Technician, 1944-46; A.B., Bowdoin College, Brunswick, Maine, 1947; M.D., Harvard Medical School, 1951; at the end of his 3d year at H.M.S., went with two classmates to Notre Dame Bay Memorial Hospital, Twillingate, Newfoundland, for a summer internship; made house calls by fishing boat, dodging icebergs on the way; performed appendectomies, Cesarean section, tonsillectomies, and delivered twins on his first O.B. house call; father (deceased) was Superintendent of the Central Maine General Hospital and President of the New England Hospital Assembly; a brother is now serving as a surgeon with the U. S. Navy; 6 uncles and great-uncles include 2 general practitioners, a plastic surgeon, a radiologist, and a vice president of a drug house; home address: 240 College Street, Lewiston, Maine.

Dr. James P. Isaacs, Assistant Resident in Anesthesia – born in Struthers, Ohio, August 8, 1919; B.S., Ohio University, 1941; military service: U. S. Naval Reserve Hospital Corps, Pharmacist's Mate 1st Class, serving in the Southwest Pacific Theatre, 1942-45; Columbia Midshipmen's School, 1945; M.D., Johns Hopkins University Medical School, 1949; Surgical Intern, Johns Hopkins Hospital, 1949-50; William Stewart Halsted Fellow in Surgery, Johns Hopkins Medical School, 1950-51; home: Norwood, Massachusetts.

Dr. Hanna Klaus, 2d Assistant Resident in Pathology – born in Vienna, Austria, January 27, 1928; B.A., University of Louisville, 1948; M.D., University of Louisville, 1950; Intern, Louisville General Hospital, 1950-51; home: Louisville, Kentucky.

New addresses:—

Dr. Henry H. Banks (a.r.s. *Or.* 1952), Peter Bent Brigham Hospital, Boston, Mass.
Dr. Charles H. Burnett (c.r.p. 1946), School of Medicine, University of North Carolina, Chapel Hill, N. C.
Dr. Harrie R. Chamberlin (*C.M.* 1949), Grace-New Haven Community Hospital, New Haven 4, Conn.
Dr. Frederick S. Coombs (a.r.p. 1937), 803 Home Savings and Loan Bldg., Youngstown 3, Ohio.
Dr. Sanford T. Freedman (clin. asst. *Or.*), 483 Beacon St., Boston, Mass.
Dr. Arvil J. Hinshaw (*E.S.* 1947), Veterans Hospital, Houston, Tex.
Lt. Robert W. Hopkins, NC, USNR (*S.* 1948), U.S.S. *Repose* AH-16, c/o Fleet Post Office, San Francisco, Calif.
Dr. H. Walter Jones, Jr. (clin. asst. *M.*), 330 Dartmouth St., Boston, Mass.
Dr. E. Ross Mintz (*Path.* 1930 & r.s. *U.* 1932), 8 South State St., Concord, N. H.
Mr. Raymond S. Quick (res. fel. *Physics* 1952), Strong Memorial Hospital, Rochester 20, N. Y.
Dr. William C. Quinby, Jr. (r.s. 1950), 264 Beacon St., Boston, Mass.
Dr. Arthur S. Spangler (r.p. *D.* 1945), 330 Dartmouth St., Boston, Mass.

Brief bits:—

Dr. Walter S. Burrage, Associate Physician at M.G.H., presented a paper entitled "Maintenance cortisone in severe bronchial asthma" before the American Academy of Allergy at its Annual Meeting in Chicago on February 20. The paper had been written by Dr. Burrage and Dr. John W. Irwin, Clinical and Research Fellow in Medicine. On March 22 Dr. Burrage was guest speaker at the Annual Meeting of the Southeastern Allergy Association, held in Augusta, Georgia. His subject at that meeting was "Common sense in Allergy".

Drs. Parker C. Carson (r.s. *Or.* 1940) and Elmer F. Franseen (r.s. *Or.* 1947) announce the removal of their office to 38 School St., Springfield, Mass., for the practice of Orthopedic Surgery.

Dr. Edward F. Lawlor, Assistant Surgeon in Otolaryngology at the Massachusetts Eye and Ear Infirmary, announces the removal of his office to 67 Vernon St., Waltham, Mass.

Dr. Ellsworth H. Trowbridge, Jr. (a.r.p. *N.* 1940), who practises Neuropsychiatry and Electroencephalography in Kansas City, is organizing an epileptic clinic at the K. U. Medical School, where he is the Assistant Professor in Neuropsychiatry.

This short note has come from Dr. William R. Eyler (*C.M.* 1943 & r.p. *R.* 1949).

Some of your readers might be interested to know my present address, which is 55 East Washington Street, Chicago 2, Illinois.

I have an appointment at the University of Illinois as Assistant Professor and will be engaged in the private practice of Radiology in Chicago and Highland Park.

* * *

There is an accumulation of unclaimed articles in the Moseley Coat Room. Claimants may obtain their belongings by going to the Coat Room and offering proof of ownership.

Any items not claimed by June 1 will either be destroyed or donated to a charitable institution.

THE NEWS

No. 113 Boston, Mass. June 1952

NEUROLOGY SERVICE

The past year has witnessed several important changes; some of these can be viewed only with regret, and others may be looked upon with pride, for they assure a necessary growth and development in our department of medical neurology.

Dr. Charles S. Kubik retired as Chief of the Neurology Service on June 30, 1951, and the writer was appointed to fill his place. Dr. Kubik has been connected with this Service as both Neuropathologist and Neurologist since 1927. Through his untiring efforts the Neuropathology Laboratory, which he started in 1928, has been developed as an integral part of both the Neurology Service and the Pathology Department and is generally regarded as one of the finest in this country. A great wealth of neuropathological material has been accumulated and is available for the teaching of neurologists and for research. As Chief of Service he maintained a high standard of clinical neurology and of graduate training, often at personal sacrifice because of limited funds and personnel. Only those who have in the past served as residents or graduate students can fully appreciate how great this contribution has been. As Consultant in Neuropathology and a member of the Board of Consultation, we are fortunate in still having the benefit of his advice and counsel. It has been a unique pleasure this past year to have both Dr. Kubik and Dr. James B. Ayer, past Chief of Neurology and now a member of our Board of Consultation, at our weekly staff conferences.

The services of Dr. Henry R. Viets and Dr. Augustus S. Rose were lost to the Hospital during 1951. Dr. Viets, after a distinguished career in neurology, has retired, and Dr. Rose has been called to the University of Southern California at Los Angeles as Professor of Neurology. Dr. Vincent P. Perlo is on leave of absence, having entered the U. S. Army Medical Corps.

In the spring of 1951, through the combined efforts of the Massachusetts General Hospital and the Harvard Medical School, funds were secured from the National Multiple Sclerosis Society for the expansion of the research and postgraduate educational activities in the Neurology Service. We are happy to announce that the United States Public Health Service has agreed to support the research activities of our department for the next three years, beginning June 1, 1952.

The acquisition of these research funds has permitted several additions to our staff. Dr. Huntington Porter (Resident in Neurology at M.G.H., 1946) has joined the staff as a research fellow. His special interest is the biochemistry of neurological disease. He has been working with Dr. Folch-Pi at McLean on the fractionation of brain tissue and on copper metabolism. Dr. Byron H. Waksman has been transferred from the Neuropathology Department of Harvard Medical School to the staff of the Neurology Department as experimental immunologist. He is presently engaged with Drs. Folch-Pi, Porter, and Raymond D. Adams in the investigation of experimental demyelinative diseases. Miss Margaret Carroll has been added to the staff as tissue technician in the Laboratory of Experimental Neuropathology. Mr. D. Gaulitz assists Dr. Waksman as technician, and Mr. Juris Beggrovs is a technician working with Dr. Porter at McLean. Mrs. Ruth Simonds has joined the staff as secretary, and Miss Eulalia F. Grzebieniowska has been made executive secretary of the department.

New laboratories for Experimental Immunology, Biochemistry, Experimental Neuropathology, and Neurophysiology have been opened on Bulfinch 4.

The other members of the staff have continued their former activities. Drs. Robert S. Schwab, John A. Abbott, and Mary A. B. Brazier continue their electroencephalographic studies. Besides providing for routine electroencephalograms on patients in the M.G.H., they have carried on a number of investigations. Dr. Schwab has continued his studies of fatigue and of the pharmacotherapy of Parkinson's disease and myasthenia gravis. Moreover, he has published a monograph on the electroencephalogram entitled *Electroencephalography in clinical practice,* Philadelphia, W. B. Saunders Company, 1951. This book has been well received. Dr. Brazier has published an excellent monograph on neurophysiology: *The electrical activity of the nervous system,* New York, The Macmillan Company, 1951. The prominence of this group of clinical neurophysiologists is indicated by the fact that several research fellows are coming to the M.G.H. each year for special training in this field. In 1951 the following studied in this laboratory: Dr. Simon E. Markovich of Chile, Dr. and Mrs. Pierre Passouant of Montpellier, France, Dr. Ruth Jens of Salem, Oregon, and Dr. Alejandro P. Arellano of Lima, Peru.

Dr. Edwin M. Cole has continued his important work in Language Training and in "Cortical Testing". The activities of these two laboratories have been clearly defined in previous reports. I am pleased to say that these laboratories have continued to grow and the service which they render to the Hospital is appreciated by all who work in neurology and related fields.

The staff of the Neuropathology Laboratory has also increased in size. Dr. Edward P. Richardson, Jr., with the help of Dr. Adams, is in charge of the reporting on neurosurgical biopsies and the routine postmortem material, and Dr. Kubik serves as a consultant. Dr. Lysia Saxe of Copenhagen, Denmark, has been here for the past year as a Research Fellow in Neuropathology. She has been supported by a fellowship given by the American Association of University Women. Dr. Remedios K. Rosales has served as Resident in Neuropathology. Mrs. Klara Edwards and Mrs. Jean Engborg work as tissue technicians.

The Out-Patient Clinic and the Neurological Ward have been functioning at full capacity throughout the year. The census is not smaller than in past years, and is probably larger. Our close liaison with Ophthalmology, Medicine, Pediatrics, Neurosurgery, and Psychiatry continues.

Investigations and subclinics: Myasthenia Gravis Clinic – This is continued under Drs. Schwab and William H. Timberlake. The case material is abundant and permits the testing of new drugs for treatment of this disease. The Multiple Sclerosis Clinic – This meets once a week to diagnose cases suspected of having multiple sclerosis and to recommend treatment and management. Drs. Ruth E. Stauffer and R. D. Adams are in charge. The Epilepsy Clinic and a Parkinson's Clinic – These continue to meet once a week under the direction of Dr. Abbott and Dr. Schwab, respectively.

Because of the number of graduate fellows in neurology and neuropathology, our program of postgraduate training has been broadened. Drs. Schwab, Abbott, and Brazier held weekly seminars on electroencephalography during the autumn and early winter months. The weekly macroscopic neuropathology conference has been continued. One evening a week Drs. Richardson and Adams review the microscopic pathology of current cases in the Neuropathology Laboratory. A series of fifteen two-hour seminars on neuropathology has been given during the winter by Drs. Kubik, Richardson, and Adams. Dr. Paul I. Yakovlev has conducted ten evening seminars in neuroanatomy for the house staff and fellows of both the Neurological and Neurosurgical Services. The Thursday morning Ether Dome conferences have been continued, and an out-patient teaching conference is held each Friday at noon.

Steps are being taken to resume the publication of the staff books in which are recorded, indexed, and illustrated all of the cases presented at the weekly staff conferences.

The second and third year neurology lectures for the Harvard students are given as in previous years, also the third year section teaching. Approximately one-third of the fourth year class are taking a month of neurology as an elective, either at the Boston City Hospital or the M.G.H.

In general, the writer is optimistic over the future prospects of our Neurological Service. The Director and Trustees of the Massachusetts General Hospital and the Dean of the Harvard Medical School have been extremely helpful during this period of transition, and we feel confident of their future support. We now have the means of making an important contribution to undergraduate and postgraduate education in neurology and of investigating neurological problems on a larger scale than has hitherto been possible. We hope to maintain the reputation the Service has had for a high standard of clinical neurology.

Raymond D. Adams, M.D.,
Chief of Neurology Service

* * *

Lt. Hermes C. Grillo, MC, USNR (*S.* 1948) has been awarded the Navy Commendation Medal with Combat V for excellence in the line of duty. Lieutenant Grillo, whose present address is U. S. Naval Hospital, St. Albans, Long Island, N. Y., served with the First Marine Division in Korea.

* * *

The largest military-civilian medical symposium ever held in New England by the Army will be conducted at Murphy Army Hospital in Waltham, June 23 through 25. Leading Boston specialists and Army medical chiefs will discuss 23 vital topics, and about 400 physicians, surgeons, and dentists of the Northeastern States are expected to attend. Major General George E. Armstrong, Surgeon General of the Army, will deliver the opening address.

Massachusetts General Hospital is well represented on the program. Dr. Edward D. Churchill will discuss a paper on "Hyperparathyroidism" to be delivered by Major General Leonard D. Heaton, Commander of the Letterman Army Hospital in San Francisco. Also to be featured on the program are Drs. Oliver Cope, Varaztad H. Kazanjian, Donald S. King, Robert R. Linton, Laurence L. Robbins, Richard H. Sweet, Kurt H. Thoma, Arthur L. Watkins, and James C. White.

Invitations to hear the discussions may be obtained by writing to the symposium headquarters at Murphy Army Hospital. No registration fee is required.

The Board of Trustees, at their meetings on April 18 and May 2, voted:

To accept with great regret the resignation of Dr. James R. Killian, Jr. from the Scientific Advisory Committee;

To accept the resignation of Dr. Frederick C. Robbins from the position of Assistant to the Children's Medical Service, as of April 30.

To appoint:

Dr. Lawrence J. Barrows as Resident in Neuropathology, to begin July 1;

Dr. George Christman as Assistant Dental Surgeon, beginning July 1;

Dr. Thomas Frank as Assistant Resident on the Children's Medical Service from July 1, 1952 through June 30, 1953;

Dr. Thomas R. Goethals to the Board of Consultation;

Dr. Robert C. Lincoln as Intern on the Dental Service for the year beginning July 1;

Dr. William D. Nichol as Clinical Fellow in Radiology, with the duties of an Assistant Radiologist;

Dr. James P. Ryan as Intern on the Dental Service for the year beginning July 1.

At their meetings on March 28, April 18 and 25, and May 2, the General Executive Committee voted to make the following promotions on the Surgical Service, each effective as of July 1, with one exception:

Dr. Richard C. Austin from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. John F. Burke from the position of Intern to that of Third Assistant Resident;

Dr. Robert C. Coe from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. John O. Esslinger to the position of Senior Resident on the Orthopedic Service, effective as of January 1, 1953;

Dr. Frank W. Garran, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Melvin J. Glimcher from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Thomas H. Green, Jr. from the position of Second Assistant Resident to that of First Assistant Resident;

Dr. Walter M. Haynes, Jr. from the position of Intern to that of Third Assistant Resident;

Dr. Clement A. Hiebert from the position of Intern to that of Third Assistant Resident;

Dr. Richard N. Kleaveland from the position of Intern to that of Third Assistant Resident;

Dr. Isaac V. Manly from the position of Second Assistant Resident to that of First Assistant Resident;

Dr. D. Franklin Milam, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Federico Mora from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Talmage W. Nielsen from the position of Second Assistant Resident to that of First Assistant Resident;

Dr. William P. J. Peete from the position of Second Assistant Resident to that of First Assistant Resident;

Dr. George S. Richardson from the position of Second Assistant Resident to that of First Assistant Resident;

Dr. Frederick G. Shaffer from the position of Intern to that of Third Assistant Resident;

Dr. David B. Sheldon from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Clifford J. Straehley, Jr. from the position of Second Assistant Resident to that of First Assistant Resident, assigned to Urology;

Dr. Eji Suyama from the position of Third Assistant Resident to that of Second Assistant Resident;

Dr. Jack E. Tetirick from the position of Intern to that of Third Assistant Resident.

To appoint:

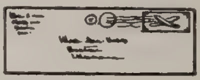
Dr. Lawrence J. Barrows as Clinical and Research Fellow in Neurology, effective July 1, this appointment to run concurrently with his appointment as Resident in Neuropathology;

Dr. Abraham Fineman as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. John B. Harris as Graduate Student Assistant in Surgery for a period of two months, beginning April 2 and ending June 2;

Dr. Theodore F. Hueter as Research Fellow in Physics, assigned to Neurosurgery, for one year, beginning January 1, 1952;

Dr. Philip M. Margolis as Clinical Fellow in Psychiatry, beginning July 1.



New addresses:—

Dr. Wallace C. Bedell (*E.S.* 1945), 168 South Cherry St., Poughkeepsie, N. Y.

Lt. William N. Christenson, MC, USNR (*M.* 1949), MSTS Atlantic, 58th St. and 1st Ave., Brooklyn 50, N. Y.

Dr. John J. Cranley, Jr. (clin. assoc. *S.*), 1180 Beacon St., Brookline, Mass.

Dr. Robert N. Ganz (*C.M.* 1925) 262 Beacon St., Boston, Mass.

Dr. Elizabeth M. Hincks (psychol. 1951), Psychology Department, St. Elizabeth's Hospital, Washington, D. C.

Dr. Dera Kinsey (a.r.p. 1939), 203 Commonwealth Ave., Boston, Mass.

Lt. John W. Littlefield, MC, USNR (*M.* 1948), U.S.S. *Repose* AH-16, c/o Fleet Post Office, San Francisco, Calif.

Dr. Earle D. Mason (*M.* 1946), 174 Denslow Ave., West Los Angeles 49, Calif.

Dr. Kenneth M. Metcalf (r.p. *C.M.* 1925), 169 East 78th St., New York, N. Y.

Dr. Laszlo Ormandy (*Or.* 1943), 1532 16th St. N. W., Washington 6, D. C.

Dr. Richard L. Pearse (*E.S.* 1934), 604 West Chapel Hill St., Durham, N. C.

Dr. Thomas Rutter (*E.S.* 1946), Jackson Clinic, 16 South Henry St., Madison, Wis.

Dr. D. Vernon Thomas (a. an. 1952), Massachusetts Memorial Hospitals, Boston, Mass.

Brief bits:—

Dr. Edward B. Benedict, Endoscopist on our Staff, discussed the various types of gastroscopes at the meeting of the American Gastroscopic Society on May 1. At the meetings of the American Gastroenterological Association, held on May 2 and 3, Dr. Benedict discussed two papers: "Endoscopic aspects of the gastric mucosa in relation to its function", by S. J. Stempien, Jacob Oritt, and Norman Karr; and "The use of anesthetic agents in gastroscopy", by John S. Atwater.

Dr. Earle M. Chapman, Associate Physician at M.G.H., will be in Chicago June 7-12 as a delegate from Massachusetts to attend the American Medical Association meetings.

Dr. Albert E. Sloane, Assistant Surgeon in Ophthalmology at the Massachusetts Eye and Ear Infirmary, delivered a lecture on "Children with visual handicaps" at the Harvard School of Public Health on April 23.

MASSACHUSETTS EYE & EAR INFIRMARY

The position of Senior Ear, Nose and Throat Resident has been renewed this year. This post, created during the wartime emergency but not continued in the past few years, provides for additional supervision of the resident group and relieves the Chief of Service of a number of administrative details. Dr. George F. Reed has been appointed to serve as the new Senior Resident.

Members of the Winthrop Foundation for the Deaf took part in a panel discussion on "The hard-of-hearing child". The discussion was held at the Massachusetts Speech Conference held in Worcester on May 3. Miss Helen Patten, Speech Therapist, acted as Chairman of the panel. Mrs. Victoria Jesseman, Speech Therapist, presented a demonstration with two of the Winthrop Foundation's young pupils. A paper, "How Social Service helps to integrate the professional services for the child with a hearing problem", was read by Miss Madelaine Shipsey, Social Case Worker.

Miss Isabel Whiting, Director of Social Service at the Infirmary, has been appointed an Associate in Medical Social Work on the faculty of Simmons College School of Social Work.

Dr. Mahmud Ali Shah, Professor of Ophthalmology at the Dow Medical College, Karachi, Pakistan, is observing the work carried on here by the Eye Service. Dr. Shah, who recently completed the postgraduate course in Ophthalmology given by Harvard Medical School, plans to spend a year in this country. He holds a fellowship granted under the United States Point IV Program.

THE NEWS appreciates very much this nice letter from Dr. Merrill Lineback (*Otolar.* 1952). From 113 Fourteenth Street, N.E., Atlanta, Georgia, Dr. Lineback writes:

> It was very pleasant being associated with all my friends on Olympus, and I shall always treasure fond memories of the M.G.H. and E. & E. Greetings from the *very* sunny south to all up there.
>
> My office is located "between the Peachtrees" on, I think, one of the old Civil War thoroughfares; and sometimes, late in the afternoon, the fading sunlight glancing off the shiny chrome of the passing stream of homeward-bound cars appears to reflect from a loose-hung sabre or a fixed bayonet. In the mist of car exhaust appears for a fitful instant a battered, diaphanous gray — or blue — uniform.
>
> Enough of this daydreaming! As you can see, I have few patients as yet.
>
> Hope to visit you-all whenever I'm up Boston way.
>
> Warmest regards.

Since the Infirmary has joined the more general trend and is using in its latest Annual Report the unhyphenated form for the word "Otolaryngology", THE NEWS has also adopted this spelling for all notices which refer to that department of the Infirmary. — *Editor*

The Women's Auxiliary to the Middlesex South District Medical Society was entertained at McLean Hospital on March 11. Mrs. James Marvin Baty presided over the meeting.

Dr. W. Franklin Wood, Director of McLean, spoke about the history of the Hospital from the time of its incorporation in 1811. He told of the many changes which have affected the Hospital through the years and of the modern treatments which are at present employed to aid in restoring the mentally ill to normal health.

Miss Margaret C. Tibbetts, Director of Nurses and Nursing Service at McLean, gave a brief history of the McLean Hospital Nurses Training School from the time of its beginning in 1882. Miss Tibbetts also spoke about the recruitment of nurses at the present time, and emphasized particularly the future for nurses in the field of psychiatry.

Mrs. W. Franklin Wood and Mrs. Paul M. Howard, whose husband is Acting Chief of Psychiatry at McLean, poured at the tea given in Higginson House.

The McLean Hospital School of Nursing held its Investiture Service in the Samuel Eliot Memorial Chapel on March 17. Mrs. Evangeline H. Morris, Director of the Simmons College School of Nursing, addressed the students who were being formally accepted into the School. Dr. Wood and Miss Tibbetts presented to the women their caps and to the men their four-in-hand ties to replace the bow-ties.

Following these presentations, a Florence Nightingale lamp was lighted and the students recited the Florence Nightingale Pledge. A picture of this very impressive part of the ceremony is on page 6. The beautiful Chapel window is shown in the background.

The Reverend Cuthbert Fowler pronounced the benediction. Dr. Homer Whitford presided at the organ.

Twelve student nurses were accepted into the School.

Forty-five long-term employees at McLean were presented with service pin awards at a buffet supper on May 2.

Dr. Wood introduced Mr. Ralph Lowell, a member of the Board of Trustees, who presented the pins as "a token of appreciation for long and faithful service". Dr. Wood then awarded a ten-year pin to Mr. Lowell.

A 50-year pin was presented to Mr. Alfred Mercer of the Hospital's upholstery shop. Mr. Mercer is the first McLean employee to receive such an award and the third employee of the Massachusetts General Hospital Corporation to be so honored. The other two were Mr. Eric Frankson, past Storekeeper, and Mr. Robert Henderson, past Dean of Orderlies, both of the General Hospital, who received their 50-year pins on Ether Day, 1945.

Mr. Salvina Britts received a 40-year pin. Six employees received 30-year pins, fifteen received 20-year pins, and twenty-two received 10-year pins.

* * *

GASTROINTESTINAL CLINIC

The Gastrointestinal Clinic continues its weekly sessions, Tuesday afternoons, with an attendance averaging 30 patients. The roster of patients grows from year to year. Most of them are handicapped by maladies characterized by recurrent symptoms, and appear to find in this Clinic a helpful continuity of care by one responsible physician or surgeon. The majority of cases come under the following diagnostic groups:

1. Chronic ulcerative colitis

    a. The ambulatory cases of relatively mild degree and limited involvement of the colon. These are more frequent than usually supposed by doctors who see only the ulcerative colitis of severe character, on the hospital wards. These people are doing a day's work as housewives, mill hands, truck drivers, and school children. Some of them do not seem inadequate at all. Some need our psychiatrist consultant's guidance; or the responsible physician in the Clinic needs the psychiatrist's help, so that he may curb his impatience and know what not to do. These patients can be kept effective; some, as the years go by, can be labeled — tentatively — "healed".

    b. The precariously balanced case, recently discharged from the hospital ward, and trying to meet obligations within all too clear limitations. It is for these patients that we ask for and get such practical aid from our Social Service workers.

    c. The ileostomy cases. Dr. Richard Warren has provided the impetus for establishing a new group, within the Clinic, for ileostomy cases that report the first Tuesday of each month. Here they settle the minutiae of detail concerning the care of ileostomy. This takes patience, and an inordinate amount of time. The reward is physical comfort for the individual ileostomy patient, and a bolstering of the *esprit de corps* of these plucky people.

2. Cirrhosis of the liver

    It is encouraging to follow some of the recently "decompensated" livers, in the months after hospital discharge. These patients rally well; they need a clinic that can give them the long view. There have been instances here where physician and social worker, with psychiatrist's assistance, have been able to do constructive preventive medicine for the as yet salvageable cirrhotic patient.

The Clinic serves as a follow-up for some of the cirrhotics who have had spleno-renal or posto-caval shunts. Other cases can be prepared for such surgery.

3. Peptic ulcer

It is with these cases that the Clinic's opportunity for teamwork of surgeon and physician is particularly helpful. The pros and cons of surgical measures for relief of intractable pain can be threshed out by doctors who have followed the progress of symptoms over months or years, and know the patient well.

It is to the Gastrointestinal Clinic that come the poor results of subtotal gastrectomy, as well as the far more frequently comfortable patients who return periodically to report that they are symptom-free following this operation. The patients with the "Dumping syndrome" have been encouraged to return to us, particularly to Dr. Culver, who has done much to alleviate their lot and to study the genesis of their symptoms.

4. Among other diagnostic groups, there has been particular interest in the benign esophageal strictures who receive bouginage therapy in the Clinic; the convalescents from infectious hepatitis; the diaphragmatic hernias that may or may not cause appropriate symptoms; and the ileitis group.

The personnel of the Clinic remains much as it was at the last report, four years ago. Dr. Richard Warren has joined the surgical side of the team. The members of Dr. Jones's group of research fellows have contributed a great deal — Drs. Mora, Dalrymple, Benson, and Ebeling. Dr. Arthur French, prior to his departure to join the University of Utah Medical School faculty, was a highly valued member of the Clinic. Dr. Warren Point continues the active work begun as a research fellow. Dr. Eugene Smith has served as consultant psychiatrist, and most helpfully.

Miss Dorothy Kellogg is the member of the Clinic with the most years of experience. She is, in her capacity as Social Service worker, a wise counselor, gracious hostess, and indispensable smoother of ruffled feathers. Mrs. Foley, who has presided over the Reception Desk for several years, makes the Clinic a place to which our patients like to come.

Myles P. Baker, M.D.,
Head of Gastrointestinal Clinic

* * *

National Hospital Day was observed at M.G.H. with a very interesting tableau, given in the Moseley Rotunda on the afternoon of May 12. An audience of invited guests, many of whom were those who have served as volunteers here at the Hospital, was greeted by Dr. Clark, who outlined the over-all picture of patient care and stressed particularly the role of the volunteer as an indispensable segment of the Hospital activities. Dr. Clark then introduced Dr. Berg, who can out-MC any other MC to be found anywhere – professional or otherwise. With Dr. Berg in the speaking role and Dr. Leonard Laster, an Assistant Resident in Medicine, enacting most realistically and often convulsingly the pantomimic part of a bedridden patient, the audience was taken through each step in a patient's experience from the time he enters the Admitting Office or the Emergency Ward until he is discharged from the Hospital.

1. The patient was met in E.W. by two volunteers, who wheeled him in his bed to his imaginary room on the Medical Service. Dr. Berg brought out the fact that nearly 48,000 hours were contributed by our volunteers during 1951.

2. The functions of the two nurses who then appeared at the patient's bedside were explained by Miss Sleeper.

3. A member of the House Staff, represented by Dr. Kurt J. Isselbacher, Assistant Resident in Medicine, visited the patient while Dr. Berg explained his various duties.

4. Mealtime having been reached, Miss Hatch gave a résumé of the activities of her department. She informed us that, on an average, 5,000 meals a day are served at M.G.H. each year, with food bills amounting to $555,000 per year. The many special diets were mentioned.

5. The visit of the student doctor who appeared next at the patient's bedside was described by Dr. Berg. He said that in some instances the eager interest displayed by the student has inspired the patient with such confidence in him that the student is the doctor the patient prefers above those with greater experience.

6. Next to appear beside the patient was a member of the Research Staff. Dr. Berg enumerated the several subdivisions of this Service, and told us that a budget of $2,000,000 a year for research is made possible through the many grants from contributing organizations and others. It should be remembered that all expenditures for research are scrupulously segregated from other expenses and do not in any way increase the cost of hospitalization of patients.

7. A member of one of our laboratories then made an appearance, while we were again instructed in what was going on.

8. A technician with a portable X-ray machine appeared next, and while Dr. Berg was explaining that this type of machine is less satisfactory than the stationary ones and is used only when it is inadvisable to move the patient to the X-ray Room, the technician was taking a picture of the patient's arm.

9. After all this, the patient was now ready for the "Visit" – the member of the Visiting Staff who was scheduled for hospital service at this particular time. Dr. Bland played the role. On the basis of his own and the preceding examinations of the patient, Dr. Bland believed that surgery was indicated and requested a consultation.

10. Dr. Churchill appeared as the Consulting Surgeon, made his own examination, and offered his advice to the Visit. Dr. Churchill pointed out that the Visit is *the doctor* in each case and that the Visit may or may not accept the advice of the Consultant. It was also brought out that doctors representing four degrees of training are called upon for each person who enters the Hospital as a bed patient – a medical student, an intern, a resident, and one member or more of the visiting staff.

11. At this point a physical therapist made her appearance, with equipment for the patient to use in order to expedite his recovery, and an occupational therapist, bringing a small loom, provided the patient with a project which would tend to draw his mind away from his woes.

12. When the patient was ready to leave the Hospital the Social Service Department took over. Miss Barbour outlined briefly the many ways in which Social Service is essential during the period up to complete recovery and adjustment to home and other conditions outside the Hospital.

In summing up, Dr. Berg brought out the fact that patient care now costs the Hospital almost $8,000,000 a year. High prices for medicines and equipment, and other factors which intensified the situation, resulted in a deficit of $172,000 at M.G.H. for 1951.

On a blackboard at the right of the stage was a list of Hospital departments, and as the talks went on Mrs. Courtney recorded the number of persons included in each group. The tabulation showed:

170	Administration
550	Volunteers
1100	Nursing Department
117	House Staff
	25 First Year
	67 Second Year
	14 Third Year
	11 Fourth and Fifth Years
335	Dietary Department
130	Students
206	Research Staff
149	Laboratory Staff
75	X-ray Department
	15 M.D.'s
	60 Lay Personnel
320	Visiting Staff
45	Social Service Department
8	Physical Therapy Department
5	Occupational Therapy Department
1046	Others
68	Accounting Department
4324	

This breakdown in figures is not only interesting in itself, but is most impressive when one realizes that in some way, to a greater or lesser degree, each one of the 4324 individuals in the Hospital family contributes to the care of every patient admitted here, either currently or in the future.

Tea was served in the East Cafeteria after the tableau.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration – an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Endocrinology

Gottschalk, C. W., and Riggs, D. S.
Protein-bound iodine in the serum of soldiers and of Eskimos in the Arctic.
J. Clin. Endocrinol. & Metab. 12:235-243.

General Medicine

Jacobson, B. M., and Sohier, W. D.
The effects of ACTH and of cortisone on the platelets in idiopathic thrombopenic purpura.
New England J. Med. 246:247-249.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E.
What is Mongolism? (Congenital acromicria): Pathogenesis and experimental treatment.
Internat. Record Med. 165:75-91.

Brazier, M. A. B.
Expanding concepts in Neurophysiology.
A.M.A. Arch. Neurol. & Psychiat. 67:545-549.

Durling, D., and Benda, C. E.
Mental growth curves in untreated institutionalized Mongoloid patients.
Am. J. Ment. Deficiency 56:578-588.

Orthopedic Surgery

Barr, J. S.
The surgical experiment.
J. Bone & Joint Surg. 34-A, No. 2:249-253.

Cave, E. F.
Femoral-shaft fractures treated by medullary nailing.
New England J. Med. 246:284-288.

Otolaryngology

Goodale, R. L., and Mangiaracine, A. B.
Clinical observations on the use of autogenous vaccine made from cultures of coagulase positive hemolytic staphylococcus aureus.
Laryngoscope 62:299-310.

Holmes, E. M., Sweet, W. H., and Kelemen, G.
Hemangiomas of the frontal bone.
Ann. Otol., Rhin. & Laryng. 61:45-61.

Books

Benda, C. E. (Editor)
The clinically important reflexes, F. W. Bronisch.
New York, Grune & Stratton.

L'ENVOI

In surg'ry I rise at dawn,
And work the day with hours long.
E.W. is quite perverse,
My sleeping hours are in reverse.

I must retire while surgeons slit
The case I did with care admit,
And miss each week my service rounds
Where chief and student each confounds.

And does it not seem hard to you
When ops are set that I could do
And I should like so much to cut,
And have to go and rest my nut?

With this effort at classic iambic meter completed, the embryo surgeon, late of the resident staff, pondered whether or not he would add it to his collection of verse entitled "An interne's hospital book of verse". It probably was more than chance that had resulted in his unconsciously selecting Stevenson's children's poems to parody, as, after all, hospital training is a second childhood with a professional infancy.

In reviewing the period of hospital training extending over seven and a half years, there had been a break of three years which he had divided between Japan, as a member of the Army of Occupation, and investigative work at M.I.T. These years had seemed like a vacation in comparison with the intense hospital work. With his training completed and a comfortable post assured at a Concord hospital, where he could achieve almost complete fulfillment of the possibilities of his training, he counted himself as one of the lucky few. The blandishments of some of the senior surgeons with their astonishing remuneration might have convinced some that his plan to retire to an outside hospital in the Altogether Uninhabitable Interior was a poor choice. He had made the decision firmly and looked forward to the practice of general surgery.

No one could deny that his training had been of the best, and a rugged tradition of accepting almost all surgical therapy from the chin down and from the spinal column anteriorly had been implanted in his soul. What greater goal hath any man! A bit wistfully he recalled he had just missed the experience of conducting a major thoracic operation. This made no difference, perhaps, in the long run; yet what patient, in his right mind, would regard him as a gifted thoracic surgeon? These thoughts were possibly the expression of an occasional twinge of malnourished confidence, or could they be a rational recognition of a deficiency? Obviously, the doing of an operation was a small part of the training, or so he had been encouraged to believe; and, in any event, rumor had it that an operative repertoire was of less importance than longevity in establishing a private practice in the Altogether Uninhabitable Interior. On looking back over the years, how much pleasure remained in the memories of his training!

The professional infancy of the internship with training again directed to the proper management of excreta. . . . the first day of rounds with surveillance by the beady, ferreting glance of his resident. . . . the elegant and Oh-so-mortifying disdain the head nurse imparted in correcting his dosage of a drug. . . . the staccato bark of the page braying his name and initials. . . . the rapture at developing norms in blood bank physical examinations in the basement of Moseley. . . . the pungent odor of vitamin B ampules in preparing IV's. . . . fulminating, acute, irreversible exasperation with elevators. . . . the sincerity expressed by the old Italian's son and his gift of Chianti. . . . a 3 A.M. burn case hematocrit. . . . a first appendectomy. . . . candor and responsibility at service meetings. . . . the crushing weight of precedence. . . . and then a change party, refreshing all participants, giving each tie a new look, and joining visit and intern alike in the pursuit of happiness in the hospital neighborhood.

These and other thoughts, sprinkled with easy and hard clinical decisions, highlighted by smooth and challenging operations, blended into a miniature whirlwind of vivid details that spun rapidly through the young surgeon's mind, and in the mounting column of clinical impressions there emerged the physical form of the Phillips House and the Baker Memorial. Each floor had made its mark, and from the arena of surgical sleight of hand and finesse atop the Phillips House to the linen room stronghold in the basement of the Baker Memorial, every corner, every polished passageway, and every personality brought forth a companion experience for each hour of the day and the night. Would his time ever be so fully utilized again? He clearly would never learn as much so rapidly in the future, but at least time for reflection might permit him to digest and assimilate the gargantuan clinical repast and let him decide which course he really liked best and how he might flavor it another time.

Had he devoted more time to his training than necessary to gain his present understanding of clinical surgery? If he didn't seriously question himself on this score, his friends had done so with something less than perfect understanding. Those who had answered other professional callings were at times astonished at what they recognized as non-professional work amongst his duties. Of course they were misinformed, and if you couldn't convince a bright, young lawyer about the professional aspects of errands to the blood bank, laboratory work, and wheeling beds, this clearly represented a deficiency of the legal mind. One of his

Investiture Service in the Samuel Eliot Memorial Chapel at McLean Hospital

friends, with the doubtful qualification of being a junior member of Philip Murray's staff, had muttered something about present-day lengthy methods of medical training favoring the financially independent and erecting an undemocratic barrier to be scaled by the less fortunate doctors with families. On recalling this intolerant statement the young surgeon warily shook his head, sensing an argument which, if not suppressed, might lead to theories subverting the order of established medical practice. Some social and economic arguments seemed to have implications concerning the progressive position to be assumed by medicine today, and yet he had done nothing, or next to it, to develop his concepts in this political sphere. At thirty-five years of age was he only twenty in a political and civic sense? Probably not, since most of his surgical contemporaries felt at home in these matters.

It *had* been a *wonderful* training, comparable only to a few of the great experiences obtainable today in a world dedicated to television, propaganda, and nuclear fission. Surgical training is a microcosm and partakes of all that is great and petty in life, and by its compressed intensity and demands and by the high quality of its leadership it stands unique as a humanitarian and educational venture. So thought the young surgeon, packing his toilet articles off the dusty top of his Moseley bureau.

He returned his key to Dr. Clay, accepted his fifty cent deposit, and departed for Concord.

B. A. B.

The House Staff Penthouse on the 14th floor of the White Building has been beautifully decorated by members of the Staff Wives Club, the Ladies' Visiting Committee, and other friends of the Hospital.

We should be happy to have the members of the Visiting Staff come up any time to see the apartment.

House Staff Committee

On Thursday evening, May 8, Dr. Madan M. Singh, Intern in Medicine, gave an informal talk on India for the Distaff Club and members of the House Staff. The meeting was held in the Penthouse at 8 o'clock. Mrs. Byrl J. Kennedy acted as hostess and was in charge of refreshments. Mrs. Amasa B. Ford introduced Dr. Singh, who spoke of some of the interesting social and religious customs of India. Questions and a general discussion followed Dr. Singh's talk.

The many friends of Lt. Sigurd B. Gundersen, Jr., MC, USNR (*S.* 1949) will be glad to receive this word from him.

> I have appreciated very much receiving The News since I have been in the Navy.
>
> At the present time I am stationed at the Great Lakes Naval Hospital and am living with my family in Waukegan, Illinois. If things remain the same, I should be out of the Service in November, and I hope to get back to residency training again.

A note – all about MGH-ers – has come from Dr. Charles H. Burnett (c.r.p. 1946). From the University of North Carolina, Chapel Hill, he writes:

> As of July 1st, we will have quite a contingent of General men here in the Department of Medicine of the University of North Carolina, which is currently expanding from a two- to a four-year school. In addition to me, there will be Dr. Isaac M. Taylor (*M.* 1946) and Dr. Ernest Craige (*M.* 1943) as Assistant Professors of Medicine; Dr. Thomas B. Barnett (*M.* 1950), Instructor in Medicine; and Dr. Carl W. Gottschalk (*M.* 1946), who will have a traineeship here from the National Institute of Health and will be working with Dr. Craige.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 114 Boston, Mass. July and August 1952

THE HOUSE STAFF CLUB ROOMS

The Penthouse on the top floor of the White Building has been turned over to the House Staff for use as club rooms, and an Open House was held there Wednesday, May 28, attended by about 300 guests.

This project was undertaken several months ago by the Staff Wives group. The House Staff sent out letters to people interested in the Hospital and received a very enthusiastic response—163 people, from 29 States, replied with contributions amounting to approximately $2,900.

There was widespread local interest, as well. Coffee parties were given in five different communities to collect phonograph records and books. Hostesses in their respective communities were Mrs. Joseph C. Aub, Mrs. Walter Bauer, Mrs. Earle M. Chapman, Mrs. Daniel S. Ellis, and Mrs. James C. White. Mrs. Raymond D. Adams, Mrs. Marshall K. Bartlett, and Mrs. Howard Ulfelder made collections in their own neighborhoods. In response to these combined efforts, about 500 books and 200 records were collected.

The Boston Museum of Fine Arts has loaned pictures for the rooms, among them two Rosenbergs; and both Dr. J. Howard Means and Dr. Fritz B. Talbot have given original paintings. The Vose Galleries have loaned a handsome carved head, done in wood by the sculptor Charles Cutter. Dr. Lamar Soutter gave a Capehart Victrola. Among the other gifts received were a piano, a percolator, china, and incidental accessories.

The decorating committee, consisting of Mrs. Walter S. Burrage, Mrs. Henry H. Faxon, and Mrs. Howard B. Sprague, has done an outstanding job. The modern decorative formula combining refreshing colors, function, practicability, and comfort is executed to perfection throughout the apartment. Each room has a distinctive decor expressed in comfortable lounges, chairs, occasional tables, etc., and each has been planned for a separate activity. The piano, television set, and record player are placed in separate rooms, so that each may be enjoyed without conflict with another. The colors and arrangements in the entire apartment are most original, and it would be difficult to single out any one room for specific comment. The living room is gracious and comfortable, ideal for entertaining or for individual relaxation. French doors open out to a terrace which affords an excellent view of the Charles River and environs. Another room to excite considerable interest and comment is the "Bird-Cage Room", which derives its name from the paper on one wall—a whimsical motif of white and yellow bird-cages on a gray background.

For the opening Mrs. William H. Sweet contributed some delightful flower arrangements designed to complement the color schemes in the various rooms. Miss Louise Hatch, Director of the Dietary Department, provided the refreshments.

Particular thanks are due the carpenters and painters of the Hospital for their interest and assistance.

Every one of us on the House Staff wishes to thank all those who helped make our new Club rooms possible – those who were instrumental in securing the apartment; all those who helped raise the money, decorate the rooms and furnish them; and all who contributed money, books, phonograph records, and pictures.

If we have failed to mention anything or anyone, please forgive us. It's because there has been so much done we can't yet take it all in.

* * *

Dr. Fritz Lipmann, Research Chemist on our Staff, is one of 19 biochemists in his country chosen to receive scholarships from the National Science Foundation, to attend the Second International Congress of Biochemistry in Paris, July 21-27. The choices were made on the basis of contributions to research in biochemistry, as recommended to the Foundation by a committee appointed by the American Society of Biological Chemists and endorsed by the Biological Chemistry Division of the American Chemical Society.

Dr. J. H. Means, recently Chief of our Medical Services and now a member of our Board of Consultation, was the recipient of the Squibb Award for 1952 at the Annual Meeting of the Endocrine Society, held in Chicago on June 6. The Award was made "for meritorious work in the field of Endocrinology". This is the twelfth time the Award has been granted. One other MGH man has received it – Dr. Fuller Albright, in 1948.

Dr. Paul D. White, a member of our Board of Consultation and Executive Director of the National Advisory Heart Council, was voted the winner of the Distinguished Service Award of the American Medical Association for 1952. The award consists of a gold medal and a citation "for outstanding service in the science of Medicine", and was conferred upon Dr. White at the 101st Annual Convention of the A.M.A., held in Chicago in June.

OFFICIAL NOTICE

In order to clarify and strengthen the administrative organization of the Hospital and to give recognition to outstanding administrative accomplishments, the Trustees have taken the following actions, effective as of May 6, 1952:

1. Dr. Charles L. Clay has been appointed Assistant Director with tenure until the usual retiring age for full-time staff.
2. Dr. Ellsworth T. Neumann has been promoted from Assistant Director to Executive Officer for the entire Hospital.
3. Mr. Henry J. Murphy has been promoted from Administrative Assistant in charge of Housekeeping and Laundry to Assistant Director for the entire Hospital.
4. Dr. Leon R. Lezer continues as Assistant Director, but his duties have been broadened to include the entire Hospital.

Dr. Clay will continue to act as my deputy for matters of general policy.

Dr. Neumann will direct the day-to-day execution of the administrative functions of the entire Hospital, based on the general policies established by the Trustees and the General Director.

Mr. Murphy will give technical administrative assistance to all units of the Hospital and will serve on the Budget Committee.

Mr. Arthur C. Rood has been appointed Head of Laundry and will attend Tuesday morning administrative conferences.

Mr. William McNair has been appointed Head of Housekeeping and will attend Tuesday morning administrative conferences.

It is to be clearly understood that this new administrative organization is intended to simplify and make more efficient the day-to-day operation of the Hospital, and that it does not limit in any way the right of all Chiefs of Service and all Department Heads to have direct access to the General Director. . . .

Dean A. Clark, M. D.,
General Director

The Board of Trustees, at their meetings on May 16 and 29, voted to appoint:

Mary A. B. Brazier, Ph.D. as Neurophysiologist on the Neurological Service, in addition to her appointments in Anesthesia and in Psychiatry;

Dr. Ernest S. Crawford as Resident in Surgery for one year, beginning January 1, 1953;

Dr. Harold E. Dysart as Assistant Resident in Anesthesia, beginning January 1, 1953;

Dr. Alex F. Müller as Assistant Resident in Medicine, beginning January 1, 1953;

Richard H. York, Ph.D. as Assistant Psychologist, beginning May 5.

At their meetings on May 9, 16 and 23, and June 6, the General Executive Committee voted:

To continue the appointment of Dr. James P. Hepburn as Assistant Resident in Anesthesia, to begin September 1.

To promote:

Dr. Leonard W. Cronkhite, Jr. from the position of Assistant Resident to that of Resident in Medicine, effective January 1, 1953;

Dr. James B. Field from the position of Intern to that of Assistant Resident in Medicine, effective October 1;

Dr. Richard A. Field from the position of Assistant Resident to that of Resident in Medicine, effective October 1;

Dr. Gerald S. Foster from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Arthur Haut from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Kurt J. Isselbacher from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. John H. Knowles from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Stephen M. Krane from the position of Intern to that of Assistant Resident in Medicine, effective October 1;

Dr. Leonard Laster from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Martin B. Levene from the position of Second Assistant Resident to that of First Assistant Resident in Radiology, beginning July 1;

Dr. Alexander S. Macmillan, Jr. from the position of First Assistant Resident to that of Resident in Radiology, beginning July 1;

Dr. George B. Murphy, Jr. from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. Avrum B. Organick from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. John C. Rowe from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Madan M. Singh from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. William A. Tisdale from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Giles D. Toll from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. Elbert P. Tuttle from the position of Intern to that of Assistant Resident in Medicine, effective October 1.

To appoint:

Dr. Bernard J. Doyle as Clinical Fellow in Physical Medicine for one year, beginning July 1;

Dr. William C. Ebeling as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for the period June 2 through July 31 and the additional period September 2 through September 30;

Dr. Freddy H. Frankel as Clinical Fellow in Psychiatry, to begin September 15;

Dr. Shepard C. Ginandes as Clinical and Research Fellow in the Children's Medical Service, assigned to the Children's Psychiatric Group, for one year, beginning July 1, 1953;

Dr. Salomao Kelner as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for the period May 1 through July 31;

Dr. Abdul R. A. Kerim as Clinical Fellow in Medicine, beginning July 1;

Dr. Louis C. Lasagna as Clinical and Research Fellow in Anesthesia, effective as of May 23;

Dr. Donald M. Mitchell as Clinical Fellow in Medicine, assigned to the Rheumatic Diseases Study Group, for one year, beginning July 1;

Dr. Savitri Ramcharan as Clinical Fellow in Medicine, assigned to the Rheumatic Diseases Study Group, for one year, beginning July 1;

Dr. Hyung J. Roh as Graduate Student Assistant in Surgery, for the term May 6 through November 6;

Dr. Remedios K. Rosales as Clinical Fellow in Neurology for one year, beginning July 1;

Pierre J. Stoffyn, Ph.D. as Research Fellow in Biochemistry, assigned to Medicine, for one year, effective September 1;

Dr. Edward F. J. von Hueber as Clinical Fellow in Medicine, assigned to Cardiology, effective as of April 8.

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STAFF WIVES

While some members of the Staff Wives group have contributed time and interest to the highly successful project of the House Staff Club rooms, other activities have been inaugurated, as well – in particular, plans for extending hospitality to visiting doctors from abroad and incoming members of the House Staff.

On May 24 a picnic was held by Dr. and Mrs. Bradford Cannon on the grounds of their lovely country place in Lincoln. The weather was ideal, and several hundred people, a number which includes many children, had a perfectly wonderful time.

On July 12, under the auspices of Mr. David Crockett, Associate Director of Resources and Development, an outing is being planned to be held in Ipswich. Guests are privileged to choose between a picnic and swim at nearby Crane's Beach, or a lobster dinner and concert on the estate. Members of the Hospital Staff interested in attending the latter are urged to apply for their tickets early; visiting doctors and their families from other countries will be guests of the organization.

About the middle of July the incoming House Staff will be honored by a party. Dr. and Mrs. Edward Churchill will entertain for the surgical group, and Dr. and Mrs. Walter Bauer, together with Dr. and Mrs. Joseph Aub, will entertain for the medical people. The parties will be given simultaneously on the adjoining properties of the Churchills and the Aubs in Belmont. Highlight of the occasion will be a baseball game – Medical vs. Surgical Services – on the diamond of the nearby Belmont Hill School.

Mrs. Henry K. Beecher and Mrs. Raymond D. Adams have plans for entertaining periodically during the summer at their homes, inviting doctors' families now here from abroad, particularly those with small children, to "come out for the day". They would like to hear from other Staff Wives who have expressed themselves as willing to entertain in this way, as they have available an up-to-date list of visitors who would most certainly enjoy an opportunity to spend a few hours or a day in the country.

With the summer plans now under way and under consideration, it looks as if the season will be a busy one for all of our group.

MASSACHUSETTS EYE & EAR INFIRMARY

At the American Medical Association meetings held in Chicago, Dr. Edwin B. Dunphy, Chief of our Eye Service, served as Chairman of the Section on Ophthalmology. Dr. Dunphy's address as Chairman was given on June 10. Dr. Trygve Gundersen is Secretary for the Ophthalmological Section.

Dr. David ~~C.~~ G. Cogan, Director of our Howe Laboratory, was Chairman of the Association for Research in Ophthalmology, which met in combined sessions with the Section on Ophthalmology.

Dr. Wiliam Stone, Jr. read two papers – one, a discussion of "Experimental study of plastic material as a substitute for opaque corneas", and the second on "The use of lid sutures in cataract surgery, and presentation of a new technique".

A paper on "Analysis of results of idiopathic retinal detachments" was presented by Dr. Taylor R. Smith.

Infirmary doctors attended the series of otolaryngological meetings held in Toronto, Canada, in late May and early June. Dr. LeRoy A. Schall, Chief of our Ear, Nose and Throat Service, Dr. Harris P. Mosher, Dr. Philip E. Meltzer, and Dr. Werner Mueller serve on the examining board of the American Board of Otolaryngology. Dr. Schall, President of the Board for 1951-52, was re-elected President for the coming year. Dr. Schall was also chosen as President-elect of the American Laryngological, Rhinological and Otological Society.

Dr. Moses H. Lurie presented a paper on "Ototoxic action of streptomycin, dihydrostreptomycin, and neomycin" before the American Otological Society.

Dr. Varaztad H. Kazanjian, Consulting Surgeon in Plastic Surgery at the Infirmary and Professor *Emeritus* of Plastic Surgery of Harvard Medical School, again received recognition for his distinguished career when he was presented the honorary degree of Doctor of Science by Bowdoin College at the June 7 commencement exercises.

Dr. Philip E. Meltzer, Surgeon-in-Chief of the Winthrop Foundation, discussed "Causes and treatment of deafness" recently on N.B.C.'s television series "Here's to your health". The half-hour program was presented under the auspices of the American Hearing Society, the Lexington School for the Deaf, and the New York Academy of Physicians and Surgeons.

The Winthrop Foundation and Clinic for the Deaf held open house on June 20 for members of the Volta Speech Association. Staff members of the Winthrop Foundation acted as hosts and were on hand to answer inquiries and to explain the Foundation's program. The visitors observed speech therapy classes taught by Miss Helen Patten and Mrs. Victoria Jessemen. The three-fold rehabilitation work carried on by the Winthrop Foundation – in medical treatment, speech therapy, and community education – was summarized on a large chart which illustrated the activities of the doctors, audiologists, speech teachers, and social workers.

AMPUTATION CLINIC

It has long been recognized that the amputee presents a special problem in rehabilitation which demands the coordinated activities of the surgeon, orthopedist, physiatrist, social service worker, and the limb fitter. The problems of the amputee loom formidably after surgery has been performed and are always present for those patients with congenital amputations who must receive guidance in order to take their place in society as active, happy, productive, and independent individuals.

The Amputation Clinic was established in 1948 by Dr. Joseph S. Barr and Dr. Edward D. Churchill, to provide the special services required by the amputee. The aims of the Clinic are to rehabilitate the amputee mentally and physically as rapidly as possible. To meet these objectives the amputee is examined by a physician member of the Clinic within the first week following surgery. In those instances in which it will be possible to wear an artificial limb, the proper prosthesis is prescribed. The patient is interviewed by a social service worker, who performs invaluable service in helping to prepare the amputee for the adjustment to a new life, to build up and maintain patient morale, and to help him to look forward to his future with confidence in attaining his hopes of achievement. There are, inevitably, material considerations, and the social worker must develop those resources inherent in the family and those available in the community to meet the necessary expense of the prosthesis, rehabilitation, and the temporary dependency of the patient.

Immediately after the limb is prescribed by the physician a representative of one of the limb fitting houses in Boston is called in by Social Service and measurements are taken. These steps ensure prompt delivery of the prosthesis, often before the patient is discharged from the Hospital.

As soon as possible after surgery the Physiotherapy Department institutes an active exercise program to prevent flexion contracture and to develop the musculature necessary to manipulate the new "limb" and to establish the necessary, new balance. When the patient is ready to wear the prosthesis instruction in the proper use of the limb is continued until maximum efficiency of function is attained.

The Clinic meets on the last Friday of each month in the Bigelow Amphitheatre on White 3A at 10 o'clock, and renders its services through the Admitting Office of the Out-Patient Department to ward and private patients. Amputation problems are referred to the Clinic by MGH staff members, the ward services, the Massachusetts State Division of Rehabilitation, and by physicians throughout New England. The awakened interest in these problems is manifested by the large number of welcome visitors who attend each Clinic meeting. Between the Clinic sessions, amputees are seen every Friday morning in the Orthopedic Out-Patient Department. The Amputation Clinic itself saw 41 patients in 1948, its first year, and 107 patients were examined in 1951.

The Amputation Clinic is currently under the joint direction of Dr. Arthur L. Watkins, Chief of the Physical Medicine Department; Dr. Richard Warren of the Surgical Service; and Dr. Eugene E. Record of the Orthopedic Service. Our indispensable social service workers in regular attendance at Clinic sessions are Mrs. Hazel Fritz, Miss Catherine McHugh, and Miss Ida Salzman. The success of the Clinic is dependent to a large extent on the faithful attendance of representatives of six of the best limb manufacturing houses in Boston, who furnish and service most of the prosthetic devices for our patients. These men give generously of their time and trained advice to help resolve each individual problem.

The Clinic aspires to carry on with the wise, skillful, and kind attentions rendered in the past to amputees at the Massachusetts General Hospital by Dr. Philip D. Wilson, Dr. George W. Van Gorder, and Dr. Fiorindo A. Simeone.

Eugene E. Record, M.D.,
Assistant Orthopedic Surgeon

* * *

SURGICAL VISIT TO THE FAR EAST

"There is no truce with Adam-zad the Bear that looks like a man." Kipling's words seem particularly appropriate to recall today, at the time of our ineffectual negotiations in Korea with two satellites of the Russian Bear who, for all his deceitful hammer and sickle, is the same animal of the international jungle in the 20th century that he was in the 19th.

Would that my trip to Japan and Korea in April had given me opportunity to observe the diplomatic aspects of our efforts in the Far East; but, like other Consultants to the Surgeon General of the Army, I had my nose to the professional grindstone. I visited sixteen of our thirty Army Hospitals, plus sundry Air Force and Naval medical installations, met hundreds of doctors in uniform, gave twenty-one lectures in thirty days, and learned a lot about the excellent manner in which we are handling our military medical problems abroad. I ran into multitudes of Harvard Medical School graduates and several MGH-ers, among whom were Holly Smith (*M.* 1949), Jim Shannon (*S.* 1948), and Roger Wilcox (*S.* 1949). All these three are in Korea working on the casualties in the forward areas. Holly Smith is the member of the Army Research Team at Wonju who is directly in charge of the artificial kidney now being used for the first time in history on battle casualties.

As is usual in an overseas theatre, the Army is conducting in Japan and Korea several types of surgical practice. First, is the ubiquitous garrison practice which follows the Army wherever it goes and consists of the traumatic results of vehicle wrecks, pilonidal sinuses, hemorrhoids, and, for local color in Japan, bed warmer burns and skiing injuries. There is also in existence a large dispensary practice on U. S. dependents, including a considerable amount of obstetrics and pediatrics. In fact, the American medical profession seems to be so well settled in at some of the larger Japanese hospitals that they look very much like metastasized M.G.H.'s, complete with gray ladies and ladies' visiting committees!

A second kind of practice is the "civilian" type, which involves elective surgery of all sorts. This includes those individuals to whom the 120-day evacuation policy does not apply, namely, the occasional U.N. soldier from continental Europe for whom evacuation home is not rapid, and the multitude of Korean civilians who are now being cared for in our Army installations. Under this category esophageal, pulmonary, and gastric resections, ligations of patent ductuses, and many other things of that ilk are cropping up in American hospital beds in Korea. The local civilian medical facilities are not up to caring for all problems, and some of our hospitals are allowed to accept such patients up to one-third of their capacity. Our doctors go to local Korean dispensaries, give lectures, and discuss cases. Problem cases are there brought in for their selection. Space does not permit me to list the numbers of unusual diseases that are seen. Leprosy is common. Tuberculosis and parasitic infestation are almost a normal state. The prevalence of Ascaris infestation in gastrointestinal disease, it was pointed out to me, is a mixed blessing. In a case, say, of perforated ulcer, the Ascaris, who is detrimental to gastric tube suction because he blocks its lumen, is, on the other hand, helpful in that he sticks his head out of the perforation at the time of laparotomy and shows the surgeon where the perforation is. Ulcer cases, incidentally, because of the spicy diet, do even worse on medical treatment in Korea than in Boston (Dr. Culver please note!).

The third category of practice, namely, war surgery, is now going on under what must be nearly ideal conditions. The initial surgery is done in the Mobile hospitals, the reparative surgery in Japan. The limited, though steady, fighting, without alteration of the position of the front lines, has served to keep the Mobile hospitals active but *immobile.* Patients get from the front to the operating table by helicopter, often in under two hours. For this scale of activity there is plenty of blood available, some of which is now given in the battalion aid station within a few minutes after wounding. I saw several cases of wounds of the major intra-abdominal vessels saved as a result of this efficient set-up. The controlled circumstances under which the casualties are treated also provide an ideal arrangement for study of the many important problems in military surgery still remaining. Lower nephron nephrosis is the major cause of death in the severely wounded man who dies after getting back to the Mobile hospital. Primary restoration of continuity of arterial wounds under war conditions has improved slightly since World War II, but further progress needs to be made now that favorable conditions present themselves. Both of these problems are now receiving extensive study by the group from the Army Research Center at Walter Reed Hospital, whose representatives are with the Mobile hospital.

The Korean people represent such a different civilization from ours that it was for me, who had never traveled in Asia before, a great experience to come in contact with them. They are a rugged and sober, perhaps slightly surly, people who have never had an opportunity to govern themselves. So reft by wars have they been, and so impoverished, that our standards of property mean little to them. The Korean engineer of our U. S. hospital train, for example, has finally been prevented, after a year or so, from delivering coal from the train's bunker to his friends and relations at the whistle stops along his route down the peninsula. Physically unimpressive, they are possessed of a sturdiness and stamina which is fantastic. They carry everywhere great weights on their backs on wooden human pack-saddles called "A frames". On these they bring supplies up to our men in the foxholes on the ridges, up 45° slopes without stopping even to pant. A large colored sergeant, after thoughtfully observing such a performance, once turned to Colonel Matuska, the present Surgical Consultant to the Far East Command, and said, "Colonel, dat ain't no work for modern man!"

In Japan all is politeness and cooperation. Sincerity? That's the $64 question. All who know the Japanese seem to feel that they inevitably must trade with China. Many are pessimistic, due to the centuries-old respect of the Japanese for authority and "face", about their ability to form a true people's democracy. Most agree, however, that the Japanese will always be grateful to us for our clemency and voluntary restoration of their independence. Who knows?

My impression of the morale of our medical forces was that it is good. The point system of rotation home gives every individual a date in the future to live for. A GI humorist, who must have been in the MP's, erected at a particularly dangerous turn of the road near the front line in Korea a large sign which said "Drive carefully. You may kill your replacement!" Because of this he seems, perhaps, to be less aware of the frustrations of the global international situation than we are at home. The only date *we* have to look forward to is that indefinite but awesome one when we might have to go over there.

Richard Warren, M.D.,
Associate Visiting Surgeon

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration – an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Dermatology

Ferguson, B. C., Rosenbaum, J. D., and Tolman, M. M.
Cortisone and corticotropin in treatment of diseases of the skin.
A.M.A. Arch. Dermat. & Syph. 65:535-542.

General Surgery

Cope, O.
Medical progress: Diseases of the thyroid gland.
New England J. Med. 246:368-373; 408-417; 451-457.
Dwight, R. W.
Pilonidal sinus: An evaluation of plastic closure using flaps of gluteal muscle.
A.M.A. Arch. Surg. 64:438-442.

Laboratory Science

Gottschalk, C. W.
A comparative study of renal interstitial pressure.
Am. J. Physiol. 169:180-187.

Neurology, Neurosurgery, and Psychiatry

Brown, M. R.
The mechanism involved in polyneuritis as exemplified by postdiphtheritic polyneuritis.
Ann. Int. Med. 36:786-791.
White, J. C., and Sweet, W. H.
Effectiveness of chordotomy in phantom pain after amputation.
A.M.A. Arch. Neurol. & Psychiat. 67:315-322.

Orthopedic Surgery

Joplin, R. J.
Backache.
In Cyclopedia of Medicine, Surgery and Specialties, Philadelphia, F. A. Davis Company, vol. 1, pp. 983-999.

Physical Medicine

Watkins, A. L.
Physical Medicine and athletic injuries. (Editorial)
Arch. Phys. Med. 33:239-241.
Watkins, A. L.
Research in Physical Medicine and Rehabilitation. (Editorial)
Brit. J. Phys. Med. 15:100-101.

The House Staff Aloha Party, sponsored jointly by the House Staff and the Distaff Clubs, was held Saturday evening, June 14, in the House Staff Club rooms. With technical advice given by Mrs. Alice Rudin, who is from the Territory, decorations were all in authentic Hawaiian tradition. One of the local airlines supplied colored posters for the occasion. The end room was converted into a dance floor, and rum punch with pineapple juice was served throughout the evening.

Among the House Staff members who are leaving in July and who attended the party were Betsy Aub, Max Rukes, and James Ferguson from Medicine, Doug Atherton from Urology, Ransom Arthur from Pediatrics, and Walt Theus from Dentistry. Because of other parties which had been planned earlier, a good number of the departing House Staff were unable to attend.

Another party is planned for the late summer, to introduce the new House Staff members to the organization.

We have long been bothered by the erroneous use of the term House Officers when the intention was to include both the Interns and the Residents. This misuse has occurred more frequently since the Penthouse has been made the headquarters of the House Staff Club. The term House Officers means the Interns, only, and the Residents should take vigorous exception to the already too firmly established habit of referring to the 14th floor quarters with a title that excludes them. In order to drive our point home, it seems worth while to review briefly this subject of titles for the two branches of the House Staff.

In 1821, when the General Hospital was opened, there were no surgical interns, and the single medical intern appointed each year was called the Apothecary. In 1829 their number was increased to two, they were relieved of their duties as Apothecaries, and were given the title of House Physician to identify them from the single House Surgeon who was then to be appointed to the House Staff each year. In 1846 the number of House Surgeons was increased to two, and so the quotas stood at two each until 1864.

In 1849 the title House Physician was changed to that of House Pupil. Dr. Washburn, in his *History of the Massachusetts General Hospital* gives us the complete story of the altercation which precipitated this decision. We quote from Chapter VIII, entitled "Residents, House Officers, Students":

". . . the Staff felt that the House Physicians and Surgeons were assuming too much authority in the care of the patients, and a committee was appointed by the Medical Board to consider 'the necessity of having so many resident officers at the Hospital.' The following vote was passed and transmitted to the Trustees:

> "Resolved — That the Board of Physicians and Surgeons of the Hospital beg leave respectfully to represent to the Trustees that in their opinion the situations of House Physician & House Surgeon would be better filled by Medical Pupils before graduation than at present they are by Medical Graduates. And also that these officers in the Reports &c of the Institution should be designated as Medical & Surgical House Pupils instead of by the title of Surgeon & Physician, as more clearly defining their subordinate position.

"On this letter appears a note signed by Nathaniel I. Bowditch, of the Trustees' Committee to whom the matter was referred:

> "The Committee of the Trustees report in favor of filling the offices in question with medical pupils of two years standing. What is lost from their having one year's less professional experience will be more than made up by their greater degree of docility & obedience. The proposed change of name is also acceded to, though the present names designate better than any other the exact relation which these young men hold to the Institution.

"The Trustees approved their committee's recommendation on November 18, 1849: 'Voted to make the change in name and qualifications of the House Officers suggested by the Physicians and Surgeons.'

"Thus, House Physicians and Surgeons became House Pupils. . . . The term 'House Pupil' was adopted to put the House Officers in their place. It became a title of honor, borne worthily by generation after generation of House Pupils – men who became leaders in the profession throughout our country."

By 1894 the number of House Pupils had been increased to eighteen, with both Medical and Surgical Services having their senior, junior, and out-patient men. It was the latter whose title was often abbreviated to "Pup", the better to keep uppermost in the minds of these young men their lowly position in the hospital hierarchy. Incidentally, the East Medical Pup, who lives on the table in the Archives Room, was given to Dr. Aub as a Christmas present in 1914 when he was one of our "Pups".

Now for a word about the Residents. The first Resident, in Surgery, was appointed in 1911. He is Dr. George W. Morse of 475 Commonwealth Avenue, Boston. It was not until 1913 that the first Residents in Medicine and Urology were appointed, 1915 for X-ray, 1918 for Children's Medicine, and 1926 before the other Services began gradually to have Residents on their staffs. The first Resident was given this title at the same time that the chief administrative officer of the Hospital, who had previously been called the Resident Physician, gave up that title to become known as the Director.

All of this to emphasize that down the years, from 1821 to the present time, the title House Officers has always been confined to the Interns. It seems to us that the simplest way to clear up the confusion is to eliminate entirely the term House Officer from our vocabularies and use only the title Intern for that group. It's shorter, anyway. However, if that isn't possible, let's remember that when we say House Officers we mean Interns, and that when we mean *both* House Officers (or Interns) and Residents we should use the term HOUSE STAFF.

As we finished writing the above account of Interns and Residents it occurred to us that Dr. George W. Morse himself, the first Resident ever to be appointed at M.G.H., might have something of interest to say. We found Dr. Morse very glad to cooperate, and within a day or so this letter from him arrived. We wish he had gone into greater detail. Maybe we will hear from him again some day.

> I have now reached the age of seventy and am seriously considering retiring from active work. As I look back over my many years in surgery, several interesting experiences come to mind. [It is those experiences we wish we might hear about. — *Editor*]
>
> I have enjoyed my work very much. I feel that I had excellent training and that my residency at the Massachusetts General Hospital in 1911 and 1912 was extremely valuable. During that time a great many difficult cases were turned over to me, especially the emergencies at night, and that experience gave me more confidence in myself than anything else that came my way during medical school or my internships.
>
> I was very fortunate in being the first Resident, in that I was associated with all the best and most prominent surgeons on all three surgical services (there was a South Surgical Service at that time, in addition to the East and West), and I assisted the chiefs of service in every unusual or difficult operation. I was fortunate enough to have assisted Dr. Maurice Richardson, Dr. Scudder, Dr. Porter, Dr. Balch, and Dr. Harrington, all of whom were the finest teachers I have ever had an opportunity to associate with. If I remember correctly, I had several hundred operations turned over to me, and although I was pretty well tired out at the end of my appointment, I feel that my residency at the Massachusetts General Hospital was a tremendous factor in what little success I have had in surgery.

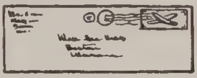
The Distaff Club wishes to welcome all the wives of the new House Staff members and the Fellows, and the new female doctors of the House Staff.

This club is a social group, whose purpose is to help the wives of new House Staff members and Fellows to make friends and to learn about recreational and educational opportunities which might interest them while their husbands are working.

We have meetings, with programs, about once a month. Future meetings will usually be held in the newly decorated House Staff Club rooms at the Hospital. There is a Distaff Club bulletin board in the Brick Corridor near the Hospital Post Office, with notices of interest to members. We have a member in charge of housing information who will help those who are looking for apartments or houses.

We hope you will be interested in joining the Distaff Club and will let us help you in any way we can. If we don't get in touch with you first, please communicate with one of our officers, whose names and telephone numbers are posted on the bulletin board.

We are planning a party in July to welcome new members. We hope you will all come.



A long-awaited letter has come from Dr. Chiu-an Wang (*W.S.* 1944) of 12-14 Queen's Road, Central, 306 Sze Hoi Building, Hong Kong, China. It reads, in part:

> I want to thank you for sending me a recent copy of THE NEWS, in which you recorded the change of our address. We have received THE NEWS every now and then from my brother, Dr. C. C. Wang, at present with the Department of Radiology at the M.G.H., and have always taken great interest in what it contained.
>
> Since our last return trip from the States in February 1950 (our previous one was in January 1947), we have made our home here in Hong Kong, where I have been in practice ever since.
>
> I have found my work here very interesting. There has been a vast amount of clinical material. My practice is mainly surgical, with the exception of obstetrics, but I have to do all kinds of medical work. We have many cancer cases and communicable diseases. As a matter of fact, both of our children have already been exposed to and have contracted measles and chickenpox.
>
> I hope you will not publish this in THE NEWS, for I have written in a very hasty manner and, moreover, my letter doesn't contain much of interest for your readers. [What a misconception! — *Editor*] What I meant to tell you is that I want to thank you for your kind thought of remembering us and to say that we have often thought of our friends over there.
>
> We look forward to having another opportunity of paying you all a visit in the near future.
>
> Kindest regards to all of you.

In response to an appeal for funds for the new House Staff Club, Dr. Elmar S. Waring (*E.M.* 1919) sent, in addition to his check, this cordial note:

> At the HMS Alumni Dinner in 1943, I believe I had the biggest family — certainly of the Class of '18—and a grandson on the way; now 7 and 5.

THE MAIN LOUNGE – HOUSE STAFF CLUB ROOMS

If any MGH House Staff-ers come even as near me as Washington (15 miles away), I wish they'd come out and dine with us.

One of the most interesting letters to reach us in a long time has come from Capt. Lloyd H. Smith, Jr., MC, USAR (*M.* 1949) – better known here at M.G.H. as Holly Smith. The letter, with date line April 28, 11th Evacuation Hospital, APO 301, c/o Postmaster, San Francisco, must, we regret to say, be withheld until our next issue because of space limitations. The letter contains news concerning several MGH-ers and should appear in its entirety.

We are always particularly grateful when something unsolicited arrives for THE NEWS. This voluntary contribution has come from Mr. Charles H. W. Foster, one of our Corporation members.

Preliminary to a meeting of the Class of 1912 of the Harvard Medical School, held at the Ship's Cabin in Marblehead, I had a bit of research done to find out what pet names were given to doctors aboard ship by sailors "in ye olden times". Here are all the names that can be used by a lady, as well as by a man. With a rising inflection they mean pleasure; with a falling one, the reverse. I am sure they will be useful for family or hospital use.

Lob Lolly Boys (1812)
Pill Pushers
Bone Setters
Saw Bones
Surg

New addresses: —

Dr. Anthony A. Arzimanoglou (a.r.s. *Or.* 1952), Lakeville State Sanatorium, Middleboro, Mass.
Dr. Benjamin A. Barnes (*W.S.* 1945), Uplands Farm, Cold Spring Harbor, Long Island, N. Y.
Dr. Glenn E. Behringer (*W.S.* 1946), 266 Beacon St., Boston, Mass.
Dr. James M. Davis, Jr. (*S.* 1948), 1819 Goodwin St., Jacksonville, Fla.
Dr. W. Sterling Edwards (*W.S.* 1946), Medical College of Alabama, Birmingham, Ala.
Dr. Carl W. Gottschalk (*M.* 1946), Department of Medicine, University of North Carolina, Chapel Hill, N. C.
Dr. James E. Kreisle (*W.M.* 1943), Longview Ave., Austin, Tex.
Dr. Saul W. Levy (a.r.p. *D.* 1951), University of California Hospital, Medical Center, San Francisco 22, Calif.
Dr. John E. McKeigue (a. *Otolar.*), 520 Commonwealth Ave., Boston, Mass.
Dr. John McL. Morris (*E.S.* 1942), Yale University School of Medicine, Department of Gynecology, 789 Howard St., New Haven, Conn.
Dr. Pauline Owyang (*C.M.* 1943), 4797 Telegraph Ave., Oakland 9, Calif.
Lt. Paul S. Russell, Jr., MC, USAFR (*S.* 1949), 3605th Medical Group, Ellington A.F.B., Houston, Tex.
Dr. Samuel R. Schuster (a.r.s. 1952), Children's Hospital, 300 Longwood Ave., Boston, Mass.
Major Donald W. S. Stiff, MC, USA (r.p. *R.* 1950), Osaka Army Hospital, APO 1007, c/o Postmaster, San Francisco, Calif.

Brief bits: —

Dr. Edward B. Benedict, Endoscopist on our Staff, presented a paper written by him and Dr. Walter F. Lever, Assistant Dermatologist at M.G.H., at the meeting of the American Bronchoesophagological Association in Toronto in May. The subject of the paper was "Stenoses of the esophagus in benign mucous membrane pemphigus".

Dr. Mary A. B. Brazier, Neurophysiologist on our Anesthesia, Neurology, and Psychiatry Services, was elected Vice-President and President-elect of the American Electroencephalographic Society at their Annual Meeting in May.

Dr. Bradford Cannon, Associate Visiting Surgeon at M.G.H., was recently re-elected Secretary-Treasurer of the American Board of Plastic Surgery. On May 8, Dr. Cannon presented a paper entitled "The place of the plastic surgeon in Medicine" before the Annual Meeting of the Rhode Island Medical Society. He also presented a paper on "Further observations on the use of the split vermilion bordered lip flap" at the Annual Meeting of the American Association of Plastic Surgeons, held in St. Louis May 21-23.

Dr. Donald S. King, a member of our Board of Consultation, was made President-elect of the American Trudeau Society, Medical Section of the National Tuberculosis Association, at the 48th Annual Meeting of the Association, held in Boston in May.

THE NEWS

No. 115 Boston, Mass. September 1952

MEDICAL SERVICE AFFAIRS

From its beginning the Massachusetts General Hospital has been fortunate in having its share of distinguished physicians and surgeons. The first of these able and devoted men, and those of like spirit and zeal who followed, so shaped the spiritual, intellectual, and physical growth of the Hospital that it was destined to become one of the leading medical centers in this country. The success of their labors, when measured in terms of medical care, teaching, and research, is evident in the many activities of our present Hospital community. In addition, there exists within its walls a most unusual spirit. Though difficult to define, it is unique and all-pervading.

In rendering my first report on Medical Service affairs I wish to pay personal tribute, as well as to express the gratitude and affection of the medical staff, to Dr. James Howard Means, Chief of the Medical Services and Jackson Professor of Clinical Medicine from 1923 to 1951. He, like many of the distinguished physicians of the last century, brought added renown to the Hospital. As his first resident physician I came to know him as both friend and mentor. This marked the beginning of a long and intimate association, interrupted only by my year abroad and my leave of absence during the recent war years. I soon learned of his devotion to the Hospital and the happiness he derived from administering the Medical Services. That he was pro-M.G.H. there can be no doubt.

He first knew the Hospital as a medical student and upon graduation in 1911 became an East Medical house officer. From then until June 30, 1951, he was an active member of the Hospital community. Because of his long association with the Hospital, his knowledge of its past, his intense devotion to the institution, his interest and ability as an administrator, teacher, and investigator, he was ably suited for the position in which he served with such distinction for 28 years. His heart was in his work; he spurned private practice and the rewards thereof in order to give his whole and undivided attention to the job at hand.

He was an ardent advocate of any cause which he believed would enhance the Hospital's role in furthering medical practice and the advancement of medical knowledge. He was ever mindful of the institution's responsibilities as an active member of the Harvard Medical School community, and always emphasized that the Hospital's treble function was care of patients, teaching, and research. His interest in Medical School affairs was equally great. He was long a proponent of experimentation in medical education and favored a radical change in the curriculum. Being a man of deep conviction, he never faltered in stating his position in matters medical and stood ready to champion any movement which would better either the Hospital or the School.

The many changes which took place during his period of tenure were recorded by Dr. Paul D. White in the July-August 1951 issue of THE NEWS. This short historical summary documents the vital contributions made by Howard Means and indicates the increasingly important role the Hospital has come to play in medical care, teaching, and research. Again, our thanks to Dr. Means. We all wish him happiness and success in the years that lie ahead at our friendly, neighboring institution, the Massachusetts Institute of Technology.

On reviewing the affairs of the Medical Service for the past year the writer has become more fully aware of its past record of accomplishment and its challenging future. Though new and unforeseen problems may arise on the American medical scene, our chief concern – Better Medical Care – must remain foremost in our minds. The component parts of this common objective or central theme must remain the same: care of patients, teaching, and research. Though the accomplishment of this goal is implicit in good medical practice and in the training of future physicians, its execution is difficult – difficult because of the scope of modern medicine and the ever-emerging body of knowledge, seemingly at an ever-increasing tempo, which must be incorporated in this central theme. Its execution will be further influenced by various social and economic factors, some of which are already at hand.

When Howard Means turned over his administrative duties on June 30, 1951, the Medical Service, to use his own words, was "going strong". The few changes initiated during the past year, though in themselves minor, further our common objective – optimal medical care.

The house staff organization, so important in both the care of the patients and in teaching, has remained unchanged, with twelve house officers, eleven assistant residents, four residents, and one chief resident. The contributions made by this enthusiastic segment of our hospital staff have been due in large part to the devoted work and able leadership of the chief residents – first Dr. Isaac M. Taylor, and since January Dr. Evan Calkins. They have been most conscientious and enthusiastic in discharging their duties and in guiding the many activities of the service. To date, no house staff appointment has been interrupted by call to the Armed Services. Our situation for the coming year, however, may be less favorable.

We all regret that the broadening of the house and hospital staff that comes from accepting interns from other medical schools received a set-back this year. A number of outstanding applicants from other schools were unable to accept internships at our hospital for 1952-53 because of the decision of a number of large teaching hospitals to make commitments to students prior to the official date established for the new "matching plan" for interns. It is hoped that the principle of simultaneous acceptance of applicants by all hospitals will receive more widespread support this coming year.

Two changes, which affect primarily the house officers and the resident staff but also increase the educational value of our patients for physicians and students at all levels, were instituted. The weekly service (death) meetings, formerly attended by the residents alone, were thrown open to the entire house staff and other interested persons, including ward visiting physicians, consultants appropriate to the cases in question, and visitors from abroad. The discussion of the cases within this group with the pathologists in attendance has proved to be stimulating and informative. All members of the staff are invited to attend these exercises, which are held each Wednesday at 4:30 P.M. in the Medical Staff Room. The other change relates to the house staff activities in the private pavilions, particularly the Baker. Due largely to the efforts of Drs. Walter T. St. Goar and William R. Owen, at least two organized conferences with staff physicians and surgeons have been held each week since the first of the year. Efforts have also been made to permit the house staff to follow the patients with staff physicians and to participate more actively in their care.

The success achieved by these minor changes in the private pavilions prompted the appointment of a committee to study the medical service affairs in the private pavilions. Under the chairmanship of Dr. Bland, this committee (consisting of Drs. Myles P. Baker, Calkins, Ellis, Kranes, Neumann, Owen, and St. Goar) has reviewed the problem thoroughly from the point of view of the house staff, the private patient, and the visiting physician. It is obvious from their report and the accompanying recommendations that any plan for the future reorganization of the private medical service must proceed slowly. The only additional measures instituted to date have been the biweekly meetings to review the deaths in the Baker and the Phillips House, and the appointment of Dr. Baker as director and coordinator of this new program. During this first year he will attempt to determine by means of the trial-and-error method what can be accomplished in terms of better medical care and of more effective teaching and training of house staff. It is hoped that encouraging developments along these lines can be reported a year or two hence.

One minor change has been introduced with regard to the education of all of us. Medical Grand Rounds, held in the Lower Out-Patient Amphitheatre during the postwar years, has been moved back to the Ether Dome, where the atmosphere has proved to be more conducive to informal and spirited discussion among the staff.

A number of efforts have been made to improve the teaching of fourth year medical students. These include: establishment of an informal weekly conference with the chief of the medical services on a variety of subjects of the students' own choosing; institution of a second weekly conference with younger staff members on the physiology and clinical management of certain diseases; and more rapid screening of out patients by the residents in order to provide students with selected cases at an earlier hour in the morning. In order to improve further our fourth year teaching it is planned during the year 1952-53 to assign one resident to each of the Bulfinch wards instead of requiring one resident to cover two wards as previously. He will act as tutor to the students on his ward and will devote a good portion of his time to teaching.

The Social Service Department continues to contribute its share to our teaching program and other service activities. The medico-social conferences held weekly on each ward service acquaint both students and house staff with the many problems relating to total medical care. Miss Dorothy Kellogg, the social service representative, performs most expertly at the biweekly medical-psychiatric conferences as teacher and counselor of students in relating the role of social and economic factors in disease.

The care of the house patients remains at a high level. Here the talents of all are brought to bear – house staff, visiting physicians, specialists, and members of the many important ancillary services. The house staff has become increasingly aware of the rising cost of medical care and what it means to the family pocketbook, especially for those patients without the benefits of Blue Cross. They are also more mindful of the Hospital's responsibility in rendering excellent medical care, and are well indoctrinated in the principle that the patient's safety and comfort come first, irrespective of the cost.

An assistant resident remains in charge of each of the medical wards, with the visiting physician serving as his mentor, consultant, and advisor. When the assistant resident is permitted to serve as the captain of the ward team he is in a more strategic position to provide continuity of medical care and can do a better job of maintaining a good doctor-patient relationship. This desired care of patients can be most nearly achieved when all concerned with ward-patient care, including consultants and representatives of special clinics, transmit information concerning individual patients directly to the assistant resident in charge of the ward. The effects of failure to adhere to this important principle of good medical care are occasionally brought into focus in the weekly medico-social conferences.

In order to provide ward opportunities for more members of the staff during the coming year, twelve of the forty-eight months of ward visiting will be assigned as single month visits. This system will have the added advantage of providing more contacts between the student-house staff group and our large visiting staff, who bring to the wards many points of view and skills that have direct bearing upon both the science and the art of medical practice. The relative merits of this system and those of a smaller visiting staff will be assessed one year hence.

Each year some of our house staff, clinical and research fellows, and graduate students join the staffs of our sister institutions, carrying the gospel of the M.G.H. with them. Through this process we have lost during the year Dr. Ernest Craige, r.p. 1948, an active member of our staff and the cardiac group. Dr. Craige, along with Drs. Isaac M. Taylor, c.r.p. 1951, and Carl W. Gottschalk, r.p. 1951, has accepted an appointment with Dr. Charles H. Burnett, c.r.p. 1946, Professor of Medicine and Chief of the Medical Services, University of North Carolina Hospital, Chapel Hill, North Carolina. With the opening of the new hospital this fall the University of North Carolina will have available for the first time all facilities needed for a four-year medical school. Dr. Burnett and his fellow MGH graduates have been busily engaged in recent months making ready for a new house staff and their first clinical clerks. We are proud of this MGH group and wish them every success in this new and exciting assignment.

During January 1952, Dr. W. Melville Arnott, Professor of Medicine at the University of Birmingham and the Queen Elizabeth Hospital, Birmingham, England, served as Honorary Associate Physician pro tempore. He was followed in April 1952 by Dr. René S. Mach, Lecturer on Medicine, Medical School, University of Geneva, and Physician at the University Hospital, Geneva, Switzerland, who likewise served as a pro tempore member of our staff. These distinguished physicians contributed generously of their knowledge and added greatly to the education of our house staff.

Dr. Earle M. Chapman, who continues in charge of the Medical Out-Patient Department, has acquainted me with the affairs of this important division of the Medical Service. Though the discrepancy between ward and out-patient care of twenty years ago has been lessened, much still remains to be accomplished. The problem of better ambulatory medical care in teaching hospitals is not a new one, nor is there an easy solution. It is hoped that a plan can be evolved that will further improve the quality of medical care rendered in the Out-Patient Department. Any plan which is to be more effective must have educational content. That new quarters will be required there can be no doubt. Perhaps all of us should devote some time to this most important area of medical practice and teaching.

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To attempt to detail the research activities of the service would require a separate report. The ever-present problem is one of space. This being true of all services, the allocation of laboratory space has become an all-hospital affair. The laboratories vacated with the advent of the new Research Building have been greatly in demand. All requests were deferred until the needs of the hospital's Chemistry Laboratory were defined and until the Department of Bacteriology had reclaimed its locum tenens space. Now that this has been effected, the needs of others will be met within the limits of the space available.

Since the establishment of the Committee on Research, more of our research activities have become all-hospital enterprises. For example, the Physics Laboratory (Dr. Brownell), the new Cardiovascular Research Unit (Dr. Frantz), and the Infectious Disease Laboratory (Dr. Paine) are underwritten by the Massachusetts General Hospital Research Fund. Such units strengthen both the Hospital and the individual services. Undoubtedly, certain of our service functions, such as better ambulatory care and the contemplated home care program, must become all-hospital enterprises if the institution is to fulfill more completely its role in greater community service. Many of the full- and part-time members of all services have shown that they are keenly interested in and desirous of participating in these and other plans concerning the Hospital's future. Such cooperation bids well for our future.

Walter Bauer, M.D.,
Chief of Medical Services

Dr. Fuller Albright, Physician on our Staff, was elected a member of the National Academy of Sciences at its Annual Meeting in Washington last April. He is in the section of Pathology and Bacteriology. It is our understanding that only a very small number of clinical investigators – possibly no more than two or three – have ever been so honored by the Academy.

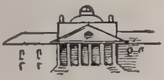
Dr. Arthur W. Allen, a member of our Board of Consultation, was the recipient of an honorary degree as Doctor of Science from Harvard last June. The award recognizes Dr. Allen as: "A leader of the medical profession, in the front rank of those who wield the knife for the benefit of suffering humanity."

Mr. Francis C. Gray, Chairman of our Board of Trustees, was awarded the honorary degree of Doctor of Commercial Science by Suffolk University at its Annual Commencement Exercises last June.

Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service, has been elected President of the newly created organization called the National League for Nursing, to be composed of nurses, private citizens, and public groups interested in nursing. This new organization is a combination of five former nursing associations, including the National League of Nursing Education, the National Organization of Public Health Nursing, and the Association of Collegiate Schools of Nursing.

Members of the health profession are watching with great interest the pattern which has now been set by the nursing profession in their plan for reorganization, which emphasizes the importance of sharing problems with the consumer in order to improve health service.

Dr. Paul D. White, a member of our Board of Consultation, has carried out that plan of his to measure a whale's heartbeat. Together with Dr. Robert King of Seattle, President of the American Heart Association, Mr. James Jenks, President of the Sanborn Company of Cambridge, and a crew to man the whaleboat, Dr. White succeeded in getting for the first time in history, an electrocardiograph of the heartbeat of the whale, while the huge animal which had been harpooned and the whaleboat carrying the members of the expedition tore through the rough seas off the Alaskan coast.



The Board of Trustees, at their meetings on June 13 and 27, and July 18, voted:

To accept the resignation of Mrs. Donald V. Baker, Jr. from the Ladies' Advisory Committee of the School of Nursing;

To accept the resignation of Dr. John McL. Morris as Assistant in Surgery;

To promote Dr. Thornton Brown from Assistant in Orthopedic Surgery to Assistant Orthopedic Surgeon, effective July 1;

To promote Dr. David Littmann to Clinical Associate in Medicine;

To grant leave of absence to Drs. Robert E. Scully and Austin L. Vickery from the Pathology Staff, effective during their anticipated periods of military service.

To appoint:

Dr. Theodore L. Badger as Clinical Associate in Medicine;

Dr. Edgar L. Gasteiger, Jr. as Research Associate in Neurosurgery for one year, beginning July 1;

Dr. Pierre Gauthier-Lafaye as a Fellow in Anesthesia, beginning August 1;

Dr. John F. Gibbons as Assistant Radiologist, beginning September 1;

Dr. Robert G. Greene as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1953;

Dr. Ruth C. Haynes as Assistant Resident in Anesthesia for one year, beginning August 1, 1953;

Dr. John E. LeDonne as Assistant in Dermatology, as of July 1;

Dr. Robert W. Mackie (Commander, U. S. Navy) as First Assistant Resident in Neurosurgery for one year, beginning July 1;

Gershen Rosenblum as Assistant Psychologist, assigned to Psychiatry, for one year, beginning July 1;

Dr. Harry W. Rudel as Third Assistant Resident in Pathology, for the year beginning July 1;

Karl Schmid, Ph.D. as Assistant Biochemist, assigned to Medicine, for one year, beginning July 1;

Dr. Robert B. Sloane as Assistant Resident in Psychiatry for six months, beginning January 1, 1953;

Morris Soodak, Ph.D. as Assistant Biochemist, to be made retroactive to January 1;

Dr. Bernard B. Stone as Second Assistant Resident in Neurosurgery for one year, beginning July 1.

To make the following changes in effective dates of appointments as Assistant Residents:

Dr. James B. Field, Assistant Resident in Medicine, effective July 1 instead of October 1;

Dr. Stephen M. Krane, Assistant Resident in Medicine, effective July 1 instead of October 1;

Dr. Avrum B. Organick, Assistant Resident in Medicine, effective October 1 instead of July 1;

Dr. Robert H. Walker as Second Assistant Resident in Surgery, effective June 1 instead of July 1.

At their meetings on June 13 and July 16, the General Executive Committee voted:

To accept the resignation of Dr. Donald O. Rudin as Research Fellow in Anesthesia;

To reappoint Dr. Vernon H. Mark as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1.

To appoint:

Dr. Edwin R. Bickerstaff as Research Fellow in Neurology, for the period March 1 through December 31;

Dr. William C. Doust as Clinical Fellow in Psychiatry for one year, beginning September 1;

Dr. Belton G. Griffin as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for the period July 1 through October 31;

Dr. Carleton R. Haines as Clinical and Research Fellow in Surgery, assigned to the Tumor Clinic, for one year, beginning July 15;

Dr. Harold J. Harris as Clinical Fellow in Psychiatry for one year, beginning September 1, to work in Child Psychiatry;

Dr. Robert Kagan as Clinical Fellow in Psychiatry, beginning July 1, to work in Child Psychiatry;

Dr. John W. Keller as Clinical and Research Fellow in Medicine for one year, effective July 1;

Dr. Joseph E. Murray as Clinical Assistant in Surgery, assigned to Plastic Surgery, as of July 1;

Dr. Burton C. Prior as Clinical Fellow in Radiology, beginning January 1, 1953;

Dr. Warren B. Weil as Clinical Fellow in Pathology, beginning on or about October 1.

At meetings earlier in the year, the General Executive Committee voted:

To promote Dr. Manucher Javid to the position of Resident in Neurosurgery, effective as of January 1;

To promote Dr. Leon Reznick to the position of Resident in Dermatology, effective as of July 1;

To appoint Dr. Louis J. Borel as Clinical and Research Fellow in Medicine, to work with Dr. Dienes, for six months, beginning September 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Allergy

Burrage, W. S., Irwin, J. W., and Gibson, J. S.
Maintenance cortisone in severe bronchial asthma.
J. Allergy 23:310-321.

Anesthesia

Beecher, H. K.
Some problems of acid-base equilibrium during anesthesia with particular reference to thoracic surgery.
Anesth. et analg. 9, supp. 1:1-7.

French, A. B., Barss, T. P., Fairlie, C. S., Bengle, A. L., Jr., Jones, C. M., Linton, R. R., and Beecher, H. K.
Metabolic effects of anesthesia in man: V. A comparison of the effects of ether and cyclopropane anesthesia on the abnormal liver.
Ann. Surg. 135:145-163.

Keats, A. S., and Beecher, H. K.
Analgesic activity and toxic effects of acetylmethadol isomers in man.
J. Pharmacol. & Exper. Therap. 105:210-215.

Keats, A. S., and Beecher, H. K.
Analgesic potency and side action liability in man of Heptazone, WIN 1161-2, 6-methyl dihydromorphine, metopon, levo-isomethadone and pentobarbital sodium, as a further effort to refine methods of evaluation of analgesic drugs.
J. Pharmacol. & Exper. Therap. 105:109-129.

Cardiology

Clark, R. J., and White, P. D.
Congenital aneurysmal defect of the membranous portion of the ventricular septum associated with heart block, ventricular flutter, Adams-Stokes syndrome and death.
Circulation 5:725-729.

General Surgery

Churchill, E. D.
Evarts Graham–Early years and the hegira.
Ann. Surg. 136:3-11.

Churchill, E. D.
The physiologic basis of wound-shock.
Tufts M. J. 19:3-6.

tuted to date have been the biweekly meetings to review the deaths in the Baker and the Phillips House, and the appointment of Dr. Baker as director and coordinator of this new program. During this first year he will attempt to determine by means of the trial-and-error method what can be accomplished in terms of better medical care and of more effective teaching and training of house staff. It is hoped that encouraging developments along these lines can be reported a year or two hence.

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I am glad to announce that Ward 4 is currently being altered through the added generosity of Mr. Edward Mallinckrodt. The alterations will include a more spacious kitchen, an enlarged nurses' station, a bay for conferences, a new treatment room, increased utility room space, a small lounge for patients, and new furnishings. These changes will provide better facilities for both patients and physician-investigators.

To attempt to detail the research activities of the service would require a separate report. The ever-present problem is one of space. This being true of all services, the allocation of laboratory space has become an all-hospital affair. The laboratories vacated with the advent of the new Research Building have been greatly in demand. All requests were deferred until the needs of the hospital's Chemistry Laboratory were defined and until the Department of Bacteriology had reclaimed its locum tenens space. Now that this has been effected, the needs of others will be met within the limits of the space available.

Since the establishment of the Committee on Research, more of our research activities have become all-hospital enterprises. For example, the Physics Laboratory (Dr. Brownell), the new Cardiovascular Research Unit (Dr. Frantz), and the Infectious Disease Laboratory (Dr. Paine) are underwritten by the Massachusetts General Hospital Research Fund. Such units strengthen both the Hospital and the individual services. Undoubtedly, certain of our service functions, such as better ambulatory care and the contemplated home care program, must become all-hospital enterprises if the institution is to fulfill more completely its role in greater community service. Many of the full- and part-time members of all services have shown that they are keenly interested in and desirous of participating in these and other plans concerning the Hospital's future. Such cooperation bids well for our future.

Walter Bauer, M.D.,
Chief of Medical Services

Dr. Fuller Albright, Physician on our Staff, was elected a member of the National Academy of Sciences at its Annual Meeting in Washington last April. He is in the section of Pathology and Bacteriology. It is our understanding that only a very small number of clinical investigators – possibly no more than two or three – have ever been so honored by the Academy.

Dr. Arthur W. Allen, a member of our Board of Consultation, was the recipient of an honorary degree as Doctor of Science from Harvard last June. The award recognizes Dr. Allen as: "A leader of the medical profession, in the front rank of those who wield the knife for the benefit of suffering humanity."

Mr. Francis C. Gray, Chairman of our Board of Trustees, was awarded the honorary degree of Doctor of Commercial Science by Suffolk University at its Annual Commencement Exercises last June.

Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service, has been elected President of the newly created organization called the National League for Nursing, to be composed of nurses, private citizens, and public groups interested in nursing. This new organization is a combination of five former nursing associations, including the National League of Nursing Education, the National Organization of Public Health Nursing, and the Association of Collegiate Schools of Nursing.

Members of the health profession are watching with great interest the pattern which has now been set by the nursing profession in their plan for reorganization, which emphasizes the importance of sharing problems with the consumer in order to improve health service.

Dr. Paul D. White, a member of our Board of Consultation, has carried out that plan of his to measure a whale's heartbeat. Together with Dr. Robert King of Seattle, President of the American Heart Association, Mr. James Jenks, President of the Sanborn Company of Cambridge, and a crew to man the whaleboat, Dr. White succeeded in getting for the first time in history, an electrocardiograph of the heartbeat of the whale, while the huge animal which had been harpooned and the whaleboat carrying the members of the expedition tore through the rough seas off the Alaskan coast.

The Board of Trustees, at their meetings on June 13 and 27, and July 18, voted:

To accept the resignation of Mrs. Donald V. Baker, Jr. from the Ladies' Advisory Committee of the School of Nursing;
To accept the resignation of Dr. John McL. Morris as Assistant in Surgery;
To promote Dr. Thornton Brown from Assistant in Orthopedic Surgery to Assistant Orthopedic Surgeon, effective July 1;
To promote Dr. David Littmann to Clinical Associate in Medicine;
To grant leave of absence to Drs. Robert E. Scully and Austin L. Vickery from the Pathology Staff, effective during their anticipated periods of military service.

To appoint:

Dr. Theodore L. Badger as Clinical Associate in Medicine;
Dr. Edgar L. Gasteiger, Jr. as Research Associate in Neurosurgery for one year, beginning July 1;
Dr. Pierre Gauthier-Lafaye as a Fellow in Anesthesia, beginning August 1;
Dr. John F. Gibbons as Assistant Radiologist, beginning September 1;
Dr. Robert G. Greene as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1953;
Dr. Ruth C. Haynes as Assistant Resident in Anesthesia for one year, beginning August 1, 1953;
Dr. John E. LeDonne as Assistant in Dermatology, as of July 1;
Dr. Robert W. Mackie (Commander, U. S. Navy) as First Assistant Resident in Neurosurgery for one year, beginning July 1;
Gershen Rosenblum as Assistant Psychologist, assigned to Psychiatry, for one year, beginning July 1;
Dr. Harry W. Rudel as Third Assistant Resident in Pathology, for the year beginning July 1;
Karl Schmid, Ph.D. as Assistant Biochemist, assigned to Medicine, for one year, beginning July 1;
Dr. Robert B. Sloane as Assistant Resident in Psychiatry for six months, beginning January 1, 1953;
Morris Soodak, Ph.D. as Assistant Biochemist, to be made retroactive to January 1;
Dr. Bernard B. Stone as Second Assistant Resident in Neurosurgery for one year, beginning July 1.

To make the following changes in effective dates of appointments as Assistant Residents:

Dr. James B. Field, Assistant Resident in Medicine, effective July 1 instead of October 1;
Dr. Stephen M. Krane, Assistant Resident in Medicine, effective July 1 instead of October 1;
Dr. Avrum B. Organick, Assistant Resident in Medicine, effective October 1 instead of July 1;
Dr. Robert H. Walker as Second Assistant Resident in Surgery, effective June 1 instead of July 1.

At their meetings on June 13 and July 16, the General Executive Committee voted:

To accept the resignation of Dr. Donald O. Rudin as Research Fellow in Anesthesia;
To reappoint Dr. Vernon H. Mark as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1.

To appoint:

Dr. Edwin R. Bickerstaff as Research Fellow in Neurology, for the period March 1 through December 31;
Dr. William C. Doust as Clinical Fellow in Psychiatry for one year, beginning September 1;
Dr. Belton G. Griffin as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for the period July 1 through October 31;
Dr. Carleton R. Haines as Clinical and Research Fellow in Surgery, assigned to the Tumor Clinic, for one year, beginning July 15;
Dr. Harold J. Harris as Clinical Fellow in Psychiatry for one year, beginning September 1, to work in Child Psychiatry;
Dr. Robert Kagan as Clinical Fellow in Psychiatry, beginning July 1, to work in Child Psychiatry;
Dr. John W. Keller as Clinical and Research Fellow in Medicine for one year, effective July 1;
Dr. Joseph E. Murray as Clinical Assistant in Surgery, assigned to Plastic Surgery, as of July 1;
Dr. Burton C. Prior as Clinical Fellow in Radiology, beginning January 1, 1953;
Dr. Warren B. Weil as Clinical Fellow in Pathology, beginning on or about October 1.

At meetings earlier in the year, the General Executive Committee voted:

To promote Dr. Manucher Javid to the position of Resident in Neurosurgery, effective as of January 1;
To promote Dr. Leon Reznick to the position of Resident in Dermatology, effective as of July 1;
To appoint Dr. Louis J. Borel as Clinical and Research Fellow in Medicine, to work with Dr. Dienes, for six months, beginning September 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Allergy

Burrage, W. S., Irwin, J. W., and Gibson, J. S.
Maintenance cortisone in severe bronchial asthma.
J. Allergy 23:310-321.

Anesthesia

Beecher, H. K.
Some problems of acid-base equilibrium during anesthesia with particular reference to thoracic surgery.
Anesth. et analg. 9, supp. 1:1-7.

French, A. B., Barss, T. P., Fairlie, C. S., Bengle, A. L., Jr., Jones, C. M., Linton, R. R., and Beecher, H. K.
Metabolic effects of anesthesia in man: V. A comparison of the effects of ether and cyclopropane anesthesia on the abnormal liver.
Ann. Surg. 135:145-163.

Keats, A. S., and Beecher, H. K.
Analgesic activity and toxic effects of acetylmethadol isomers in man.
J. Pharmacol. & Exper. Therap. 105:210-215.

Keats, A. S., and Beecher, H. K.
Analgesic potency and side action liability in man of Heptazone, WIN 1161-2, 6-methyl dihydromorphine, metopon, levo-isomethadone and pentobarbital sodium, as a further effort to refine methods of evaluation of analgesic drugs.
J. Pharmacol. & Exper. Therap. 105:109-129.

Cardiology

Clark, R. J., and White, P. D.
Congenital aneurysmal defect of the membranous portion of the ventricular septum associated with heart block, ventricular flutter, Adams-Stokes syndrome and death.
Circulation 5:725-729.

General Surgery

Churchill, E. D.
Evarts Graham—Early years and the hegira.
Ann. Surg. 136:3-11.

Churchill, E. D.
The physiologic basis of wound-shock.
Tufts M. J. 19:3-6.

Churchill, E. D.
The shock frog. (Editorial)
Ann. Surg. 135:573-576.

Cope, O.
The role of ACTH and cortisone in the treatment of shock.
J. Indiana M. A. 45:485-492.

Dwight, R. W., and Ratcliffe, J. W.
Aneurysm of the hepatic artery: Report of a case treated by wiring.
Surgery 31:915-921.

Laboratory Science

Nardi, G. L.
Distribution and dosage of radiocarbon in the tissues.
Am. J. Roentgenol. 67:989-990.

Neurology, Neurosurgery, and Psychiatry

Bakay, L.
Studies on the absorption of dyes and radioactive phosphorus into the brain from the cerebrospinal fluid.
Zentralbl. f. Neurochirurgie 12:15-22.

Bakay, L., and Sweet, W. H.
Cervical and intracranial intra-arterial pressures with and without vascular occlusion.
Surg., Gynec. & Obst. 95:67-75.

Lindemann, E., and Clarke, L. D.
Modifications in ego structure and personality reactions under the influence of the effects of drugs.
Am. J. Psychiat. 108:561-567.

Michelsen, J. J.
Neurologic manifestations following spinal anesthesia.
Neurol. 2:255-259.

Neurophysiology

Brazier, M. A. B., and Casby, J. U.
Crosscorrelation and autocorrelation studies of electroencephalographic potentials.
EEG & Clin. Neurophysiol. 4:201-211.

Otolaryngology

Macmillan, A. S., and Kelemen, G.
Radiography of the supraglottic speech organs.
A.M.A. Arch. Otolaryng. 55:671-688.

Pathology

Scully, R. E., and Coffin, D. L.
Canine testicular tumors: With special reference to their histogenesis, comparative morphology, and endocrinology.
Cancer 5:592-605.

Physical Medicine

Watkins, A. L.
Medical progress: Current trends in physical medicine and rehabilitation.
New England J. Med. 247:91-97.

Radiology

Klein, A., Joplin, R. J., Reidy, J. A., and Hanelin, J.
Slipped capital femoral epiphysis: Early diagnosis and treatment facilitated by "normal" roentgenograms.
J. Bone & Joint Surg. 34-A, No. 1:233-239.

Porter, E. C.
Relationship between the adrenal cortex and radiation sickness: A review of the literature and a presentation of new data.
Radiology 58:246-257.

Reeves, J. D.
Medical progress: Radiation therapy of carcinoma of the cervix: A review of fundamental considerations.
New England J. Med. 246:652-661.

Reyersbach, G. C., Hanelin, J., and Joplin, R. J.
Vitamin A intoxication: Report of a case.
New England J. Med. 246:978-980.

Surgery — Reconstructive

Kazanjian, V. H.
Bone transplanting to the mandible.
Am. J. Surg. 83:633-639.

Urology

Smith, G. G.
Interstitial cystitis.
J. Urol. 67:903-915.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Robert Russell Trotter, alumnus of the Infirmary, who has recently returned to the U.S. from nine months in Okinawa, has been appointed Harvard Instructor in Ophthalmic Research in the Howe Laboratory of Ophthalmology. Dr. Trotter will work with Dr. W. Morton Grant on a clinical evaluation of glaucoma, a program sponsored by the U.S. Public Health Service.

During his stay in Okinawa, Dr. Trotter conducted a survey of the incidence of ocular disease among the Ryukyuan natives. As a civilian Consultant in Ophthalmology for the Scientific Investigation of the Ryukyu Islands, sponsored by the Pacific Science Board of the National Research Council, Dr. Trotter saw a good deal of the medical facilities of the islands. His travels took him to villages not only on Okinawa but on the smaller islands of the Ryukyuan chain.

Dr. Trotter found that infectious eye diseases, such as conjunctivitis, trachoma, and keratitis, were widely prevalent in Okinawa. Antibiotics are rarely used there, the emphasis being on ocular irrigations and surgical treatment. There is also a surprising lack of refraction and few of the people wear glasses, even those who have had cataract extractions. There is some cultural antipathy toward spectacles, which seems strange in an area close to and, until recently, dominated by Japan.

During his stay in the Ryukyus, Dr. Trotter was entertained by several local medical societies and he spoke to their members on medical treatments in the U.S. One bit of information which amazed the Ryukyuan doctors was that concerning the free clinic service provided in the U.S. It is interesting to note that although there are only 139 doctors for a population of one million, no free clinics exist at present on the islands.

Mrs. Mary A. Doehler, instructor of the Infirmary's esophageal voice classes, attended an Institute on Voice Pathology and the First International Meeting of Laryngectomized Persons, held in conjunction with the Institute. Mrs. Doehler, for several years a speech teacher for men and women who have had their larynxes removed because of cancer, was invited to participate in the special Institute and Meeting that took place on August 1 and 2 in Cleveland, Ohio.

The Meeting of Laryngectomized Persons provided an opportunity for an exchange of ideas in reference to the teaching of esophageal speech and recreational and vocational rehabilitation, while the Institute on Voice Pathology offered a professional meeting of medical and speech specialists in voice problems, plus a comprehensive survey of etiology and treatment of voice disorders.

Mrs. Doehler took part in a panel discussion on Methods of Teaching Esophageal Speech, part of the conference section on Rehabilitation of Laryngectomized Persons.

Brief bits: —

Dr. Henry K. Beecher, Chief of our Anesthesia Service, has been elected President of the New England Society of Anesthesiologists for the year 1952-53.

Dr. Mary A. B. Brazier, Neurophysiologist in our departments of Psychiatry, Anesthesia, and Neurology, was invited to lecture at the Maudsley Hospital of London University this summer.

Dr. Dorothy B. Chamberlin joined the Staff at McLean Hospital on July 1, as Assistant in Psychiatry.

Dr. Lewis M. Hurxthal (*W.M.* 1925) has been elected President of the Massachusetts Heart Association.

Dr. Philip Solomon, Assistant Psychiatrist on our Staff in 1937, writes: "We're leaving California and coming home!" His address will be 7 Gardner Road, Brookline 46, Mass.

Dr. Kurt H. Thoma went to Germany this summer as Civilian Consultant in Oral Surgery and Oral Pathology to the Surgeon General. He lectured and held conferences for the Service dentists in that area.

Dr. William H. Timberlake, Assistant in Neurology at M.G.H., announces the opening of his office for the practice of Neurology at 20 Gloucester Street, Boston.

Dr. David Weisberger, Oral Surgeon and Chief of Dental Service on our Staff, has been promoted from Associate Professor to Professor of Dental Medicine at the Harvard School of Dental Medicine.

There is a concession in the Breckinridge Park Zoo in San Antonio called the Reptile Garden, into which I wandered during my banishment to the Military Medical primary school at Fort Sam Houston. The Reptile Garden consists of a circular pit, about 20 feet in diameter and 3 feet deep, surrounded by a railing and an asphalt walk. By paying 25¢ to a beautiful blonde one may enter the area, lean on the fence, and peer at an assortment of creatures in the pit, including two half-grown alligators, an abundance of snakes of varied sizes, species, and degrees of decrepitude, and several frayed and scared frogs placed therein as food for the snakes. When the periphery of the pit became sufficiently populated with cash customers a weathered, lean man with leather boots under his long pants would enter the pit and stir up the snakes with a stick, giving a discourse on the habits, culture, and personal background of the various snakes he stirred. He would prod the racers until they raced; wallop, pound, and kick the rattlesnakes until they rattled; and feed the alligators a little hamburg. Occasionally one of the snakes would entrance the customers by eating a frog or another snake. Each Sunday there was a "rattlesnake fry", advertised in large lettering here and there, and occasionally in the daily paper. This affair consisted of cornering a large and ferocious rattlesnake, snaring him with a loop on the end of an old golf club, whacking off his head, skinning him as one removes a sock, chopping him into sections, frying him in deep fat left over from the previous Sunday, and serving him up on paper plates to the awed spectators who had paid the blonde 50¢ because it was Sunday and there was going to be a sacrifice. The meat was white and tender, tasting much like frogs' legs.

I thought this was grand, and engaged the weathered, lean man in conversation after the shouting had died down and most of the cash customers had departed – leaving their uneaten snake on their paper plates. He turned out to be a Cape Codder, and after exchanging pleasantries about the Bay State I learned that he bought snakes from local small boys and Mexicans for 50¢ a pound (75¢ apiece for coral snakes) and sold them to zoos or to anyone who wanted snakes. Indigo snakes, being very gentle and very large, had a special market with carnival snake-charmers. Most of the snakes eventually expired in the pit and they were salvaged. The skins were saved and sold – belts, shoes, etc. The fat of the rattlesnakes was placed in a large glass funnel in the sun where it gradually tried out and dripped into a bottle – rattlesnake oil, $1.00 per ounce, very good for rheumatism in Texas. The gallbladders were dried and sold for an unannounced price and mysterious purpose to a local Chinese apothecary. A desultory attempt had been made to extract venom, but apparently a fellow in Florida had a corner on the market and this was not considered worth while.

One thing led to another and thence to a bottle of beer, and finally I found myself in a trailer camp, eating supper with the weathered, lean man, his wife, the blonde (who turned out to be his daughter), and a smiling young Virginian who was his assistant. After this it seemed only natural to embark on a snake hunt, it being dark and there being sufficient Old Overholt in the pantry to support the mission in case of snake-bite. The latter, I found, was considered more prophylactic than therapeutic. This adventure proved to be the first in a series.

The function of these snake hunts was to provide water snakes and frogs to serve as fodder for the larger reptiles in the pit. The hunts were necessarily nocturnal because of the habits of the creatures, and were of course conducted in streams or swamps. Equipment consisted of a flashlight, a pair of boots, a pair of cotton work gloves, a golf club (#2 iron is best – a putter would be good, but the handle is too short), a gunny sack – and, of course, a bottle of Old Overholt.

It being late in the summer, the streams had become segmented into pools and the pools had dried to puddles, resulting in a concentration of the water fauna. In this particular ecological solution the frogs had a low solubility, being salted out by the snakes as the concentration increased; so a frog was a relative rarity and many pools seemed to be pure snake. The technique was as follows:

One would approach a pool, walking up the dry brook bed in the dark, don the cotton gloves, prop the bag mouth open with the crook of the left elbow, and, shining the flashlight boldly before one, wade hip-deep into the pool. Snakes could be seen swimming away in all directions to escape the invader. One had to grasp as many as one could, as quickly as possible, and stuff them into the bag. If one hesitated the snake would sound and hide in the murky water. The cotton gloves provided a sufficient thickness of cloth so that the little teeth of the water snakes could not penetrate to the skin of the hand, and his bite was ignored. Cottonmouth moccasins were in the minority among the brook snakes – but the approach to them was of course more formal and will be dealt with in the section on "Securing cottonmouths in Lake Mitchell". The cottonmouth is instantly recognizable and so "bear by the tail" situation did not occur. The benign water snakes have small oval heads and are intent on leaving town as rapidly as possible, while the cottonmouths have larger triangular heads with white markings about the jaws and are ready to mix it up, or at least stand pat. On our first venture we had a bag shortage, so the eager young hunter would enter a fruitful pool bagless, grab everything in sight and run for the man with the bag, looking a little like the Laocoön. In the course of an hour we filled an average-sized laundry bag about ½ full of snakes.

A later expedition in search of cottonmouth moccasins took us to the swampy shores of Lake Mitchell, just outside San Antonio. Lake Mitchell is fed by the outflow of the San Antonio sewers, so it is teeming with life and things. Vegetation grows rich and rank in its swamp and its waters fairly wiggle with wild life. Here the cottonmouth grows fat and happy – top-dog of a long series of creatures of increasing size, each feeding upon the smaller, its only obvious enemies being numerous nematodes and the collectors from the Reptile Garden.

The temperament and dentition of the cottonmouth necessitated a different hunting technique. This snake was almost always found at the edge of the water, and when approached he would not flee, but would coil and glitter his eyes, assuming a defensive attitude. Here the golf club came into play. Resisting a natural impulse to tee off, one would pin the coils of the snake with the head of the club, and work the club up the snake's body until the head was immobilized by pressure on the nape of the neck or thereabout. The snake thus being disarmed, one would grab him by the guzzle and drop him into the bag, first giving the bag a shake to cause its occupants to retreat to the cul-de-sac where they would not cause trouble.

There was one Army sergeant occasionally attending the hunt who had developed a somewhat different technique. First rendering himself immune to snake-bite with the medication provided for that purpose, he would approach a coiled cottonmouth and so bedevil it and terrify it with shrieks and proddings that it would betray its orthodox behavior and flee into the water. Then he would quickly grasp the very tail of the snake and carry it to the bag at arm's length. The snake was of course very interested in polishing off whatever was holding onto his tail and made efforts to arch its head up and bite the imprisoning hand. This was countered by shaking the snake straight again, as one would shake the coils out of a rope. Placing the snake in the bag was more difficult than in the conventional method, and resembled a little the game of croquet, using flamingos, as described in *Alice in Wonderland*.

The only significant snake-bite incurred during my acquaintance with this group was suffered by the smiling young Virginian. He accidentally put his foot into the mouth of a cottonmouth that was lying on the bottom of the lake digesting his evening meal. This would have resulted in nothing more than another snake in the sack but for the fact that he was wearing a pair of Japanese Army boots constructed of canvas and rubber, which did not prevent the entrance of one fang into his right little toe. First aid was applied on the spot in the form of a crucial incision with a razor blade through the puncture wound and a tourniquet about the ankle, and he was taken to the San Antonio Hospital where he spent a rather septic 3 to 4 weeks from the effects of cottonmouth bite and Lake Mitchell, or *vice versa*. Cottonmouth venom has a high titer of proteolytic enzyme and is also very dirty from a bacteriologic standpoint, so a considerable cellulitis is expected and clostridial infections are common. Our Virginian was loaded up with tetanus toxoid, antigas sera, antivenom, and antibiotics; the stocking of edema, representing progression of venom, etc. in the lymphatics, was periodically drained as it advanced with a circumferential garter of small crucial incisions through the skin and fat, and a venous tourniquet was kept above the edema. After a week or so the characteristic appearance of snake-bite was lost, and the leg looked like the leg of any one of the uncontrolled, unwashed diabetics with postphlebetic syndrome and badly infected athlete's foot which we see in E.W. The ultimate result, happily, was A4 F4.

As previously mentioned, most of the snakes expired in the reptile pit, and their life span in such captivity was usually measured in weeks. Post-mortem examinations on a few of these unfortunates demonstrated the reason for their demise, as each snake's viscera contained enough

MEMBERS OF THE MEDICAL HOUSE STAFF

variety and abundance of parasites to support a full-blown Ph.D. thesis. This is understandable when one considers that in nature the snake distributes its parasites' ova over a wide territory and probably seldom crosses its trail to reinfect itself; but in the pit the situation is much different, for not only did the snake wallow in its own and many other snakes' infected excreta, but the high snake diet they were on must have resulted in the diner accumulating the parasites of its meal plus the parasites of its meal's meal and its meal's meal's meal, etc. I was unable to help my friends in this problem in public health. The pit floor was already being hosed down daily, and my suggestion to diaper the snakes was considered neither helpful nor very funny.

I was asked to try my hand at treatment of one case, however, when A Florida Cottonmouth, whom we shall call George, suffered a decline. This snake was much larger than the local variety, measuring about 4 feet in length and being about as big around in the middle as a gym teacher's calf. For this reason, and because he had been imported at some expense, his impending loss was keenly felt.

When I first saw the patient he was lying listlessly on his side, with his mouth open and his lower jaw askew, looking very sad, indeed. History, as provided by the weathered, lean man, revealed that George had not been observed to eat anybody for about 2 weeks and had not stirred up well for about 6 days. Physical exam revealed a sick snake. I reasoned that George had the well-recognized clinical entity of too many worms, plus malnutrition. The indicated therapy was obvious: he should be wormed and fed. Searching about, I found some carbon tetrachloride in the Company fire extinguisher and some mag sulphate in a local bathroom medicine cabinet, and set about to accomplish the first part of the plan. An old Levin tube was found after a long search in the basement of the neighborhood drug store. George was weighed, and the CCl4 dosage scaled down accordingly. The Levin tube was passed in spite of poor cooperation from George, and the dose of CCl4 followed in a little while, with a good slug of 50% Epsom salt solution. The patient was then placed, expectantly, in isolation. The next morning George was surprisingly still alive, and the success of the treatment was evident. It looked as though George had whelped. We then proceeded with phase two, and squirted goodly amounts of raw egg and milk down George's gut. He responded wonderfully for the first 3 days, and resisted his Levin tube with real interest, like a regular South Winger. This improvement was only transient, unfortunately, and he went to Allen Street quite unexpectedly on the 6th day.

Post-mortem examination was performed. George's liver appeared not to have suffered from the CCl4. He appeared to have died from an obstructing lesion of the colon – in George, the descending colon. This looked for all the world like a carcinoma, but was probably an inflammatory process having to do with some kind of parasite. I put the specimen in my pants pocket, planning to have it sectioned in the pathology department of the Brooke Army Hospital. I would have loved to end this piece with a histological description, but, alas, my pants got sent to the laundry before I could accomplish my design.

Robert S. Shaw, M.D.,
Resident Surgeon

The 1950-51 season of art exhibitions in the Brick Corridor ended that June with a very special show – paintings and prints done by Boris Margo, well-known New York artist. His work aroused so much interest and appreciation that we have arranged with him to exhibit more of his work here next month.

Margo's paintings have been widely exhibited throughout the United States and in Paris, Brazil, Japan, and other countries. He is represented in the collections of the Museum of Modern Art, the Whitney Museum of American Art, the Metropolitan and Brooklyn Museums in New York, the Chicago Art Institute, the Philadelphia Museum, the National Museum, and many others. The Universities of Yale, Illinois, and North Carolina own examples of his work, as do also Lessing J. Rosenwald, Josepha Whitney, the Rockefellers, and several MGHers. Margo has conducted art seminars at the American University in Washington, D. C., in Boston, Louisville, Florida, and in other centers. He has invented his own printmaking technique — the cellocut – examples of which will be shown here. The Museum of Modern Art owns thirteen of these.

The Metropolitan Museum of Art has invited Margo to serve on the jury for its forthcoming exhibition of American watercolors, prints, and drawings.

We are indeed privileged to have eight or so examples of Margo's very latest work detoured via M.G.H. on their way from Provincetown to New York.

THE NEWS

No. 116 Boston, Mass. October 1952

THE ANESTHESIA LABORATORY

OF THE HARVARD MEDICAL SCHOOL AT THE MASSACHUSETTS GENERAL HOSPITAL

Doctors don't reason: they just rearrange their prejudices. So said (it is said) the late Mr. Vincent of the Rockefeller Foundation. There is no deterrent to the easy rearrangement of prejudices, as a substitute for reasoning, equal to a good laboratory. Over the past 16 years we have striven to build such a laboratory. In a report to THE NEWS a couple of years ago I wrote about the over-all Department of Anesthesia. This time I should like to describe the Anesthesia Laboratory in terms of what we are doing and where we are heading.

A NEGLECTED AREA IN MEDICINE

It seems fitting that research in anesthesia at the Massachusetts General Hospital should be an integral part of the institution, for, as though to celebrate the Hospital's silver jubilee, Morton's research with his fish, a dog, and one Gilbert Abbott, produced the Hospital's first great scientific contribution—a demonstration that is recognized over the world as a milestone of civilization's progress. Notwithstanding this auspicious introduction into clinical medicine, anesthesia remains a neglected area.

Some insight into the importance of this neglect can be obtained, perhaps, by taking a look at the results of a study we have been conducting in ten university hospitals. A careful on-the-spot examination of more than a half-million anesthesias over the past four and a half years indicates that the death rate from anesthesia (anesthesia deaths are so designated in each of the ten participating hospitals) is about 1:1650. Extrapolating this to cover all of the 7,000,000 anesthesias carried out in the 150,000,000 population of the United States each year, we find that nearly eight times as many citizens died of anesthesia as died last year from poliomyelitis. When one considers the millions rightly spent each year on poliomyelitis research and the small sum spent on anesthesia, the desperate need for giving attention to research in anesthesia is evident. It is believed that ours is the first laboratory to be dedicated to this end.

GOALS OF THE ANESTHESIA LABORATORY

Anesthesia in its death-dealing power is a neurological "disease". Even its sought-after primary effect is depression of the central nervous system; to an extraordinary extent its secondary or toxic effects strike through the nervous system. For example, even a complication apparently unrelated to the nervous system, like the accumulation of fixed acids in the blood as a consequence of ether anesthesia, can be prevented, as we have recently shown[1], by block of the nerve pathways to the adrenal glands. Even when these pathways are blocked, we can clinch the proof by injecting the secretion of the adrenal glands, epinephrine, in physiological amounts and show how this then results in the accumulation of fixed acids in the blood. The key to the understanding of the good and the bad powers of anesthetic agents lies in the nervous system.

There are two goals of the Anesthesia Laboratory: One is to study the problem of irritability (responsiveness) of the tissues to stimuli and the suppression of irritability by drugs—as fundamental a problem as exists in all biology; and second—a practical problem—to lower the death rate from anesthesia.

Let us consider the practical problem for the moment. How can the practical goal best be achieved? One point of view might be to go at once to a study of the complications of anesthesia: for instance, how often and why does spinal anesthesia cause severe headache, and why are some paralyses permanent after spinal anesthesia, as in the cauda equina syndrome? Now, such studies are needed and they are important; but to attack them is to attack the *symptoms* of the "disease", not the "disease" itself. In any case, funds are readily available from a number of sources for short-term studies of this kind.

In the long run, far greater distance will be covered and more of lasting value accomplished if a long-range attack can be made upon the basic problem stated in the first goal: Study of the primary effects of anesthesia, study of what the anesthesia process does, what anesthetic agents do to the nervous system in terms of *basic* pharmacology.

THE BROAD FIELD

Those not previously familiar with the work we are doing might wonder at the variety of the attacks being made on the problem at hand. The rationale of this several-phase attack becomes clear when it is realized that what can be studied profitably is the central nervous system depressants as a group. It is customary to divide these up into the sedatives, the hypnotics (the sleep producers), the analgesics[2] (the pain relievers), the antitussives (cough suppressers, related to the analgesics), the ego depressants (agents used in "truth serum", so-called), and the anesthetics. The needlessness of a rigid preservation of these several categories becomes apparent when it is realized that, for example, nothing more than increase in dosage of a barbiturate is adequate to take a patient through this gamut from sedative to anesthetic. A useful cross-fertilization of ideas comes from related work in these several categories.

SPECIFIC NEUROPHYSIOLOGICAL STUDIES

Under the following headings I shall describe how we have attacked this problem and how we hope to continue, handicapped as we are in planning and in holding the research teams together, by short-term grants.

A. *Techniques which make possible study of the white matter of the central nervous system.* In animals, Drs. Donald O. Rudin and George Eisenman[3] (since the work done is such a specific part of this presentation, I am including the titles of the papers with this text) have shown in this laboratory that various spinal cord tracts can be easily dissected over lengths of 10-15 cm and removed to a nerve chamber where they can study the character of the action potentials and metabolic peculiarities of central nervous system *white* tissue for as long as 24 hours. They have shown that these tissue masses are adequately oxygenated by diffusion alone and that spike potential properties are normal. In order to establish the fact of adequate oxygenation, studies were carried out which involved elevated tensions of oxygen. While the point was demonstrated with tensions slightly exceeding one atmosphere, deleterious effects of the oxygen were encountered at two atmospheres and studied extensively at eight. This led to a series of observations[4] which demonstrated that "oxygen poisoning" acts to increase the permeability of the cell membrane with loss of intracellular potassium and accumulation of it in the intercellular area. These techniques can now be applied to study of the effects of anesthetic agents on the cell membrane. This is very important. All evidence to date indicates that normal conduction of nerve impulses requires a normal membrane. The fundamental problem is how the anesthetic agents alter membrane properties and thus conduction of nerve impulses. Dr. Rudin and Dr. Eisenman are now in the process of characterizing the normal after-potential sequence of this tissue and find it strikingly different from that of peripheral nerve, notwithstanding many assumptions by others to the contrary. Associated with this difference there are some very interesting special responses of this tissue to altered ionic environment. This revolutionary new technique for studying the central nervous system has attracted the attention of several distinguished neurophysiologists who have come to see it. This technique makes available a new class of neural tissues (white matter) for electrical and pharmacological study of the effects of anesthetic agents on the central nervous system.

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[1] Brewster, W. R., Bunker, J. P., and Beecher, H. K.: Metabolic effects of anesthesia. VI. Mechanism of metabolic acidosis and hyperglycemia during ether anesthesia in the dog. In press.

[2] We have been asked to write for *Pharmacological Reviews* a review of methods for measuring pain and the application of such methods in the appraisal of analgesic agents.

[3] Rudin, D. O., and Eisenman, G.: A method for dissection and electrical study *in vitro* of mammalian central nervous tissue. Science *114*: 300, 1951.

[4] Rudin, D. O., and Eisenman, G.: Effects of oxygen at high pressure on central nervous system axons, Federation Proc. *11*: 133, 1952.

B. *Study of the electrical activity of the central nervous system in sleep and in wakefulness and as influenced by anesthetic agents.* Dr. M. A. B. Brazier's work (Macmillan has recently published her book on *The electrical activity of the nervous system*) in this laboratory on the effects of barbiturates on the electrical activity of the brain, in particular her demonstration that with the onset of sleep the origin of the electrical activity shifts from the back of the head (the occipital region) to the frontal region[5], her new and as yet unpublished method of measuring depth of sleep, and the effect of hypnotic agents upon this, as well as the work[6] on motility during sleep and the effects of drugs on this, are all fundamental attacks upon basic problems of the primary effects of the central nervous system depressants.

C. *Work on the mechanism of block of pain.* Other work in this laboratory on animals[7] laid the basis for our current hypothesis that barbiturates in small dose can block pain in man[8] by block of internuncial neurones, producing a temporary, a reversible, pharmacological lobotomy. (The similarities of this to surgical lobotomy are striking.) This hypothesis[8] needs further study as a basic approach to an understanding of the mechanism whereby pain can be relieved. We have made the assumption that full perception of the experience of pain requires intact association paths (long circuiting, reverberating nerve impulses, intact internuncial neurones, to put it into neurophysiological terms). Techniques devised by Dr. John M. von Felsinger of this Laboratory provide a means for measuring in man the effects of drugs on association paths. It is our working hypothesis that the integrity of association paths which appears to be necessary for the functioning of memory and the perception of pain is related to phenomena recordable by the neurophysiologist (reverberating nerve impulses indicated by after discharge). A goal, even though distant, is to try to link, as just described above, recordable laboratory phenomena and sensations and thoughts. We know of no more promising approach than this one.

D. *Use of massive afferent stimuli in study of the mechanism of pain block.* This in turn has led to another attack on the pain problem: Our hypothesis is that massive afferent stimuli of whatever origin will block pain. This is being supported at present by studies in man in pain of pathological origin whereby a sudden flushing of the skin as the source of the massive afferent stimuli, produced by nicotinic acid, appears to be effective in relieving pain.

E. *The measurement of pain and a new method for quantifying the intensity of pain in man.* The method[9] used for measuring pain was evolved here. We[10] have recently devised a method for measuring the intensity of the pain of a group of individuals and the response of such groups to pain-relieving agents. The method, long needed, has been well received. For several years this work has been supported by the Committee on Drug Addiction and Narcotics of the National Research Council from funds contributed by a group of pharmaceutical manufacturers. Work closely related to the study of pain is the study of the antitussive agents supported by the Medical Research and Development Board of the Army and carried out by Dr. Robert A. Devloo.

F. *Measurement of subjective responses in general.* The work on pain, which goes back to the recent war[11] (more accurately, to the Cocoanut Grove disaster), was our first excursion into the field of measurement of subjective responses. These matters have been reported in several papers (see, for example, [11] and [12]) and have recently been summarized[13]. Relevance of these studies to the growth of psychiatry seems rather evident. In conjunction with the study of sedative agents we[12] have devised methods (recently with Dr. von Felsinger) for measuring the effects of hypnotic drugs on psycho-physiological efficiency, in particular the effects on the integrated functions of the cortex, such as judgment and association. We have shown[12] that for hours following ingestion of a single barbiturate sleeping pill, certain higher functions are impaired. We have been able to measure this impairment even more exactly in recent studies with Dr. von Felsinger. Dr. Louis C. Lasagna has recently come to the Laboratory from Dr. E. K. Marshall's department at Johns Hopkins. His interests include the narcoanalysis agents, the pain studies, and work with Dr. von Felsinger and me on the measurement of euphoria, in particular the effects of drugs on euphoria. When one considers how much misery is associated with illness both within the hospital and outside, it is curious how little attention has been devoted to study of the use of drugs to produce a sense of well-being.

Those not specifically familiar with these things might wonder what the study of pain has to do with anesthesia: Just as it is not profitable to study sleep without study of wakefulness, so also the study of anesthesia with the study of pain gives depth and fullness to the study of anesthesia and its basic mechanisms and problems.

METABOLIC EFFECTS OF ANESTHETIC AGENTS WITH EMPHASIS ON THOSE MEDIATED THROUGH THE NERVOUS SYSTEM

An essential for sound progress in understanding the effects of the central nervous system depressants is to know what derangements they produce in the metabolism. This phase of our work was made possible in the beginning by Mr. Edward Mallinckrodt. His generous continuing support has brought it to fruition. Work in the Anesthesia Laboratory would be poorly balanced without these studies. An important aspect of this problem that has had little study is the influence of the nervous system in mediating these metabolic effects. While, as indicated above, the Anesthesia Lab-

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5. Brazier, M. A. B.: A study of the electrical fields at the surface of the head during sleep, EEG & Clin. Neurophysiol. *1*: 195-204, 1949.

6. Brazier, M. A. B., and Beecher, H. K.: A study of the alpha content of the electroencephalogram in relation to movements made in sleep, and on the effect of a sedative on this type of motility. In press, J. Appl. Physiol.

Goodnow, R. E., Beecher, H. K., Brazier, M. A. B., Mosteller, F., and Tagiuri, R.: Physiological performance following a hypnotic dose of a barbiturate, J. Pharmacol. & Exper. Therap. *102*: 55-61, 1951.

7. Beecher, H. K., McDonough, F. K., and Forbes, A.: Similarity of effects of barbiturate anesthesia and spinal transection, J. Neurophysiol. *2*: 81-88, 1939.

8. Keats, A. S., and Beecher, H. K.: Pain relief with hypnotic doses of barbiturates and a hypothesis, J. Pharmacol. & Exper. Therap. *100*: 1-13, 1950.

9. Denton, J. E., and Beecher, H. K.: New analgesics: I. Methods in the clinical evaluation of new analgesics, J.A.M.A. *141*: 1051-1057, 1949.

Keats, A. S., Beecher, H. K., and Mosteller, F. C.: Measurement of pathological pain in distinction to experimental pain, J. Appl. Physiol. *1*: 35-44, 1950.

Keats, A. S., and Beecher, H. K.: Determination of analgesic potency and side action liability in man of Heptazone, WIN 1161-2, 6-Methyl dihydromorphine, Metopon, Levoisomethadone, and Pentobarbital Sodium, as a further effort to refine methods of evaluation of analgesic drugs, J. Pharmacol. & Exper. Therap. *105*: 109-129, 1952.

10. Beecher, H. K.: A method for quantifying the intensity of pain. Presented at the autumn 1951 meeting of the American Society for Pharmacology and Experimental Therapeutics.

11. Beecher, H. K.: Pain in men wounded in battle, Ann. Surg. *123*: 96-105, 1946.

12. Denton, J. E., and Beecher, H. K.: New analgesics: II. A clinical appraisal of the narcotic power of methadone and its isomers, J.A.M.A. *141*: 1146-1148, 1949.

Goodnow, R. E., Beecher, H. K., Brazier, M. A. B., Mosteller, F., and Tagiuri, R.: Physiological performance following a hypnotic dose of a barbiturate, J. Pharmacol. & Exper. Therap. *102*: 55-61, 1951.

13. Beecher, H. K.: Experimental pharmacology and measurement of the subjective response. In press, Science.

oratory is primarily concerned with basic problems, we are not unmindful of the many practical problems awaiting solution. Study and comparison of phenomena described above and below will unquestionably help us to understand how anesthesia kills so often, it will help in the choice of agents, and through better choice and better management of anesthesia will help to lower the appallingly high death rate from anesthesia.

In my estimation a part of the total problem that greatly needs study at the present time (and has the least support) is the influence of the nervous system on the metabolic effects of anesthesia. Our pilot work on this aspect of the problem has gone far enough to make it clear that a rich harvest is available there. Specifically, this work is as follows: Our attack upon the metabolic effects of anesthesia[14] has shown the importance of the role of the nervous system in producing these metabolic changes. (Dr. John P. Bunker and Dr. William R. Brewster have taken a leading part in this development, with the latter being primarily responsible for the work with total sympathetic block. Both Dr. Nils Normann and Dr. Brewster have been attacking the problem of the effect of the muscle relaxants on the nervous system and the resulting circulation changes. Dr. Donald P. Todd, with Dr. Linton's group, has been interested in studying the effects of ether on the sympathectomized extremity of man.) Ether anesthesia in the dog has been shown to result in a moderately severe *metabolic* acidosis, with rises of total fixed acids, lactic acid, and pyruvic acid in the blood. This acidosis is accompanied by a hyperglycemia and by a consistent fall in serum potassium levels. Although normal adult man does not show a significant rise in fixed acids during ether anesthesia, the infant and child develop a metabolic acidosis that is similar in all respects to that occurring in the dog, though somewhat less severe. These metabolic effects of ether anesthesia were duplicated by infusing into the dog with a total sympathetic block (see below) quantities of epinephrine that may be physiologically liberated from the adrenal medulla and sympathetic nerve endings during ether anesthesia. Ether anesthesia was administered to 17 dogs in which sympathetic block had been established and maintained by the intermittent injection of 0.4 percent procaine into the epidural space. In the dogs with a total sympathetic block, ether anesthesia at arterial levels of 95 mg percent failed to produce a metabolic acidosis and no significant changes in blood lactic acid, pyruvic acid, total fixed acids, blood sugar, or serum potassium were observed. It is concluded that the metabolic acidosis and hyperglycemia of ether anesthesia in the dog are directly related to the quantitative output of epinephrine occurring during ether anesthesia, with the resultant mobilization by epinephrine of liver glycogen as glucose and muscle glycogen as lactic acid. From the above work in the dog, we may infer that the presence of a metabolic acidosis in the child during ether anesthesia, as contrasted with the absence of a metabolic acidosis in the normal adult, is due primarily to a far greater relative output of epinephrine mediated through the nervous system in the child during ether anesthesia as contrasted with the adult, or the child is far more sensitive than the adult to epinephrine.

We propose to study further the epinephrine output of the adrenal glands as influenced by anesthetic agents. The experimental preparation[15] developed in this Laboratory (whereby "total sympathetic block" can be made, and in particular the nerve supply to the adrenal glands can be blocked or not as one wishes, through a catheter in the peridural space through which 0.4 percent procaine can be injected), opens up a new field for study of this gland.

We have obtained enough information to show that whether ether in the dog produces an accumulation of fixed acids, that is, a metabolic acidosis (unlike the situation in adult man but like that in infants and young children), depends on whether the nerves leading to the adrenal gland are blocked (see above).

We hope to continue to study the effect of the presence or absence of adrenal gland effects on acid-base equilibrium, on the electrolyte changes of the blood, and, at the same time, on the circulation as indicated by blood pressure, heart rate, cardiac output, and peripheral resistance (calculated response). We shall also want to inject epinephrine into the blood stream in physiological amounts when the sympathetic blocks are in effect, thus checking our conclusions. We have already done this for ether in the work referred to above.

We have done a good deal of pilot work with ether and a little with cyclopropane. We should like to make well-rounded studies of the effects of ether, cyclopropane, ethylene, barbiturate (thiopental sodium, "Pentothal"), and spinal anesthesia. Work is being carried on concurrently in animals, and in man wherever possible.

SIGNIFICANCE

Experimentation in animals has given rise in the past to very great discoveries; it will in the future. Without in the least minimizing the importance of animal experimentation now or in the future, it is fair to point out that there is rightly an increasing interest in human physiology and in human pharmacology. It is clear that the frog and the dog are less comparable to man than some have supposed. It is also clear in studying the effects of the central nervous system depressants that man is the "animal of necessity" for most of such work.

The work described in the preceding pages is opening up a new field by means of new techniques for the study of the effects of drugs on the nervous system, and on the mind of man. It is basic pharmacology, it is basic neurology, it is basic psychiatry, in the fundamental sense of those overworked terms. New questions have been asked; some have been answered; but only the surface of an area has been scratched which can have great importance in the development of medicine. It needs long-range planning. It needs long-range support.

Henry K. Beecher, M.D.,
Chief of Anesthesia Service

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During a conversation the other day with Mr. Kinsman, our Superintendent of Works, concerning the new Nurses' Residence, which is fast going forward (or upward, we might better say), we learned that seven additional major construction jobs are under way or have recently been completed here at the Hospital. In case you may not know about all of them, here they are:

1. A 7th floor on the Vincent-Burnham Building has been started.
2. A one-story addition to the Vincent Laboratory, above the MGH Pharmacy, has been started.
3. The Mallinckrodt-Ward 4 has been remodeled – opening date was October 1.
4. Two constant-temperature rooms in the Research Building are nearing completion.
5. Studies have been completed and work started on the new Chemistry Laboratories on Domestic 3.
6. The Memorial Room for Dr. G. Marshall Crawford, on White 8, has been completed.
7. A new incinerator, in the old oil tanks behind the Bulfinch Building, is nearing completion. It will consume all the Hospital rubbish – 4½ tons a day.

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[14] Beecher, H. K., Francis L., and Anfinsen, C. B.: Metabolic effects of anesthesia in man. I. Acid-base balance during ether anesthesia. J. Pharmacol. & Exper. Therap. *98*: 38-44, 1950.

Bunker, J. P., Beecher, H. K., Briggs, B. D., Brewster, W. R., and Barnes, B. A.: Metabolic effects of anesthesia. II. A comparison of acid-base equilibrium in man and in dogs during ether and during cyclopropane anesthesia. J. Pharmacol. & Exper. Therap. *102*: 62-70, 1951.

Bunker, J. P., Brewster, W. R., and Beecher, H. K.: Metabolic effects of anesthesia. III. Acid-base equilibrium in infants and small children during ether and during cyclopropane anesthesia. In press, J. Appl. Physiol.

Fairlie, C. W., Barss, T. P., French, A. B., Jones, C. M., and Beecher, H. K.: Metabolic effects of anesthesia in man. IV. A comparison of the effects of certain anesthetic agents on the normal liver. New England J. Med. *244*: 615-622, 1951.

French, A. B., Barss, T. P., Fairlie, C. W., Bengle, A. L., Jones, C. M., Linton, R. R., and Beecher, H. K.: Metabolic effects of anesthesia in man. V. A comparison of the effects of ether and cyclopropane anesthesia on the abnormal liver. Ann. Surg. *135*: 145-163, 1952.

Brewster, W. R., Bunker, J. P., and Beecher, H. K.: Metabolic effects of anesthesia. VI. Mechanism of metabolic acidosis and hyperglycemia during ether anesthesia in the dog. In press, Am. J. Physiol.

[15] Brewster, W. R., Bunker, J. P., and Beecher, H. K.: Metabolic effects of anesthesia. VI. Mechanism of metabolic acidosis and hyperglycemia during ether anesthesia in the dog. In press, Am. J. Physiol.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Edwin B. Dunphy, Chief of Ophthalmology, and Dr. LeRoy A. Schall, Chief of Otolaryngology, took part in the thirty-eighth Clinical Congress of the American College of Surgeons, held in New York City from September 22 to 26.

Dr. Dunphy served as presiding officer for a symposium on "The surgical correction of motor anomalies involving the extraocular muscles". Dr. Schall was chairman for the symposium on "Nasopharyngeal fibromata".

Staff members will be leaving soon for Chicago to attend the meetings of the American Boards of Ophthalmology and Otolaryngology, which will be held from October 6 to 10. Subsequently, the American Academy of Ophthalmology and Otolaryngology will hold its meeting from October 12 to 17.

Dr. Dunphy, secretary of the Board of Ophthalmology, and Dr. Paul A. Chandler will serve on the ophthalmological examining board. Dr. Schall, as president of the Board of Otolaryngology, and Dr. Harris P. Mosher, Dr. Philip E. Meltzer, and Dr. Werner Mueller, members of the Board, will attend the otolaryngological examinations.

Several Infirmary doctors of both services will present instructional courses at the American Academy meetings, as they have done in past years. Dr. David G. Cogan will deliver the Jackson Memorial Lecture, speaking on "A type of congenital ocular motor apraxia presenting jerky head movements".

As is customary at Academy meetings, there will be a section of scientific exhibits. This year the American Association of Orthoptic Technicians will offer an exhibit entitled "What the ophthalmologist without an orthoptic technician can do for the orthoptic patient". Through visual means – charts, photographs, instruments – as well as through reports and case histories, the diagnosis and treatment of strabismus will be illustrated. Miss Ann Stromberg, Orthoptic Technician at the Infirmary, is co-chairman of the presentation, which is being planned in cooperation with the Department of Ophthalmology of the School of Medicine, Iowa University.

Dr. Trygve Gundersen, Surgeon in Ophthalmology, has been appointed Professor of Ophthalmology and head of that department at Boston University School of Medicine.

Dr. David S. Johnson, House Officer in the Department of Ophthalmology, has been appointed a First Lieutenant in the Air Corps. His first station was in Alabama.

The Board of Trustees, at their meetings on July 18 and August 15, voted:

To accept the resignation of Dr. John J. Cranley, Jr. from the position of Clinical Associate in Surgery, effective as of August 1.

To appoint:

Dr. George L. Brownell to the position of Associate Physicist (Medicine), retroactive to January 1, 1951 and to run through December 31, 1953;

Dr. Dulcie E. Blunden-Morris as Assistant Resident in Anesthesia, beginning September 1;

Dr. Nancy L. R. Bucher to the position of Associate Biologist (Medicine), effective July 1 and to run through June 30, 1955;

Lewis L. Engel, Ph.D. to the position of Associate Biochemist (Medicine), effective July 1 and to run through June 30, 1955;

Dr. Jerome Gross to the position of Associate Biologist (Medicine), retroactive to January 1, 1951 and to run through December 31, 1953;

Roger W. Jeanloz, D. Sc. to the position of Associate Biochemist (Medicine), retroactive to January 1, 1951 and to run through December 31, 1953;

G. David Novelli, Ph.D. to the position of Associate Biochemist (Research Chemistry), effective July 1 and to run through June 30, 1955;

Dr. Jesse F. Scott to the position of Associate Biophysicist (Medicine), effective July 1 and to run through June 30, 1955;

Dr. Elliot H. Sweetser as Clinical Associate in Psychiatry, beginning September 1;

Dr. James L. Vanderveen as Assistant Resident in Anesthesia, beginning August 15, 1953;

Dr. John M. von Felsinger to the position of Associate Psychologist (Anesthesia), effective July 1 and to run through June 30, 1955;

Dr. Byron H. Waksman to the position of Associate Bacteriologist (Neurology), effective July 1 and to run through June 30, 1955;

Dr. Oscar B. Williams, Jr. as Assistant Resident in Anesthesia, beginning October 1, 1953.

At their meeting on August 13, the General Executive Committee voted to continue the appointments of:

Dr. William H. Baker as Clinical and Research Fellow in Medicine, through June 30, 1953;

Dr. Joseph A. Blais as Clinical and Research Fellow in Medicine, through September 15;

Dr. Goodman Cohen as Clinical and Research Fellow in Medicine, assigned to Cardiology, through December 1, 1953;

Dr. Mandel E. Cohen as Clinical Fellow in Medicine, through June 30, 1953;

Dr. Philip H. Henneman as Clinical and Research Fellow in Medicine, through June 30, 1953;

Dr. Robert B. Loftfield as Research Fellow in Medicine, through June 30, 1953;

Dr. Raymond V. Randall as Clinical and Research Fellow in Medicine, assigned to Cardiology, through June 30, 1953;

Dr. Wilson R. Slaunwhite, Jr. as Clinical and Research Fellow in Medicine, through June 30, 1953;

Dr. Joseph E. Warren as Clinical Fellow in Medicine, through June 30, 1953;

Dr. Wesley G. Woll, Jr. as Clinical Fellow in Physical Medicine, through June 30, 1953.

To appoint:

Dr. Albert Damon as Clinical Assistant in Medicine for the period July 24 through August 31, to cover his services in the Staff Clinic;

Dr. Chester C. d'Autremont as Clinical Fellow in Psychiatry, to work under the direction of Dr. Jessner in Child Psychiatry, for the period September 1, 1952 through June 30, 1953;

Dr. Chester J. Dexter as Clinical Assistant in Surgery, assigned to the Tumor Clinic, effective as of July 1;

Dr. Allan St.J. Dixon as Clinical and Research Fellow in Medicine, effective as of August 25, 1952 through August 24, 1953;

Dr. James M. Doonan as Clinical Assistant in Surgery, assigned to the Tumor Clinic, effective as of July 1;

Dr. Jorge M. Martin as Clinical and Research Fellow in Medicine, to work with Dr. Stanbury in the Thyroid Clinic, effective as of September 9, for a period of one year;

Dr. Marc P. Moldawer as Clinical and Research Fellow in Medicine, to work under the direction of Dr. Fuller Albright, effective as of October 1.

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A 72-page pocket-sized volume entitled *Five years of the Massachusetts General Hospital Research Fund – 1947-1952*, submitted by the Committee on Research of the M.G.H., has been sent as a gift from the Hospital to subscribers to THE NEWS. A second issue in the series is about to be released. If you are a subscriber to THE NEWS and wish to receive this and subsequent issues of the reports on research at M.G.H., please communicate with the office of THE NEWS and your name will be placed on the mailing list.

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The fourth Edward Pierson Richardson Lecture, in Clinical Science, was given in the Bigelow Amphitheatre on September 18. The speaker was Sir Cecil Wakeley, K.B.E., C.B., President of the Royal College of Surgeons of England. The subject of his address was "Hernia of the bladder".

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in some instances. It would save your editor considerable time and trouble if you would, *please*, remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration – an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Experimental pharmacology and measurement of the subjective response.
Science 116:157-162.
Brazier, M. A. B., and Beecher, H. K.
Alpha content of the electroencephalogram in relation to movements made in sleep, and effect of a sedative on this type of motility.
J. Appl. Physiol. 4:819-825.
Greene, N. M.
Hypotensive spinal anesthesia. (Foreword by Beecher, H. K.)
Surg., Gynec. & Obst. 95:331-335.

Biochemistry

Thomas, E. D., Hershey, F. B., Abbate, A. M., and Loofbourow, J. R
Chromatographic determination of nucleotides in the suspending medium from irradiated yeast.
J. Biol. Chem. 196:575-582.

General Surgery

Churchill, E. D.
Obliterative bronchitis and bronchiectasis. (The Alex Simpson-Smith Lecture. 1951)
London, Institute of Child Health, University of London, 23 pp., privately printed.

* * *

Ever since our Archives Department was opened in 1940, Mrs. Nathaniel W. Faxon has volunteered her time here at least one morning a week. The list of jobs she has done is a long one, but the particular piece of work she has been engaged in for the past several months merits special mention.

A year or so ago the framed pictures of groups of MGH doctors, dating back to 1839, were removed from the walls where they had been hanging for years in various places about the Hospital and were taken from their frames. To these were added many unframed pictures, including those of house staff members up to the present time. Mrs. Faxon has arranged these pictures chronologically in a large box specially built to hold them, and has set up a card index of the groups (under department headings) and of each individual in each group. To date, the file runs to over 1500 cards, with several index numbers appearing on many of the cards.

As an illustration of the value of her work – whenever a call comes for a picture of Dr. So-and-so, shown with his Hospital group in 1832 or 1952, or with his Harvard Medical School Class of 1830 or 1948, with one flip of a finger we can now locate that picture if it is in our collection. And the file proved its worth in another direction a short time ago. One of our doctors was searching for a picture he had seen which included only two members of our staff of several years ago. By simply looking at the cards for these two individuals and seeing that the same index number did not appear on both cards, we were able to say in less than a minute's time that the desired picture is not in our collection.

We have Mrs. Faxon to thank for this and many other jobs – jobs of great value to the Archives Department, but of such time-consuming proportions it would have been utterly impossible for your archivist to have done them.

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The September meeting of the Distaff Club was held Friday evening, September fifth, in the Penthouse. Bobby Coe, Anne Ferguson, and Sally Kleaveland were hostesses on behalf of the Surgical Service.

Dr. Dean A. Clark gave a most interesting talk on many aspects of the M.G.H. – its history, its complex set-up, its finances, its educational functions, and its plans for the future. Several husbands were present and they contributed to a lively discussion of the plans for the proposed Massachusetts General Staff Associates. It was one of our most interesting and successful meetings, and we appreciate Dr. Clark's taking time from his busy schedule to speak to us.

On September eleventh, Mrs. Grant Rodkey, one of the founders and the second president of the Distaff Club, now a member of the Staff Doctors' Wives group, organized a very pleasant afternoon outing for the new members of the Distaff Club who are not working during the day. With the help of Mrs. Frank Wheelock and Mrs. Pierson Richardson (also Staff Doctors' Wives), Irma Levene, and Anne Ragland, Mrs. Rodkey looked after the children at her lovely new home in Belmont, while Dorothy Nielsen took a group of Distaffers out to Concord to see the two houses associated with Louisa May Alcott. There were delicious refreshments for both children and mothers, and everyone had a wonderful afternoon.

New addresses:—

Dr. Irving P. Ackerman (*M.* 1951), Mount Sinai Hospital, 5th Ave. and 100th St., New York, N. Y.
Dr. Ransom J. Arthur (*C.M.* 1952), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. L. Douglas Atherton (r.s. *U.* 1952), 706 Brown Bldg., Louisville, Ky.
Dr. Elizabeth F. Aub (*M.* 1952), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Daniel W. Badal (r.p. *Psychiat.* 1942), University Hospitals, Cleveland 6, Ohio.
Dr. Benjamin A. Barnes (*W.S.* 1945), Memorial Hospital, 68th St. and York Ave., New York 21, N. Y.
Dr. Leon I. Charash (a.r.p. *C.M.* 1952), 87 Webster St., Irvington, N. J.
Dr. George Christman (*Dn.* 1951), 395 Commonwealth Ave., Boston, Mass.
Dr. Albert Damon (*M.* 1952), 11 Richmond Rd., Newton 58, Mass. (After Nov. 15, Constitution Laboratory, Columbia-Presbyterian Medical Center, 620 West 168th St., New York, N. Y.)
Dr. Frank R. Egloff (r.p. *Psychiat.* 1951), 1600th Medical Group, Westover Air Force Base, Chicopee, Mass.
Dr. Sheridan S. Evans (*E.S.* 1945), 701 South Broadway, McAllen, Tex.
Dr. Harry Chao-Hung Fang (a.r.p. *Psychiat.* 1952), Neurological Unit, City Hospital, Boston, Mass.
Lt. James J. Ferguson, Jr., MC, USNR (*M.* 1951), School of Aviation Medicine, U. S. Naval Air Station, Pensacola, Fla.
Dr. Knox H. Finley (*W.M.* 1934), 2675 Pacific Ave., San Francisco 15, Calif.
Dr. Buford Hall (*M.* 1946), University of Illinois Research Hospital, 1819 West Polk St., Chicago, Ill.
Dr. Hans J. Harder (a.r.p. *An.* 1952), Virchow Hospital, West Berlin N65, Germany.
Dr. W. Robert Harris (a.r.s. *Or.* 1952), 75 Forest Hill Road, Toronto, Canada.
Dr. Arvil J. Hinshaw (*E.S.* 1947), 714 Goodhue Bldg., Beaumont, Tex.
Capt. Louis F. Johnson, Jr., A.O. 757144, 6147 Tactical Control Group, APO 970, c/o Postmaster, San Francisco, Calif.
Dr. Daniel J. Joly (clin. & res. fel. *S.* 1951), Memorial Hospital, 444 East 68th St., New York 21, N. Y.
Dr. Byrl J. Kennedy (*M.* 1946), Department of Medicine, University Hospital, University of Minnesota Medical School, Minneapolis, Minn.
Dr. Brian Kiely (*M.* 1952), Johns Hopkins Hospital, Baltimore, Md.
Dr. George H. Lawrence (*W.S.* 1947), 650 North Woodlawn, Kirkwood, Mo.
Dr. Joseph E. Levinson (clin. & res. fel. *M.* 1952), Doctors' Bldg., Cincinnati 2, Ohio.
Dr. George W. Morse (*E.S.* 1910), Brooks Hospital, 227 Summit Ave., Brookline, Mass.
Dr. H. Eugene Patterson (a.r.p. *C.M.* 1952), 309 North 25th Ave., Yakima, Wash.
Dr. Ruth E. Reuting (clin. & res. fel. *M.* 1951), 413 West Elm St., Titusville, Pa.
Dr. J. Max Rukes (*M.* 1950), Barnes Hospital, St. Louis, Mo.
Dr. Paul R. Schloerb (res. fel. *S.* 1948), University of Kansas Medical Center, Kansas City 3, Kan.
Dr. Karl Schmid (a. biochem.), 64 Avon St., Brookline, Mass.
Capt. Robert E. Scully, MC, USAR (a. path.), FE, Yokohama, Japan, APO 500, c/o Postmaster, San Francisco, Calif.
Dr. Lloyd H. Smith, Jr. (*M.* 1949), A-24, Winthrop House, Harvard University, Cambridge, Mass.
Dr. Walter W. Theus (*Dn.* 1952), 1019 Pickens St., Columbia, S. C.
Dr. James H. Townsend (*W.M.* 1923), U. S. Veterans Administration Hospital, White River Junction, Vt.
Dr. Stanley C. Ulick (*C.M.* 1952), Memorial Hospital, 444 East 68th St., New York 21, N. Y.
Capt. Austin L. Vickery, Jr., MC, USAR (a. path.), FE, Yokohama, Japan, APO 500, c/o Postmaster, San Francisco, Calif.
Dr. Henry R. Viets (*Bd. of Cons.*), Longwood Towers, 20 Chapel St., Brookline 46, Mass.
Dr. Robert J. Vitt (a.r.s. *Or.* 1951), 105 West 13th St., Hays, Kan.
Dr. Leon E. White (cons. s. *Otolar.*), 395 Commonwealth Ave., Boston, Mass.
Major James G. Wood, Jr., MC, USAR (clin. fel. *R.* 1950), Station Hospital, Camp Pickett, Va.

Brief bits:–

Dr. Henry K. Beecher, Chief of our Anesthesia Service, gave four lectures, by invitation, in the Scandinavian countries last August.

Dr. Wilma J. Canada (a.r.p. *R.*) is at Oak Ridge, Tennessee, studying the use of radioisotopes in research. She is one of 32 research workers enrolled in a four-weeks' course conducted by the Special Training Division of the Oak Ridge Institute of Nuclear Studies.

Dr. Paul C. M. Zamecnik, Associate Physician on our Staff, returned to M.G.H. a few weeks ago from a six-months' leave of absence, during which time he has been working in Dr. Linus Pauling's laboratory at the California Institute of Technology,

Members of the Surgical House Staff

studying the relationship of structural chemistry to medical research problems. Dr. Pauling, a member of our Scientific Advisory Board, is one of the foremost theoretical chemists in the world.

Just the nicest kind of letter has come from Dr. John McL. Morris (*E.S.* 1941), from the Department of Obstetrics and Gynecology, Yale University School of Medicine, New Haven 4, Connecticut. It reads:

I am enclosing a subscription request, with the customary stipend, for the MGH News.

In one of the five or six baskets of things to be done which now cover my desk I found a letter from you requesting news of me for The News. Fortunately, this letter has no date on it but I suspect it was written some six months or a year ago. So many things have happened to me during the past eighteen months that I can give you news on practically any subject you wish, from radiation therapy in Sweden and travel in Europe to the art of having a baby and the real estate situation in southern Connecticut. Rather than involving you in running a set of serial articles, I might give you a brief and unembellished resumé, from which you may extract any pearls you so desire, and which, for the sake of perversity, will be in reverse chronologic order. Those who don't like this order can simply begin at the bottom and read backward.

To end with, my wife has had a baby. She says it is better than any baby that was ever born but to me it looks just like all the other babies in the nursery, except for its halo and wings. In this respect it takes after my wife. I suppose such things are hereditary.

Next to the last, I am now an employee of Yale University as Associate Professor, more or less in charge of the section of Gynecology. It was with very real regret that I left the Massachusetts General Hospital, but babies have to eat and wives have to have hats. We are buying a house in Woodbridge which I hope some of your readers will visit when they come to New Haven, which they do on certain week ends during the fall, if not at other times.

The fact that I am lazy by nature and dislike writing spares you from having to hear about the many facets of our trip to Europe. The primary object of the fellowship was to study radiotherapy as practised at the Radiumhemmet in Stockholm. The system of centralization of malignant diseases gives them a tremendous volume of material to work with – one that is considerably larger than in any institution in this country, amounting to somewhere between five and ten times the number of cases seen at the M.G.H. For example, for the year that I was in Stockholm there were more than 550 new cases of carcinoma of the uterus (cervix and corpus). Their cure rates are not only better than we are attaining here (49.3% five-year apparent cures of 311 cases of cancer of the cervix treated in 1945), but their incidence of complications from radium therapy was only a fraction of that reported by most of the institutions in this country.

The Swedish system of medicine is also an interesting one. In general, the Scandinavian countries have handled the problem of Government aid in medicine in a far more satisfactory way than the British. For example, Swedish medicine is semisocialized, with the Government subsidizing hospital beds and the teaching programs. The central municipal and university hospitals, with ward fees at about $1.00 a day, are staffed by salaried doctors who are permitted to accept, also, fees from private patients. In addition, the Government provides part of the income of about 500 doctors in districts too remote and too sparsely populated to support a doctor. Here, too, the doctors receive fees from the patients they see and in addition have private practices. The Norwegian system is somewhat different, amounting more or less to a compulsory health insurance. Whatever the theoretical advantages or disadvantages of these systems, they seem to work very well as I saw them.

In addition to our time in Sweden we managed to cover some 15,000 miles in our car, including England, Scotland, Wales, Norway, Denmark, Holland, Belgium, France, Germany, Switzerland, Italy, Austria, and Yugoslavia. Dr. Meigs is responsible for the last jaunt, which proved most interesting. Actually, all of it was interesting. It is fantastic and awful to see the efficiency of the destruction of German cities by the American and British air forces. Postwar apathy in France, Italy, and Britain, and the effectiveness of the crude Communist peace propaganda makes a sharp contrast with the fear of the Russian terror which exists in the countries bordering on the Iron Curtain. I am not sure that most Americans realize what the Iron Curtain really means and how young minds are being warped so that there are generations who know of nothing but of hatred for America and what America stands for. I think that most Americans who underrate this menace underrate it because they know very little about it.

Like all people who travel, I feel that it is good to be back again and settling down. I am afraid it will be a great blow to my wife, though, when she realizes that doctors have to stay up at night for other things besides balls at the castle at Uppsala or Paris night life.

My very best to everyone.

Capt. Austin L. Vickery, Jr., MC, USAR (a. path.) sends a brief amplification regarding his military address. He writes:

Capt. Robert E. Scully (a. path.) and I have been assigned on special orders to the Far Eastern Theatre's Central Laboratory for Pathology and Research, located in Tokyo. It should prove to be an interesting tour of duty.

We are very glad that Lt. James M. Davis, MC, USAR (*S.* 1948) is keeping us up to date on his whereabouts. A recent letter from him reads:

Thanks so very much for the July-August issue of The News. I read it with keen interest and am looking forward to future copies.

I am now at the Medical Field Service School, Fort Sam Houston, Texas, and expect to remain here through mid-August, at which time I anticipate being sent to the Far East Command.

Warren Bennett (*M.* 1948) and Don Rudin (res. fel. *An.* 1949-52) are in my group here.

I will write again after I get my permanent assignment. Meanwhile, my Florida address – 1819 Goodwin Street, Jacksonville – is the best bet, as someone will always be there to forward any mail.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 117 Boston, Mass. November 1952

THE TEAM CONCEPT IN NURSING

Nursing service administrators today are concerned primarily with one question, "How shall we take care of our patients?".

While many nursing leaders and educators are proclaiming a new era in nursing, those of us facing the day-by-day need to give good nursing care with limited resources are not so sure whether we are witnessing the emergence of a new era or are simply struggling in the decline of an old one. Professional status for nurses may evolve more naturally through the demonstration of changing attitudes on the part of nurses themselves than in any radical change in the pattern of nursing education.

We often hear it said that teamwork is not new in nursing. It is true that we have always worked together, but this has been the result of expediency rather than of intelligent planning. Actually, for seventy-five years we have practised independently within the framework of a hierarchy so designed as to inhibit any thoughtful divergence from the main stream. The increased number of patients with the decreased number of nursing service personnel have brought us up against the startling fact that we are losing face as a profession because we are failing to take care of our patients.

The team concept in nursing *is* new. But, as Goethe has said, "There is something inevitable about an idea whose time has struck". The word "team" itself has a reassuring connotation. It is symbolic of action and achievement. It comes to us from the Anglo-Saxon and originally meant "family"; later, "brood", as a brood of ducks; and finally "two horses harnessed to the same plow".

The team concept in nursing breaks down and forever dissipates the idea of line authority. A title becomes only a mark of identification, a symbol of the kind of contribution that person is making in the care of the patient. What a well-motivated and well-trained aide can do for the comfort of the patient is more important to the patient than what the director of nursing service can do. And yet both the aide and the director of nursing service have the same basic needs to satisfy in their daily living: security, approval, the sense of belonging, and all the rest. Under the old hierarchy the nurse had only a meager gratification for her labors. Her professional and emotional growth were stultified beneath a so-called "professional attitude". There was a constant projection of "All's well" when all was not well. With the team concept in nursing, the individual functions freely according to her ability, in an atmosphere which recognizes her personal worth and tends to promote her development.

The team plan method of assignment of patient care is based upon the team concept. It has as its objective the improvement of patient care. In attempting to attain that objective, we knew we had to do three things:

1. Relieve the pressure on the head nurse
2. Develop job satisfaction for the staff nurse and the auxiliary workers
3. Provide a better educational environment for the students

The team plan is simply a decentralization of authority. Instead of the head nurse having direct responsibility for patient care and supervision of her staff, she assigns these functions to staff nurses or student nurse interns. These delegates are called team leaders and they are responsible for a certain number of patients and for the workers (other graduates, professional students, licensed attendants, student attendant nurses, or aides) assigned to them by the head nurse.

In the Baker, where we have been working with the team plan for two years, we try to have a team in each wing (twelve beds) and, so far as is practicable and desirable, to keep the same teams in the same wings. It is not always possible to have a leader in each wing. We frequently have only two leaders available, in which case an appropriate division of the patients is made. We have had days when we have had only one leader. The remarkable thing is the fact that in spite of our limited staff no one has ever wanted to return to the old system.

The duties of a team leader are similar to those of a head nurse on a small ward, except that she has no "desk work". She plans the assignment of nursing care of the patients in her wing and helps her team members to carry it out. She assigns to herself patients she believes most needful of professional care, gives all medications (unless there are other nurses in her team), and does major treatments. If there are students in her team, she works closely with the clinical instructor in making assignments for them which are appropriate and of particular educational value. She tries to develop abilities in her team members, to accept and strengthen their weaknesses, and in general to give each worker a sense of belonging and of importance. This kind of responsibility, in turn, offers the staff nurse greater satisfaction than can be attained under the functional method.

The team members, under the close guidance of the team leader, develop a sense of solidarity as they learn to work together. They no longer think of patients as "my" patients. Rather, they have come to think of them as "our" patients. They feel secure in the accessibility of the leader. This is particularly true of student nurse (professional and practical) members.

And what about the head nurse? Perhaps the best evaluation of the team plan was made by a head nurse who was asked to relieve for a short time on a floor which did not have the team plan. She said she was so confused by the lack of organization that she wondered how she had ever functioned under the old system. Under the team plan the head nurse finds she has less work to do on her off-duty time, and this makes her more contented. She is able to leave the ward and go to the library or some quiet spot to write student reports, make out time schedules, and so forth, because she is secure in the fact that the team leaders can manage without her. She has more time to devote to the over-all planning of the ward, to the doctors, and to the patients. She has time to think about the after-care of patients and to suggest to the doctors where that care may be obtained. She can plan her clinical teaching more thoroughly. All of these things were, in fact, observed by consultants from the United States Public Health Service, who followed up their first study of head nurse functions at the M.G.H.* by a study of these functions eight months later on a floor using the team plan.**

As we watched the progress of the team plan we were soon aware that its success or failure was determined largely by the team leaders. From evaluation sheets distributed at intervals to all workers we were able to identify the good leaders. We found that the most successful ones were usually nurses who had been with us for some time. This suggested that familiarity with the environment was an important factor in leadership success. But we also found that enthusiasm for the plan was essential. When we started the team plan we simply assigned our staff nurses as team leaders and they learned their job by trial and error. We began to ask ourselves, "Is there a better way?"

In order to find the answer to that

question, we set up a one-year program to develop team leaders. We then advertised in the July and August 1951 *American Journal of Nursing* for participants. Our only requirement was that the applicants have a minimum of one year of staff nurse experience. Their hours during the first few weeks would vary, but when they were assigned to the wards they would work the regular 44-hour week — including classes, clinics, and so forth — that other nurses work. Their salaries would be the same as for other nurses with similar preparation and experience.

Early in October 1951 we started our first program with an enrollment of four nurses. One participant was from Massachusetts, one from Maine, one from Maryland, and one from Michigan. All of the participants had more than the minimum requirement, two of them had been supervisors. The program was directed toward establishing a feeling of security. They became acquainted early with persons they might otherwise not have known. They obtained a sense of belonging to a group of people — nurses and non-nurses — who were all working together to improve patient care.

To reinforce this sense of security, we included in our program those clinics and demonstrations which would give the participants accurate information about our ways of doing things and our equipment. They observed in the operating room and in the recovery room. They were given information about our student attendant nurse program and our aide program by the directors of those programs. They attended doctors' lectures given to refresher course students and to our professional students whenever possible throughout the year.

Three of these students completed the program and are still with us. They have become able leaders and have stimulated others to greater effort to improve the team plan. They are now helping with our second program, which began early in October.

At the suggestion of the first team leader students, the program has now been reduced to a six-months' period and nurses without experience are eligible. We have six nurses in this second group — one from Canada, two from Maine, one from Minnesota, one from Ohio, and one from Connecticut.

As more and more of our own students work with the team plan, both as team members and as team leaders, and as nurses from other places come here to learn about the plan, we begin to establish resources for putting the team concept in nursing into practice.

Many people ask what the effect of the team plan has been on our patient care. An answer to that question can be given only after someone determines how to evaluate nursing care from the standpoint of the patient. We believe the care has improved, but we have no statistics. Patients vary in their reactions to nursing care. Some are impressed by a nurse simply because she is pleasant and attractive, while a conscientious nurse, giving excellent care according to professional standards, may have a personality which has a negative effect upon patients. Patients also vary in their reactions according to their own philosophy of life: some expecting more attention than others. In general, if the small but important wants of patients are met promptly and cheerfully, the patient is usually content. That is why practical nurses and auxiliary workers can often be successful in nursing, in spite of their limited preparation. That is why the professional nurse is beginning to recognize her importance in assuring patients of good care which is also safe care.

Dorothy Perkins Newcomb, R.N.,
Assistant Director of Nursing Service, Baker Memorial

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* Head nurse activities in a general hospital, *Federal Security Agency, Public Health Service*, Monograph No. 3. 1950.

** Not yet published

The traditional service pin ceremonies were held on Ether Day, October 16, in the Moseley Rotunda. The trustees of M.G.H. and Dr. Clark paid tribute to the more than 400 people present who had served the Hospital loyally through the years. For the first time, five-year service pins were awarded in addition to those customarily given for longer periods of service. Also for the first time, doctors who have been on the active staff of the Hospital for twenty-five consecutive years or more received service pins.

After Dr. Clark's opening words, Mr. Henry R. Guild, Treasurer of our Corporation and a member of our Board of Trustees, expressed the deep appreciation of the Board to these members of the MGH family for their long and devoted service to the Hospital. Dr. Clark's reference to our Director *Emeritus* elicited such a round of applause that Dr. Faxon, who was seated on the platform, was obliged to rise, and responded with a few extemporaneous words expressing his lasting affection for the Massachusetts General Hospital. An excellent piano program of five Chopin etudes was given by Mr. Alain Bernheim, an exchange student from the Paris Conservatoire to the New England Conservatory of Music. The awarding of service pins was then made by Dr. Clark.

After the ceremonies in the Moseley Rotunda, refreshments were served in the East Dining Room by the Dietary Department, assisted by twenty student nurses.

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Dr. Nathan O. Kaplan of our Biochemical Research Laboratory from 1945 to 1948 has recently been honored by the Eli Lilly Award for Biochemistry for 1953.

Dr. Earl R. Stadtman of the same laboratory from September 1949 to June 1950 has received the Paul Lewis Award for Enzyme Chemistry for 1953.

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The following communication has been received from Dr. Rulon W. Rawson (assoc. p. 1948) of the Memorial Center for Cancer and Allied Diseases, 444 East 68th Street, New York 21, N. Y.:

MEANS CLUB ORGANIZED

On May 8, 1952 twenty-two former fellows and associates of Dr. James Howard Means met at the Sloan-Kettering Institute to consider the organization of a Means Club.

At this meeting it was decided to organize the Means Club with membership limited, at least for the present, to former associates of Dr. Means who had worked with him in the Thyroid Clinic of the Massachusetts General Hospital. It was concluded that the purpose of the club would be to sponsor annual meetings, at which problems related to thyroid physiology and disease would be presented for informal discussions similar to those which we all had enjoyed with Dr. Means in the Thyroid Clinic.

The following resolutions were adopted: That the club should meet once a year in a clinic or laboratory of one of the members; that the annual meeting should be held in or near a center where one of the national medical or scientific meetings, which normally are attended by a majority of the group, is being held; that the time of each meeting should be for one day, either immediately prior to or after a national meeting.

It is planned that there shall be no formal organization of the club. A committee is composed of Dr. R. H. Williams of Seattle, Dr. J. Lerman of Boston, and Dr. R. W. Rawson of New York City.

It is planned that the group will meet on Sunday, May 31, 1953, at the Sloan-Kettering Institute, following the meetings of the Endocrine Society.

* * *

In response to the need for trained medical record librarians in hospitals all over the country, Simmons College and the Massachusetts General Hospital have inaugurated a joint training program. The first students to be enrolled were greeted at the Hospital on September 25 by Dr. Clark and Miss E. Louise Seymour, Record Librarian at M.G.H.

This is the only program in New England which provides a curriculum leading to a Bachelor of Science degree in this field. After three years of work at the Simmons College School of Business, the students in the fourth year divide their time between the College and the M.G.H. It was here at Massachusetts General, in 1917, under the leadership of Mrs. Grace W. Myers (then Treadwell Librarian and in charge of House Records, now Librarian *Emeritus*), that the first students ever to be trained as medical record librarians were enrolled on an apprenticeship basis.

All cases of patients at the Hospital

have been cross-indexed according to diagnosis as far back as 1873. Through the year 1950, the files contain the records of 660,000 patients, and our many medical research projects depend heavily upon information which can be gathered quickly in the Medical Records Department.

The Board of Trustees, at their meetings on September 5 and 19, and October 3, voted:

To accept the resignation of Dr. Harry W. Rudel from the position of Third Assistant Resident in Pathology;

To grant Dr. Joseph C. Aub leave of absence for the months of February and March 1953, in order that he may accept an invitation of the World Health Organization and the Unitarian Service Committee to teach in India;

To grant Dr. Joseph S. Barr leave of absence for the purpose of enabling him to be a member of a World Health Organization Team for Indonesia, for the period April 1 to July 1, 1953;

To grant Charles E. Rounds, D.M.D. leave of absence from his position as Assistant Dental Surgeon during his service with the U.S. Navy;

To continue Dr. William A. Rogers on the active staff of the Hospital through November 30, and to appoint him a member of the Board of Consultation as of December 1.

To appoint:

Dr. Marcel Berthiaume as Assistant Resident in Psychiatry, to begin January 1, 1953;

Dr. Samuel Bogoch as part-time Assistant Resident in Psychiatry at McLean Hospital, as of October 4;

Dr. Charles H. DuToit as Chief of the Chemistry Laboratory, as of September 1;

Dr. Freddy H. Frankel as Assistant Resident in Psychiatry for five months, beginning November 1;

Dr. William N. Jones as Assistant Resident in Orthopedic Surgery, beginning October 1, 1953;

Dr. Betsy A. Ledbetter as Assistant Resident in Anesthesia for one year, beginning July 1, 1953;

Dr. Farahe Maloof as Assistant in Medicine, effective November 1;

Dr. Chiu-chen Wang as Assistant Radiologist, as of January 1, 1953.

At their meetings during September and on October 1, the General Executive Committee voted:

To promote Dr. William P. J. Peete to the position of Resident in Surgery for one year, beginning January 1, 1953;

To promote Dr. Joseph B. Tanner to the position of Senior Orthopedic Resident for one year, beginning January 1, 1953;

To continue the appointment of Dr. Helen Thomopoulo as Clinical and Research Fellow in Medicine for another year, ending September 19, 1953.

To appoint:

Dr. Morris H. Adler as Clinical and Research Fellow in Psychiatry, beginning October 1;

Dr. Haroutioun A. Aprahamian as Graduate Student Assistant in Surgery for a period of six months, beginning September 2;

Billy Baggett, Ph.D. as Assistant in Biochemical Research, effective as of September 1;

Dr. Samuel P. Bessman as Research Fellow in Biochemistry, effective September 1;

Arnold F. Brodie, Ph.D. as Research Fellow in Biochemistry, effective as of September 1;

Dr. Louise S. Clark as Research Fellow in Medicine, effective as of September 10;

Dr. George H. Derry as Graduate Student Assistant in Surgery for one year, effective as of September 2;

Dr. John E. Gillespie as Graduate Student Assistant and Clinical Fellow in Surgery, assigned to Endoscopy, for one month, beginning September 1;

Sigmund Gruber, Ph.D. as Clinical and Research Fellow in Psychiatry, effective as of September 1;

Dr. Mahlon B. Hoagland as Research Fellow in Biochemistry, effective as of September 1;

Dr. William P. Jencks as Research Fellow in Biochemistry, effective as of July 1;

Dr. John H. Lamont as Clinical Fellow in Psychiatry, beginning September 1;

Dr. Ellen Lindback as Clinical Fellow in Anesthesia for a period of two and one-half months, beginning September 26;

Werner K. Maas, Ph.D. as Research Fellow in Biochemistry, effective September 1;

Dr. Patrick A. Ongley as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Athol G. Riddell as Clinical and Research Fellow in Surgery, effective as of October 1;

Dr. Roberto F. Santos as Clinical Fellow in Medicine, effective as of September 11 through November 30;

Dr. Albert Schilling as Clinical and Research Fellow in Medicine, effective as of September 1;

Ernst Simon, Ph.D. as Research Fellow in Biochemistry, effective September 1.

On June 30, Dr. Louis Dienes retired from the position of Bacteriologist. Effective as of July 1, he was granted the title of Consulting Bacteriologist.

On August 4, Mr. Edmund R. Mattos assumed the position of Assistant Director at the M.G.H.

* * *

VOLUNTEER GROUPS

Beginning with this issue, THE NEWS will carry reports and notices from the eight volunteer groups which serve either the Massachusetts General Hospital or the Massachusetts Eye and Ear Infirmary. These groups are:

1. The Ladies' Visiting Committee of the Massachusetts Eye and Ear Infirmary
2. The Board of Managers of the Vincent Memorial Hospital
3. The Ladies' Committee of the Bay State Medical Rehabilitation Clinic
4. The MGH Staff Wives Hospital Committee
5. The Distaff Club
6. The Ladies' Visiting Committee of the Massachusetts General Hospital
7. The Advisory Council to the School of Nursing of the Massachusetts General Hospital
8. The Massachusetts General Hospital Volunteer Service Department.

Since the Ladies' Visiting Committee of the Massachusetts General enjoys the distinction of being the oldest of these volunteer groups, we are including a brief account of its history and present activities and a statement concerning the formation of the new Coordinating Committee, as the leading report in this new volunteer groups column. This compendium is a transcription of a paper read by Mrs. Augustus Thorndike, Chairman of the Ladies' Visiting Committee of the Massachusetts General Hospital, at the 54th Annual Convention of the American Hospital Association, held in Philadelphia last September. The paper is titled "A Committee to visit the patient: the whys and wherefores", and reads:

In 1869 a committee appointed by the trustees of the Massachusetts General Hospital in Boston reported that they were in favor of appointing female visitors to the female wards *but* that the measure must be regarded as an experiment . . . that the Hospital is very well managed as it is . . . and it is unwise to disturb what is satisfactory . . . but that it may be found that with the help of *judicious* women it may be managed better . . . and that the benefits to be expected from lady visitors would, they thought, arise from their more acute perceptions.

Seven young ladies and four elder ladies were appointed, and just one year later were authorized by the trustees to visit the male wards, also, at their discretion.

Today there is a Visiting Committee of 50 active members who visit the wards in the General Hospital and, upon request, patients in the semi-private Baker Memorial. We have always been privileged to go into any part of the Hospital at any time of the day or night (perhaps because of the choice of "judicious women").

Each month visitors are assigned by the chairman of the Ward Visiting Committee to twelve wards in the General Hospital. Every member expects to visit for two months during the year, not necessarily consecutively, usually visiting her ward, or wards, twice a week. Any calls that come for special visiting are assigned by the chairman of the Ward Visiting Committee to one of the Committee who, she thinks, would be most helpful with that particular case. These special requests come from head nurses, social service workers, chaplains, members of the staff, and the trustees. Quite often they are for patients who are too far from home to have any visitors.

At the beginning of her visiting each member contacts the head nurse on her ward, who tells her which patients she feels are in need of a visitor. Frequently what a patient wants most is a listener – someone who, in a large hospital, has time to sit and listen. Walking along the corridor one day, a member was stopped by the head nurse on the ward where she had visited some months earlier who said, "How lucky to see you! Would you go up to the ward and see Elaine? She has just been told that the operation they were to do on her today has had to be put off, and what she needs most is to be able to talk to someone who has time to listen." Unfortunately, there is seldom time for the Hospital personnel to ease a troubled mind.

Periodically the question has come up as to whether the Massachusetts General Hospital should have a women's auxiliary. A committee appointed recently to consider this heard members of the various Hospital departments express their opinions on how an auxiliary could benefit the Hospital. We were very grateful to Mrs. Abraham E. Pinanski of the Beth Israel Women's Committee and Mrs. Frederick N. Blodgett of the New England Medical Center for discussing the organization and functions of hospital auxiliaries with us. Undoubtedly, every hospital has a somewhat different problem. The decision of this committee was that at the Massachusetts General, where there were already several voluntary groups serving the Hospital, instead of an auxiliary, it should recommend to the trustees that a Coordinating Committee be formed, consisting of the chairman and one other representative of each of these groups, thus leaving each individual group autonomous. Last autumn the first meeting of the new Coordinating Committee was attended by the two representatives from each of the volunteer groups. We have been both interested and benefited by the experience of the Presbyterian Hospital in New York with a committee very similar to ours.

The Ladies' Visiting Committee may still be an "experiment" and somewhat unique among women's hospital committees. We have never had a constitution or bylaws, we have never paid dues, and we have never been asked to raise money. However, we are custodians of six funds, three being willed to us and two given in memory of former members of the Ladies' Visiting Committee. The sixth, the X Fund, comes to us from an anonymous donor. We are simply trustees for this fund, turning the money over to the Hospital trustees to be spent for expensive medicines, like ACTH, etc. which so many patients are unable to pay for. Each year reports are sent to the donor, telling him of the specific cases his generosity has helped, and it is interesting that, never having had any previous association with the Hospital, he felt that giving money to the Ladies' Visiting Committee, rather than to a large community project, would assure its being used with a personal touch.

With the income from these funds, the net profits from our General Store, and contributions for special purposes, we are able to finance the expenses of the Ladies' Visiting Committee. The Committee has always been interested in pioneer projects in the Hospital, was responsible for starting our Memorial Gift Fund, and supported, wholly or in part, one of the first social workers, the first occupational therapist, and the first director of volunteers. These are now recognized parts of the Hospital organization. We have an Occupational Therapy Committee which recommends projects, financial or otherwise. At present we are paying the salary of a part-time musical therapist and an occupational therapist on the Children's Ward. The present director of volunteers is a member of the Ladies' Visiting Committee, and one of our Committee is a member of the Social Service Advisory Committee.

We now have many subcommittees, arising from "acute perceptions" while visiting and from personal contacts with the patients.

Cooperating with the Occupational Therapy Department, our Christmas Committee is responsible for Christmas activities throughout the Hospital. Planning for the patients' Christmas party, transportation of bed-, chair-, and walking-patients to and from the party, a children's party and the purchase of a gift for each child, purchase of poster paints for decorating the windows and glass partitions in the wards, Christmas cards for all ward patients and current Out-Patient Department patients, the addressing of the Christmas programs made in the Occupational Therapy Department, the purchase of greens and trees for inside and outside the Hospital, the financing of special Christmas projects, and the planning for groups of carolers and various other Christmas activities, are among the accomplishments of this committee.

We are often asked for furnishings for various parts of the Hospital, and on recommendation of our Furnishings Committee we sometimes finance such requests which the Hospital feels it cannot undertake.

Through our Library Committee we annually purchase for the Warren Library a number of new books and magazine subscriptions, both foreign and domestic, and playing cards to be distributed on the wards by the library book cart. A trustees' report of thirty years ago states: "The distribution of books to the patients by means of the small wheel trucks has been copied by many hospitals in other parts of the country."

The General Store is operated for the convenience of patients, their visitors, and the Hospital personnel, under the auspices of the Ladies' Visiting Committee. Our Store Committee is responsible for the paid personnel and the policies of the store, including a store cart to service the wards, manned by volunteers.

Our Plant and Flower Committee, besides providing flowers and plants for various parts of the Hospital, is sometimes asked to act in an advisory capacity in regard to outdoor planting.

In 1923 it was noted that a radio was donated to one of the wards instead of a Victrola. We now have a Radio and Television Committee who help with the problems connected with the purchase and servicing of these modern machines which give so much pleasure to the patients.

For many years the Ladies' Visiting Committee has helped with the teas given for the incoming class of student nurses and their families, and more recently has given teas for the visiting foreign doctors and their wives. During the spring and summer some of the Committee have had the student nurses and dietetic interns picnic at their country places. In the last few years several of the Committee, as well as many of the Staff Wives, have given their houses during the summer to some of the young doctors and their wives and children who otherwise would have had to remain in town, too often in very small and very hot apartments near the Hospital.

In January 1942, the Ladies' Visiting Committee organized a War Service of volunteers who did all manner of errands throughout the Hospital, including transportation of patients, and transmission of records, X-rays, and various requisitions. This has now become the Nursing Auxiliary Service, under the Nursing School Office, and staffed by paid personnel supplemented by volunteers.

Probably everyone remembers the Cocoanut Grove Disaster. Being familiar with the Hospital and with visiting the patients, members of our Visiting Committee were able to be of help that night and for many days after.

About ten years ago, through the vision and initiative of Bishop William Lawrence, Protestant Episcopal Bishop of Massachusetts, funds were collected for a Hospital Chapel. In 1941 a beautiful Chapel was built, in a location equally accessible to the General Hospital, Baker Memorial, and Phillips House. Over the door are the words: "Whoever will may enter here", and it was Bishop Lawrence's wish that the Chapel should be for the "spiritual refreshment of all, regardless of race or creed". Our Chapel Committee supervises the order and maintenance of the Chapel and keeps it supplied with flowers. During the winter of 1951-52 it was brought to the attention of the General Director that if there were no permanent religious symbol in the Chapel it would then truly fulfill the purpose for which it was built. The religious symbol which had been upon the altar was removed. Sickness and death are surely above sectarianism, and it is indeed gratifying that with the absence of any religious symbol in the Chapel men and women of varying creeds are now sitting or kneeling side by side. Now "The doors swing open for all", and "Whoever will may enter here". It is interesting that at this time there were ten Moslems in the Hospital as nurses, students, or doctors. The following quotation taken from the *New York Times* of September 12, 1952, speaking of the Meditation Room at the United Nations is also interesting: "Because of the variety of religions represented at the United Nations, care was taken to avoid any religious symbols."

For the past forty-five years this 83-year-old Visiting Committee has held monthly meetings, preceded by Executive Committee meetings, with the exception of the months of July and August. Reports of the chairmen of the subcommittees are given and a report of her visiting from each member who has visited during the month. At the annual meeting the Nominating Committee presents the slate for the election, for a one-year term, of chairman, vice-chairman, secretary, treasurer, and corresponding secretary. About three times a year we invite speakers, and for these meetings we also invite representatives of the Coordinating Committee and other committees connected with, or interested in, the Hospital. Once a year our chairman is asked to speak at meetings of the head nurses, student nurses, and dietetic interns. The lady member of the Hospital trustees is invited to all our meetings. The attendance at the monthly meetings, and not the speaker meetings only, has always been large, usually between seventy-five and eighty percent of our membership.

Our primary object is still visiting the patient. New members are told the importance of taking any problems or criticisms to the powers within and not to the world without. It is true that not everyone has the temperament or qualities necessary for visiting the sick. It can be both fascinating and rewarding. As one patient has written: "I have seen friendship offered to a girl who felt that she had no friends. I have seen her become interested in living again . . . because someone was concerned enough in making her feel like an important human being . . . most important of all, she was made to feel that someone cared", and in speaking of her own case this patient writes: "I had just had a straight-from-the-shoulder talk from one of the doctors and had been told some pretty dreadful things about my condition and prognosis. It was more than I could take and for the first time since I had contracted polio I went to pieces. I couldn't see any point in living – in being a burden to a young, ambitious husband, and a mother my child would be ashamed of because I would always be different from other mothers and an object of pity. While I was feeling the lowest a Visitor came in, and the tears I couldn't shed before my husband or mother were shed unashamedly before her. She talked very calmly to me and I knew she understood what I was going through. She didn't tell me I was lucky because I had my sight or my hearing or one good leg. She made no comparisons. I don't know exactly what she did say, but I know it was effective – for in about an hour I had stopped crying and was able to face my husband when he came. . . . The following morning she called the ward to find out how I was, and from then on her visits became a steady habit – even after her visiting period was over. The Visitor who followed her was equally wonderful."

[The high degree of interest in what our Ladies' Visiting Committee does for the Hospital was demonstrated at the conclusion of Mrs. Thorndike's talk by the number of requests, made by listeners from all over the United States and Canada, for copies of the Committee's booklet.—*Editor*]

MGH Staff Wives Hospital Committee

The fall meeting of the MGH Staff Wives Hospital Committee took place in the Walcott House living room on Wednesday morning, October 22. Coffee was served, after which Mrs. Walter Bauer and the chairmen of the various committees reported on the activities of the past year. Following the business meeting Dr. Robert L. Berg, Assistant Physician on our Staff, spoke on "Today's research – tomorrow's treatment".

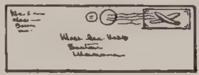
Ladies' Visiting Committee
Massachusetts General Hospital

The General Store is ready for Christmas. Are you? An early inspection of our cards and gift wrappings will assure you a fine selection and save you hours in crowded stores.

Several items have been added to our Archives collection since our last report of gifts. Among them are:

From Goodspeed's Book Shop — a printed program titled "Massachusetts General Hospital — Order of performances at King's Chapel, Thursday afternoon, 3d June, 1819", listing "full organ" voluntaries, Bible reading by the pastor, an address to the patrons of the Massachusetts General Hospital, and the words to "Hymn to benevolence". The watermark dates the paper on which the program was printed as being an 1806 product.

From Mrs. Grace W. Myers, Librarian Emeritus of Treadwell Library and of Medical Records at M.G.H. — Mrs. Myers's own copy of Dr. Ellis's *Extracts from a History of the Massachusetts General Hospital,* by Nathaniel I. Bowditch, with marginal notes made by Mrs. Myers.



Brief bits:—

Dr. Edward F. Bland, Physician on our Staff, was a guest speaker at the annual meeting of the Georgia Heart Association, held in Savannah on September 12 and 13. *En route* he visited the MGH contingent at the newly opened hospital of the University of North Carolina in Chapel Hill. The M.G.H. is represented there by Drs. Charles Burnett, Ernest Craige, Carl Gottschalk, and Isaac Taylor.

The following members of the Cardiac Group attended the meeting of the Fourth Inter-American Congress of Cardiology in Buenos Aires from August 31 to September 7: Drs. James H. Currens, Allan L. Friedlich, Howard B. Sprague, and Paul D. White.

Dr. Edward D. Churchill, Chief of our Surgical Services, was a guest of the Chicago Surgical Society on October 3. He delivered the 24th Annual Arthur Dean Bevan Lecture. His title was "Surgical interpretation of the biological processes of wound healing".

Dr. Robert C. Coe (*S.* 1951), will be on a six-months' affiliated service at the Snyder-Jones Clinic in Winfield, Kansas, from November until May.

Dr. Byrl J. Kennedy (*M.* 1946) is Assistant Professor in Medicine at the University of Minnesota Medical School and Director of Metabolism and Cancer Medicine.

MASSACHUSETTS EYE & EAR INFIRMARY

Mr. John Foster of Leeds, England, well-known ophthalmic surgeon, visited the Infirmary in September. He spent several days here, and presented a discussion on "The Ridley plastic lens" for the ophthalmological house officers and staff.

A special research project on the viruses of the upper respiratory tract was begun this summer in the Department of Otolaryngology. Investigation of the virus of influenza has been started and a program for the study of the common cold is being initiated. Robert Gohd, Ph.D., formerly in the Department of Bacteriology at Harvard Medical School, is carrying on this work.

Several new members have recently joined the staff of the Howe Laboratory. Jin Kinoshita, Ph.D. succeeds Dr. V. E. Kinsey as biochemist, and plans to study various metabolic processes in the eye in conjunction with Dr. Cogan. Dr. Kinoshita holds a joint appointment in the Howe Laboratory and the Biochemistry Department of the Harvard Medical School.

Toichiro Kuwabara, M.D. of Fukuoka, Japan, holds a one-year appointment in the Howe Laboratory, to study certain pathologic processes in the cornea. He is sponsored by the Boston Eye Bank.

Harold Kern, B.S. is associated with Dr. W. Morton Grant in research concerning the effects of chemical agents on the eye. Mr. Kern's appointment is sponsored by the Public Health Service.

Dr. Robert Herm began his residency in Ophthalmology on October 1. Dr. Herm is a graduate of Cornell Medical School and came to the Infirmary after two years of service with the United States Navy.

The ninth session of the Lancaster Courses in Ophthalmology was held at Westbrook Junior College in Portland, Maine, from June 21 to September 6. The courses, which were founded by the late Dr. Walter B. Lancaster, were sponsored by the Ophthalmological Study Council. Dr. Parker Heath, Director of the Eye Pathology Laboratory of the Infirmary, was the executive officer in charge of teaching arrangements.

Several Infirmary doctors served on the teaching staff. Dr. Harry E. Braconier taught Perimetry; Dr. Albert E. Sloane, Refraction; Dr. Paul A. Chandler, Glaucoma; Dr. W. Morton Grant, Toxicology; Dr. Merrill J. King, Medical Ophthalmology; Dr. Trygve Gundersen, External Diseases of the Eye; Dr. Edwin B. Dunphy, Surgical Principles; and Dr. Heath, Pathology. Assisting Dr. Heath were Dr. Donald Chickering and Dr. Robert H. Monahan, who served as fellows in pathology in the Eye Pathology Laboratory during 1950 and 1952, respectively.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in some instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration – an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Allergy

Burrage, W. S., and Irwin, J. W.
The treatment of bronchial asthma.
M. Clin. North America, Sept.: 1269-1278.

Evans, R. R., and Rackemann, F. M.
Allergy – Corticotropin and cortisone: A review of the literature from September 1950 to January 1952.
A.M.A. Arch. Int. Med. 90:96-127.

Rackemann, F. M.
The asthma problem.
Acta allergologica 5:1-10.

Biochemistry

Jeanloz, R. W.
La méthanolyse de l'acide hyaluronique méthylé.
Helvet. chim. acta 25:262.

Jeanloz, R. W.
The methyl ester of methylated hyaluronic acid.
J. Biol. Chem. 197:141-150.

Jeanloz, R. W.
3,4-dimethyl-D-glucosamine hydrochloride and derivatives.
J. Am. Chem. Soc. 74:4597-4599.

Dermatology

Lever, W. F., and Castleman, B.
Clear cell myo-epithelioma of the skin: Report of ten cases.
Am. J. Path. 28:691-699.

Lever, W. F., Hurley, N. A., and Blaney, A. E.
The proteins in pemphigus vulgaris. IV. Determination of the plasma proteins by electrophoresis and chemical fractionation in patients with pemphigus under treatment with ACTH or cortisone.
J. Invest. Dermat. 19:55-70.

General Medicine

Van Itallie, T. B., Waddell, W. R., Geyer, R. P., and Stare, F. J.
Clinical use of fat injected intravenously.
A.M.A. Arch. Int. Med. 89:353-357.

General Surgery

Churchill, E. D.
Management of wounds: Initial and reparative surgery.
In Symposium on treatment of trauma in the Armed Forces (10-12 March 1952), Washington, D.C., Army Medical Service Graduate School, Section Two, XI: pp. 1-5.

Neurology, Neurosurgery, and Psychiatry

Brewster, H. W.
Separation reaction in psychosomatic disease and neurosis.
Psychosom. Med. 14:154-160.

Farnsworth, D. L.
Medical progress: Mental-health aspects of civil defense.
New England J. Med. 247:209-216.

Lorenz, M., and Cobb, S.
Language behavior in manic patients.
A.M.A. Arch. Neurol. & Psychiat. 67:763-770.

Shands, H. C., and Finesinger, J. E.
A note on the significance of fatigue.
Psychosom. Med. 14:309-314.

Pediatrics

Wyngaarden, J. B., Crawford, J. D., Chamberlin, H. R., and Lever, W. F.
Idiopathic hypoproteinemia: Report of a case of transient edema, depression of plasma albumin and gamma globulin and eosinophilia.
Pediat. 9:729-735.

Physical Medicine

Watkins, A. L.
Physical Medicine in office treatment.
M. Clin. North America, Sept.: 1485-1493.

Miscellaneous

Farnsworth, D. L.
Doctors afield – Albert Schweitzer: Physician, philosopher, theologian, musician.
New England J. Med. 247:62-64.

Books

White, J. C., Smithwick, R. H., and Simeone, F.A.
The autonomic nervous system: Anatomy, physiology, and surgical application, 3rd edition.
New York, The Macmillan Company.

Dr. Evan Calkins, Chief Resident in Medicine—born in Newton, Massachusetts, 1920; attended Milton Academy; A.B., Harvard College, 1942; M.D., Harvard Medical School, 1945; Intern in Medicine, Johns Hopkins Hospital, 1945-46; U.S. Army: Medical Corps, biochemical research at the Army Chemical Center, Maryland, 1946-48; Assistant Resident in Medicine, Johns Hopkins Hospital, 1948-50; National Research Council Fellow in the Medical Sciences at Harvard Medical School, under Dr. A. Baird Hastings, 1951-52; practice of General Medicine, Peterborough, New Hampshire, summer of 1951.

Dr. Francis de Marneffe, Assistant Resident in Psychiatry—born in Brussels, Belgium, May 7, 1924; schools in Brussels, 1930-40; escaped to England via France at the time of the German invasion of Belgium, 1940; Bloxham School and King's College, University of London, 1940-42; Pilot in the Royal Air Force in England and Canada, 1943-46; resumed medical training, King's College and Westminster Hospital Medical School, University of London; L.R.C.P., M.R.C.S., M.B., B.S., 1950; Intern, Muhlenberg Hospital, Plainfield, N. J., 1950-51; Assistant Resident in Pediatrics, Kauikeolani Children's Hospital, Honolulu, Hawaii, 1951.

Dr. John H. Knowles, Assistant Resident in Medicine – born in Chicago, Illinois, May 23, 1926; Belmont Hill School, Belmont, Massachusetts; A.B., Harvard College, 1947; military service: ENS, USNR, 1947 to the present (2 years in ROTC); M.D., Washington University, St. Louis, Missouri, 1951; home address: 7025 Kingsbury Boulevard, St. Louis.

Dr. Si-Chun Ming, Assistant Resident in Pathology—born in Shanghai, China, November 10, 1922; M.D., National Central University Medical College, Nanking, China, 1947; Assistant Resident in Internal Medicine, University Hospital, Nanking, 1947-49; Medical Resident, Hackensack Hospital, Hackensack, N. J., 1950; Medical Resident, Christ Hospital, Jersey City, N. J., 1951.

Dr. George B. Murphy, Jr., Assistant Resident in Surgery – born in Plainview, Texas, 1926; U. S. Navy: Naval V-12 program, Hampden-Sydney College, Hampden-Sydney, Virginia, and University of Richmond, 1943-45; commissioned Ensign (H.P.), 1945; A.B., University of Virginia, 1946; M.D., Harvard Medical School, 1951; married.

Dr. Frederick G. Shaffer, Assistant Resident in Surgery – born in Nestorville, West Virginia, June 19, 1923; U. S. Army: Sergeant, serving in England, 1942-45; A.B., West Virginia University, 1947; M.D., Harvard Medical School, 1951; married.

Dr. Jack E. Tetirick, Assistant Resident in Surgery – born in Marysville, Ohio, September 14, 1926; military service: enlisted in U. S. Naval Air Corps, 1943, active duty as aviation cadet, 1944-45, discharged, June 1947; B.A., Ohio State University, Columbus, Ohio, 1948; M.D., Harvard Medical School, 1951; home address: 254 Amazon Place, Columbus, Ohio; married.

Dr. Giles D. Toll, Assistant Resident in Surgery – born in Denver, Colorado, January 16, 1927; A.B., Williams College, Williamstown, Massachusetts, 1947; M.D., Harvard Medical School, 1951.

Dr. Richard H. Watson, Assistant Resident on the Children's Medical Service – born in Lynn, Massachusetts, October 16, 1921; U. S. Army: Cavalry Medical Corps, and Infantry, with overseas duty in the 301st Infantry Regiment of the 3d Army in Germany and France, 1944-45; B.A., M.S. (Bacteriology), University of New Hampshire, 1947; Fellow, Department of Bacteriology and Parasitology, University of Rochester, Rochester, N. Y., 1949; M.D., University of Rochester, 1951.

New addresses:—

- Dr. Raymond A. Adams (r.p. *N.* 1951), University of Virginia Medical School, Richmond, Va.
- Simon Black, Ph.D. (res. fel. *Biochem.* 1952), Metabolic Institute, National Institutes of Health, Bethesda 14, Md.
- Dr. Thomas F. Broderick, Jr. (sr.r.s. *Or.* 1947), 1265 Beacon St., Brookline 46, Mass.
- Dr. Peter T. Brooks (*E.S.* 1943), 55 Tietan St., Walla Walla, Wash.
- Lt. Crawford S. Brown, MC, USNR (a.r.p. *D.*), U.S. Navy Dispensary, Constitution Ave., Washington, D. C.
- Dr. Chester J. Dexter (clin. a. *S.*), 51 Brattle St., Cambridge, Mass.
- Dr. Richard W. Dwight (*W.S.* 1931), Veterans Administration Hospital, Jamaica Plain, Mass.
- Lt. N. Joel Ehrenkranz, MC, USAR (*M.* 1950), Walter Reed Army Medical Center, Washington, D.C. (after Jan. 1, 1953).

Lt. John O. Esslinger, MC, USAR (sr.r.s. *Or.* 1952), U.S. Army Hospital, Box 48, Fort Bragg, N.C.
Dr. Albert J. Finck (a.r.p. *An.* 1949), 39 Somerset Rd., Brookline 46, Mass.
Dr. Amasa B. Ford (*M.* 1950), 2843 Hampton Rd., Cleveland, Ohio.
Lt. Boy Frame, MC, USAR (*M.* 1949), 8th Medical Group, 8th Fighter Bomber Wing, APO 970, c/o Postmaster, San Francisco, Calif.
Dr. Sanford T. Freedman (clin. a. *Or.* 1952), 316 Essex St., Lawrence, Mass.
Dr. David G. Freiman (a. path. 1950), Dept. of Pathology, Cincinnati General Hospital, Cincinnati 29, Ohio.
Dr. Lytt I. Gardner (*C.M.* 1944), Syracuse Memorial Hospital, Syracuse 10, N.Y.
Dr. Ferdinand Haase, Jr. (past a. dir.), R.D., Clipp Rd., Delmar, N.Y.
Dr. James P. Isaacs (a.r.p. *An.* 1952), School of Public Health, Harvard University, Cambridge, Mass.
Maj. Roy W. Leeper, MC, USAR (r.p. *D.* 1950), JAMMAT Dispensary, APO 206A, c/o Postmaster, New York, N.Y.
Dr. Francis M. McKeever (*Or.* 1930), Suite 804, 2010 Wilshire Blvd., Los Angeles 5, Calif.
Dr. D. Franklin Milam, Jr. (*S.* 1949), Surry, Maine.
Dr. Henry H. W. Miles (a. *Psychiat.* 1952), 1420 First St., New Orleans, La.
Lt. George B. Murphy, Jr., MC, USNR (a.r.s.), U.S. Naval Hospital, Chelsea, Mass.
Miss Edith E. Parris, American Journal of Clinical Pathology, Wayne County General Hospital, Eloise, Mich.
Dr. Raymond V. Randall (*M.* 1946), Mayo Clinic, Rochester, Minn.
Dr. Agustin L. Roque (res. fel. *Path.* 1952), Wheatstone Laboratory of Physics, Medical Research Council, Biophysical Unit, University of London, King's College, London, Eng.
Dr. Boris Senior (*C.M.* 1950), Medical Unit, University College Hospital Medical School, University St., London WC, Eng.
Wilson R. Slaunwhite, Jr., Ph.D. (clin. & res. fel. *M.* 1952), University of Utah, Salt Lake City, Utah.
Dr. Jack Spencer (r.p. *R.* 1934), 31 Deering St., Portland, Maine.
Lt. Giles D. Toll, MC, USNR (a.r.s.), U.S. Naval Hospital, Chelsea, Mass.
Dr. John C. Wilson (*Or.* 1917), Suite 804, 2010 Wilshire Blvd., Los Angeles 5, Calif.
Dr. John C. Wilson, Jr. (*W.S.* 1945), Suite 804, 2010 Wilshire Blvd., Los Angeles 5, Calif.

A long-overdue new address for Dr. Thomas L. Shipman (r.s. *P.H.* 1936) has just reached us, with this additional information:

My official position carries the title of Health Division Leader at the Los Alamos Scientific Laboratory. My office address is P.O. Box 1663, Los Alamos, New Mexico, and my home address is Route 1, Box 204, Santa Fe, New Mexico. I have been here since November 1948.

Dr. Joseph M. Stowell, who finished as Graduate Assistant in Surgery here in 1944, has written us an interesting letter. His present address is 1101 14th Avenue, Altoona, Pennsylvania.

Since last writing you of my activities I spent nearly a year in graduate work in general surgery at the Graduate Medical School of the University of Pennsylvania, from October 1950 to June 1951. The course was an excellent one and I highly recommend it to anyone, especially if he is practising away from a teaching center.

Following the termination of the course I returned to my general surgery practice in Altoona and have been quite busy since then.

On March 28, 1951, we had a red-haired addition to our family, making a total of five, to date. We are all getting along very comfortably and happily, although we miss our many friends in New England and hope the future may bring some leisure in which to renew old acquaintances.

I returned for the Alumni Day at the Pondville Hospital in June and had a grand time seeing many old Massachusetts General friends. I was very glad to join in the tribute given to Dr. Ernest M. Daland at the reunion and to become a member of the Daland Society. Dr. Daland certainly has done much for the Massachusetts General and Pondville, and for advancement in the treatment of cancer.

This letter has come from Lt. William N. Christenson, MC, USNR (*M.* 1949), whose present military address is USNS General A. M. Patch TAP 122, c/o Fleet Post Office, New York, N. Y.

Please list my address in the new MGH Directory as Box 524, Palm Beach, Florida, as this is a permanent home address for me.

I am still on active duty with the Navy, currently Senior Medical Officer on a transport in the Military Sea Transportation Service, Atlantic Area. This duty will continue until I leave the Service in January, to return to further house staff training in medicine.

Thank you for continuing my issues of THE NEWS.

In reply to our inquiry regarding his new address, Dr. Harrie R. Chamberlin (*C.M.* 1949) wrote:

Thank you for your note regarding the confusion over my change of address.

As of July 1 I became Chief Resident of the Medical OPD at the Boston Children's Hospital, and I presume this is the address you want for the new MGH Directory.

This appointment, however, is for six months, only, and I am not certain whether I shall subsequently enter practice or be doing academic work elsewhere. Hence, I would appreciate having THE NEWS sent to the address I previously gave you – 41 Middlesex Road, Chestnut Hill 67, Massachusetts – which is more permanent.

The many friends of Elizabeth Farrar, Librarian in our Warren Library from 1939 to 1947, will be interested to learn her new address. A short note from Miss Farrar reads:

After July 1, please send THE NEWS to me at the Public Library, Midland, Michigan. I enjoy reading it and so does my sister, who is an MGH graduate.

A letter has arrived from Lt. A. Thomas Licciardello, MC, USAR (*M.* 1948). His military address is APO 54, c/o Postmaster, San Francisco, and he writes:

I've just received the most recent issue of THE NEWS, which followed me halfway round the world before finally catching up with me here in Japan. I must say that I am very grateful for the perseverance of the Postal Service, and I spent an interesting hour reading through the familiar pages of our hospital paper. I noted with great pleasure the opening of the new House Staff Club rooms and regret that I was born five years too soon.

To fill in some of the gaps in my personal history for those who may be interested – I spent a full year at Fort Devens in pleasant professional and social surroundings. During this period our son Jere, now ten months old, was born. In March I came to the Far East, and have since been assigned to the 382d General Hospital, located just outside Osaka. I have no reasonable complaints about my duty here – working on the Medical Service, reading electrocardiograms, etc. – but I do long for the academic atmosphere now and then. Earlier this evening I attended the monthly meeting of our regional medical society, at which Frannie Moore – here on a one-month whirlwind tour as Consultant – gave an excellent talk on the treatment of shock, blood loss, and the renal complications of same. He was his usual masterful self and was the most intellectually refreshing thing to hit Japan since I've been here.

I would like to renew my subscription to THE NEWS, but find myself unable to transmit $2 via anything but military scrip. I will ask my wife to forward the amount. Please send THE NEWS to her at 20 Chase Street, Danvers, Massachusetts, since I expect to return within the next few months. My plans for the future are still uncertain, but from this distance all the alternatives look mighty good.

Best wishes to all the MGH family.

Dr. Mary S. (Blakely) Fisher (*M.* 1949) wrote this note on her subscription card:

After leaving Massachusetts General I began a radiology residency at the Presbyterian Hospital in New York. This was temporarily interrupted by the arrival of a son, now a year old. Am continuing in the X-ray Department at Garfield Hospital, Washington, D.C., and hope to complete my training early next year.

Two brief but very friendly notes have been received from Mr. A. L. d'Abreu, Visiting Surgeon at M.G.H. in 1951. Mr. d'Abreu's address is 58 Calthorpe Road, Edgbaston, Birmingham 15, England. He writes:

I get a great deal of pleasure from reading each issue of THE NEWS and have some idea of what is going on at the Massachusetts General Hospital from its contents. You all seem to be in as good heart as usual, and I am always interested to read of the many activities going on.

If any of your people are over in the Midlands of England I do hope they will let me know, as I should be delighted to see them. Dr. Churchill and Miss Sleeper, among others, could tell them exactly what they are in for if they do visit us!

It is just a year since Dr. Churchill was here with us, being just as delightful at the Queen Elizabeth Hospital as he is at the M.G.H., and I only wish we had him here again. However, I believe Dr. Walter Bauer will arrive soon.

I cannot tell you what a pleasure our contact with the M.G.H. gives to us all. You may say in any future copy of THE NEWS that if any M.G.H. man is within reach of the Queen Elizabeth Hospital, Birmingham, England, we shall always be delighted to see him.

My very best wishes to you all.

Dr. Means has sent us this letter he received from Lt. N. Joel Ehrenkranz, MC, USAR (*M.* 1950). The letter bears the address University of California, George Williams Hooper Foundation, Medical Center, San Francisco 22, and reads:

If the above address seems an unusual Army station, let me explain it by saying the Army has assigned me here to work under the aegis of Dr. Karl Meyer and continue the plague studies I started in Washington last fall.

At present we are involved in the pathogenesis and immunity of pneumonia plague in monkeys. I have a small "ward" (a monkey B 4) in which we do a fair number of clinical studies. Blood pressures, rectal temperatures, blood cultures, chest X-rays (I take and develop my own), laryngoscopies, Rumpel-Leede tests are all part of the routine— not to mention white counts and hematocrits. We are doing quantitative bacteriological studies to evaluate the efficacy of given immunizing agents. All in all, it is an excellent job, as well as I could do as civilian!

Dr. Meyer is a grand person to know. I have had close contact with him for the six weeks I have been here and find him a stimulating teacher — both in infectious diseases and in the art of living.

P.S. I did not get to Madagascar.

Mrs. Dorothy Perkins Newcomb, R.N.
Assistant Director of Nursing Service, Baker Memorial

A more recent letter from Dr. Ehrenkranz, written directly to The News, reads:

As I am still in the Army, a few words of clarification about my address are indicated. For the next few months I shall continue to function at the University of California, exploring some problems in the pathogenesis and immunology of pneumonic plague in monkeys. This is a delightful Army assignment, the uniform of the day being J. Press threadbare and the hours more or less my own. There are occasional tense moments in this pneumonic plague business, but armed with the clinical observation made in the E.W. by Dr. Stuart Ragland that I was too hard-bitten to die of anything but an acutely traumatic death, I regard the plague somewhat cavalierly. In regard to that fine physician and southern gentleman, he may be interested to know that not a few of the rhesus monkeys sprouted red carnations in their lapels on Robert E. Lee's birthday. One of these was overheard requesting his cagemate, a non-carnation-wearer, to keep his dirty cotton-picking hands to himself.

San Francisco is everything Dr. St. Goar said it would be – and more. My only regret, interns of the Army, will be in leaving this city; but by the first of the year I will probably be back at the Army Medical Center in Washington for my last few months (hopefully) of service.

Please extend my warmest regards to the personnel of the M.G.H.

We always know we are in for a treat when a letter arrives from Dr. Hugh Chaplin, Jr. (*M.* 1948). This one, true to form, arrived recently:

I'm afraid there has been a long lapse in correspondence on my part, due to the ever-present hope of prompt reassignment back in the U.S.A.; but since the Government seems likely to keep me here another six months, I am encouraged to send you a further news bulletin.

In these days of constant change, the Chaplins have been right on the band wagon. Within the last month our young daughter has returned from France, my wife has produced a 9 lb. male nuisance (David Dunbar, by name), and we have moved into a new flat (please note the new address – 4 Beverley Gate, West Hill, London SW 15). In spite of this personal whirlwind, the traditional atmosphere of calm which pervades the English landscape has remained unruffled, and we are sinking back again under its serene influence and digging in for another cold, damp winter.

In recent months the M.G.H. has seemed very close to us here in London. The first premonition of this phenomenon made itself felt in the presence of Gill Sanchez, who arrived with the Boston Symphony Orchestra under his motherly wing. We had a grand evening together, laying the groundwork with some good food and wine, followed by the exciting concert (there hasn't been as lively a concert in England for a millennium, I'm sure), and a few misty-eyed reminiscences over brandy before he headed back across the Atlantic. Not long after that, Linc and "Turtle" Clark turned up at our flat in Putney, and several nights later Bill Christensen blew in for a few brief hours, *en route* between Bremerhaven and Staten Island. We downed a few pints of "best bitter" at the Crossed Keyes pub in Chelsea, and then he, too, vanished into the night, as noisily as he had appeared!

Dr. Means's visit was a special pleasure, as you may well imagine. He was as enthusiastic and stimulating as ever, and after coming out to see the new laboratory building which my unit now inhabits, we adjourned to lunch in town with my boss and with Dr. Selwyn Taylor whom MGH-ers will remember because of his year with the Thyroid Group back around 1948. Other former visitors to the M.G.H. seem to be everywhere around one here in London – Ray Daley, who was with the Cardiac Group in 1950, also Tim Kunihan of the same outfit. And night before last, as I attended a Medical Research Society dinner at the London Hospital, I found myself sitting beside Paul Fourman of the Albright Group, 1948.

Quite in keeping with this reunion trend was the arrival of Dr. and Mrs. Chester Jones a few weeks ago – a most delightful interlude for me. Dr. Jones was much admired by all who met him out at the Hammersmith Hospital – his friendly ways, and his enthusiasm for the work which he was shown – these things made for him a host of new friends. He maintained his reputation as top-ranking authority in gastrointestinal affairs by insisting on a most excellent vintage Burgundy for the luncheon we enjoyed together.

It has been fascinating to be outside the U.S.A. during a presidential election campaign – to be able to see the reactions of the foreign press and to get first-hand accounts of British reaction to what they hear and read. There has been an interesting metamorphosis taking place in public opinion here, which I think can be summarized in three stages: 1) great relief at the defeat of Taft (who is much distrusted by Europeans) by Ike (whom all the Western Europeans revere); 2) astonishment and growing pleasure at the Democratic candidate, a man of whom Europeans knew next to nothing, but a man who seems to fit more closely than anyone else in recent decades into the Europeans' tradition of the statesman – polished, composed, witty, self-assured; 3) amazement and disappointment over the Nixon affair, not so much over the cause of the row as over the enormous emphasis which it received and over its sentimental denouement – these things are strictly outside the English political tradition, and they were very unfavorably received. I am forever besieged by the question "Who do you think will win?", but being so dependent upon the press for my information, I have not been able to make any sort of prediction. It is certainly tantalizing to be so far away at such a fascinating and important time.

My research progressses satisfactorily. We have passed the frontier in the field of blood preservation by freezing, but the "promised land" of practical application of the process is still some distance off. Nonetheless, with the goal in sight, though dimly, each day passes quickly and with some slight progress forward.

I expect to return to the U.S. in March. Till then, I renew our invitation to all MGH-ers near London – you will find a warm welcome at 4 Beverley Gate.

THE NEWS

Massachusetts General Hospital 1811

No. 118 Boston, Mass. December 1952

THE HOWE LABORATORY OF OPHTHALMOLOGY

The Howe Laboratory of Ophthalmology is unusual from several points of view. It is a department of the Harvard Medical School and is situated at the Massachusetts Eye and Ear Infirmary. It is devoted to the cause of ophthalmic research in the broad sense. Thus, it is as much concerned with ferreting out an enzyme system in the lens or measuring the rate of formation of the aqueous humor as it is with the clinical implications of neuro-ophthalmic disease or the selection of operative procedures for glaucoma patients. In fact, it is this integration of basic and clinical problems, or rather of basic scientists and clinicians, that has given the Howe Laboratory its unique opportunities and the reputation which it enjoys.

Founded in 1927 by a conjoint gift of Dr. Lucian Howe and the General Education Board of the Rockefeller Foundation, the Howe Laboratory got off to a start in a single room at the Harvard Medical School. The initial program had scarcely passed the organizational stage when it was halted by Dr. Howe's death. Operations were not then energetically pursued until 1932 when Dr. Frederick H. Verhoeff became the Director. Transferring the site of its chief activities to the Eye and Ear Infirmary, the Laboratory has since followed wherever opportunity has beckoned. Needless to say, the opportunities have been abundant, what with the vast clinical material at the Infirmary and the academic resources of the Harvard Medical School and other university centers. The fields of operation have been many. Dr. Verhoeff's many contributions during his eight years as Director were perhaps high-lighted by his fundamental studies in ocular pathology and psychophysiology of vision. Dr. Merrill J. King made extensive studies of infections and of tuberculoid reactions in and about the eye. Dr. Trygve Gundersen laid the basis for our understanding and treatment of virus infections of the eye. Dr. Clyde Keeler greatly enhanced the knowledge of ocular genetics. Dr. Elek Ludvigh was for years the pillar of physiologic optics. Dr. Everett Kinsey pioneered in ophthalmic biochemistry with great profit to all. Dr. Morton Grant has successfully straddled the fields of chemistry, pharmacology, and clinical ophthalmology. The present writer has enjoyed participation in many projects, especially those centering about clinical physiology of the eye. But as time deals out changes, so has it dealt with the Howe Laboratory. Drs. Ludvigh and Kinsey have left to assume professional positions elsewhere, setting up happily another, and basically similar, laboratory of ophthalmic research, and Drs. Jin Kinoshita and David Donaldson have joined the present staff. To this should be added, if space permitted, the names of research fellows and assistants who are serving or have served in the Howe Laboratory on numerous specific projects. The Laboratory has always been full to the capacity of its space and financial limitations. It is hoped it may grow in the future in size and service.

Current activities may be of newsworthy interest. Especially notable, perhaps, is the recent development of tonography in the Howe Laboratory. Heretofore, static measurements of ocular tension have been the chief means of determining the presence of glaucoma and the adequacy of control of the intraocular pressure. Dr. Grant, however, has perfected a technique whereby an increment of pressure is added to the eye while simultaneous pressure readings are made. Insofar as the increased pressure will cause an increased outflow of aqueous humor, the record obtained, or tonogram, gives an index of patency of the drainage canals in the angle of the anterior chamber. Now, by comparing tonograms of persons with normal eyes with those of glaucomatous eyes it has been possible to demonstrate that all glaucoma is due to obstruction of outflow. Moreover, by comparing the tonograms with gonioscopic or angle-viewing means it has been possible to demonstrate that the clinically different types of glaucoma are referable to the different types of angle obstruction. Finally, in conjunction with Dr. Paul A. Chandler, the tonogram is being used to predetermine the most effective therapy for the individual cases of glaucoma.

Another sphere of activity in the Howe Laboratory that may have general interest is that centering about effects of ionizing radiation on the eye. As a result of a survey undertaken for the Atomic Energy Commission, it was found that radiation-induced cataracts were occurring in a substantial proportion of those who had survived exposure to the atomic bomb in Hiroshima. This, combined with the fact that a number of physicists in this country were unexpectedly developing radiation-induced cataracts as a result of cyclotron exposure, has prompted a series of investigations in the Howe Laboratory aimed at studying the cataractogenic potentialities of the different types of radiation, and the mechanism by which cataracts are produced. It is probably fair to say that, as a result of these studies, the pathogenesis of cataracts is better understood for radiation cataracts than for any other type.

Of great popular interest has been the development, by Dr. Donaldson, of a superb technique for taking stereophotographs of the anterior segment of the eye. This has resulted in a collection of clinical photographs of the eye that, esthetically and pedagogically, are undoubtedly the best in the world. Moreover, a valuable series of stereophotographs have been made of selected brain dissections illustrating various phases of neuro-ophthalmology. This collection of eye and brain photographs provides a reservoir of pictures that have already proved of inestimable value in teaching, and should have increasing value for study purposes in the future.

But none of these current activities nor of the many others that might be pulled out of the hat represent fairly what the Howe Laboratory is or would like to be. There is no one problem, or even group of problems, to which the Howe Laboratory is resolutely dedicated. Rather, it is simply our humble aim to provide opportunity for persons of unusual talent and drive to devote their energies to the benefit of mankind through ophthalmic research. To paraphrase an old cliché dealing with pence and pounds, one might say, "Accumulate the intellects and the problems will take care of themselves."

David G. Cogan, M.D.,
Associate Surgeon in Ophthalmology
and *Director of the Howe Laboratory*

* * *

The Director of Admissions, Radcliffe College, has announced the offer of a competitive scholarship of $1000 in the Liberal Arts and Nursing Education for 1953-1954. The announcement reads:

"Radcliffe College and the Nursing School of the Massachusetts General Hospital offer this special scholarship on the basis of a competitive examination to be given in the applicants' schools in March 1953. Any senior interested in a career in nursing and in a liberal arts education is invited to try the examination. Additional scholarships are also available for this program leading to the A.B. degree and the diploma in nursing.

"A booklet describing the combined course and the scholarship examination may be obtained from the Director of Admissions, Radcliffe College, Cambridge 38, Massachusetts."

MASSACHUSETTS EYE & EAR INFIRMARY

The Board of Surgeons has accepted with regret the resignation of Dr. Lyman G. Richards, Surgeon for Bronchoscopy and Esophagoscopy.

Dr. Richards, an alumnus of the Infirmary, completed his residency in Otolaryngology in 1924. He was subsequently associated with the Children's Hospital and the Peter Bent Brigham, later becoming the Chief of the Nose and Throat Service at both hospitals. In 1940, Dr. Richards joined the staff of the Infirmary's Otolaryngological Department as our bronchoscopist and esophagoscopist, and received the appointment of Surgeon in Otolaryngology in 1943.

Dr. Richards is the author of *Otolaryngology in general practice.* He is a past president of the American Triological Society (1948) and the American Broncho-Esophagological Association (1939).

Dr. Richards will continue his association with the Infirmary as a consulting surgeon.

Dr. Charles L. Schepens delivered the Mark Schoenberg Lecture on December 1 before the New York Academy of Medicine, in New York City. "Prognosis and treatment of retinal detachment" was Dr. Schepens's subject.

Members of the Departments of Otolaryngology and Ophthalmology took part in a Medico-Military Symposium for Military and Civilian Physicians and Allied Professions, held at the United States Naval Hospital in Chelsea, from October 27 to 29. Dr. Richards spoke on "Epistaxis", giving a presentation of a case; and Dr. Daniel Miller discussed "Ear, nose, and throat cancer". Dr. W. Morton Grant presented a lecture on "The diagnosis of glaucoma".

Dr. John J. Shea returned to the Infirmary in October to complete his residency in the Otolaryngological Department after two years of absence for military duty. Dr. Shea began his residency in 1949, and entered the armed services in 1950. His principal military station was the U. S. Naval Hospital, Bainbridge, Maryland.

The Board of Trustees, at their meetings on October 17 and 31, voted:

That, in order to stimulate interest in the March 1953 class of the Training School of Nursing, five tuition scholarships of $300 each for the three-year course be instituted for students entering next March;

To change Dr. Warren B. Weil's title from Clinical Fellow to Assistant Resident in Pathology.

To appoint:

Dr. Stanley Berlow as Chief Resident on the Children's Medical Service for one year, beginning July 1, 1953;

Mr. Leon O. Brenner as Assistant Psychologist, effective September 29;

Dr. Hugh R. Dudley, Jr. as Third Assistant Resident in Pathology for one year, beginning July 1, 1953;

Dr. Morten Grove-Rasmussen as Director of the Blood Bank, effective November 1;

Dr. H. Walter Jones, Jr. as Assistant in Medicine;

Dr. Remedios K. Rosales as Assistant Resident in Pathology for one year, beginning July 1, 1953;

Dr. Jerome L. Weinberger as Clinical Associate in Psychiatry.

At their meetings held on September 24, October 15, 23, and 29, the General Executive Committee voted to appoint:

Dr. Luis I. Arias as Clinical Fellow in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Samir Bashour as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Alice N. Bessman as Research Fellow in the Children's Medical Service, effective as of September 1;

Dr. Rodolfo Carriedo as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Enrique E. Valenzuela as Graduate Student Assistant in Surgery for one year, beginning September 24;

Dr. Filiz Gencer as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Ghislaine Gilbert as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Manuel Guzman as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Thomas C. Hall as Clinical and Research Fellow in Medicine, effective as of July 1, 1951;

Dr. Paul P. Harasimowicz as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. William P. U. Jackson as Research Fellow in Medicine, effective as of December 1;

Dr. Klaus A. J. Jarvinen as Graduate Student Assistant in Medicine, for the period of October 15, 1952 through January 15, 1953;

Dr. Howard Levine as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Henry M. Lloyd as Research Fellow in Medicine, effective as of November 1;

Dr. Raul de la V. Lopez as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Mary N. McGovern, Ph.D. as Research Fellow in Medicine, effective as of October 16;

Dr. Myron H. Matz as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Seiichi Ohmori as Graduate Student Assistant in Dermatology, for the period of October 1 through December 31;

Dr. Raphael O. Patt as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Porn Piskanok as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Firmin E. Vansteenhuyse as Research Fellow in Medicine, for the period of four months ending January 31, 1953;

Dr. Wade Woothipoom as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. William Zukel as Graduate Student Assistant in Medicine, assigned to Cardiology for one year, beginning October 1.

* * *

Plans are in the making for the week-long Christmas festivities at the Hospital, and the Nurses' Christmas Formal is already scheduled for December 12. The program for the week immediately preceding the holiday will include the usual carol singing throughout the Hospital, the Nurses' Candlelight Service, the party for adult patients in the Moseley Rotunda on December 22, the children's party in the Burnham wards, the MGH employees' family party on December 23—for their children at 7 and the adults' dance at 8.

Further details concerning plans for Christmas at Massachusetts General and the Eye and Ear Infirmary are given in the "Volunteer Groups" column in this issue.

The following report concerning Dr. Marius N. Smith-Petersen, a member of our Board of Consultation, appeared in the July 5 issue of the *British Medical Journal.* Dr. Otto E. Aufranc, Assistant Orthopedic Surgeon on our Staff, very kindly sent us a reprint of the report and the *British Medical Journal* has given us permission to use it in THE NEWS. The article, titled "Reports of Societies", with subtitle "Dr. Smith-Petersen at Royal Society of Medicine", reads:

> At a crowded meeting of the Orthopaedic Section of the Royal Society of Medicine on June 25 Dr. M. N. Smith-Petersen, of Boston, read a paper entitled "Lessons learned from 14 years' experience with mould arthroplasty of the hip-joint."
>
> Dr. Smith-Petersen recalled that the purpose of an arthroplasty was to relieve pain and restore the greatest possible function to the joint. It was not possible to restore normal function, and the result necessarily varied with the quality of the "working stock", as he termed the tissues involved in the reconstruction. The principles of his method of mould arthroplasty were to reshape the joint surfaces to form a joint as mechanically perfect as possible, and to "guide" repair by the insertion of a smooth-surfaced mould of inert metal between the moving parts. The mould was designed to move freely within the mould. That the principle of guiding repair by a mould was sound was proved by histological studies of material removed at later operations or at necropsy. The articulating surfaces were found to be covered by smooth fibro-cartilage and sometimes even by hyaline articular cartilage. The stimulus to the formation of this smooth cartilage on the surface of the bone was a combination of pressure with friction against the smooth hard surface of the mould.
>
> ### OPERATIVE TECHNIQUE
>
> Discussing the technique of operation, Dr. Smith-Petersen said that he favoured the anterior incision, reflecting the abductor muscles from the ilium and turning the rectus femoris downwards. He preferred to isolate the lateral femoral cutaneous nerve and to divide it deliberately to prevent the possibility of pain from involvement of the nerve or its branches in the suture line. He still believed that it was wise to resect the synovial membrane as completely as possible. Its removal was equivalent to a neurectomy and he was satisfied that it reduced post-operative pain, even though the membrane always regenerated. He emphasized the importance of reshaping the acetabulum as well as the head of the femur. There was a tendency to leave the acetabulum alone if its cavity appeared reasonably smooth; but the temptation to do so should be resisted, for without careful reshaping of the acetabulum the new joint was mechanically unsound. He believed that neglect of this important step was

a cause of indifferent results. In most cases it was of advantage to deepen the acetabulum, and one should not hesitate to deepen it to the extent of penetrating the wall of the pelvis if that was necessary to secure a sound mechanical joint. It was his practice to cauterize raw bone at the rim of the acetabulum and on the ilium because, although there was no scientific proof of it, he believed that new bone formation was thereby reduced.

"Revisions", or secondary operations, might be necessary to improve the hip further, especially when the quality of the working stock at the time of the primary operation was poor – as in rheumatoid arthritis and ankylosing spondylitis. Because further operations might be needed he believed firmly that as little of the head of the femur as possible should be removed. To this end degenerative cavities in the femoral head had often been packed with bone chips to avoid sacrificing too much bone.

Referring to his results, Dr. Smith-Petersen reported a total of 1,039 arthroplasties, including 197 "revisions." There had been only one operative death. Wound infection had occurred in 42 cases. Improved methods of anaesthesia, transfusion during operation, and antibiotics had helped to make the operation safe even for old patients.

TRIBUTES TO DR. SMITH-PETERSEN

Before reading his paper Dr. Smith-Petersen was presented with the diploma of Honorary Fellowship of the Royal Society of Medicine by the president of the Society, Lord Webb-Johnson. Making the presentation, Lord Webb-Johnson said that a great debt of gratitude was due to Dr. Smith-Petersen for his pioneer work, which had brought relief of pain to thousands.

At the conclusion of the meeting Mr. H. J. Seddon also paid a warm tribute to Dr. Smith-Petersen. He had been endowed, he said, with a mechanical genius which he had used to full advantage. He recalled the many contributions that Dr. Smith-Petersen had made to orthopaedic surgery. They included the nailing of fractures of the neck of the femur, his exposure of the sacro-iliac joint for arthrodesis, his exposure of the hip-joint, his method of arthrodesis of the wrist, his mould arthroplasty of the hip, and recently, his bold operation of osteotomy of the spine for fixed flexion deformity.

* * *

RESEARCH ACTIVITIES OF THE ALLERGY DEPARTMENT

In October 1947, Dr. Francis M. Rackemann wrote in THE NEWS of the Allergy Clinic, of its beginnings in 1919 as one of the first out-patient ventures of the kind in this country, and of its progress from the earliest days to the post World War II period. This account, covering over a quarter century, embraced a period in medicine during which clinical investigation in the field of hypersensitivity made solid advances both in the United States and abroad. A subsequent report in THE NEWS of February 1952 by Dr. Burrage recounted more recent progress.

The Allergy Laboratory also came into existence in 1919 and was housed on the fourth floor of the Bulfinch Building until 1942 when it was moved to the basement. In 1950, it again migrated, this time to its present situation on the fifth floor of the Domestic Building. From 1919 to 1950, this laboratory was largely concerned with the preparation of antigenic extracts and vaccines used in the testing and treatment of allergic individuals. At all times, however, some clinical or more basic problem, such as the place of histamine in the antigen-antibody reaction, was under consideration.

By 1948, it had become evident that more fundamental research was greatly needed in the field of allergy. Allergic reactions tend to be explosive in nature. It appeared logical that one or more of the three great integrating systems of the body—neural, hormonal, or circulatory—might well be involved in these reactions. The study of the circulatory system was decided upon mainly because there was already some evidence that changes in the small vessels—arterioles, venules, and capillaries—were important in anaphylaxis and secondly because this system may be studied from the anatomical, physiological, and chemical standpoints.

This decision committed the Allergy Laboratory to a long-time, expensive basic project. Several problems had to be faced.

1. Continuation of routine laboratory procedures

The manufacture of essential extracts and vaccines was first studied. The latest and most efficient methods were introduced and all equipment put in good order.

2. Personnel

As microscopic study of living blood vessels had been determined upon as a research project, Dr. John W. Irwin —at the suggestion of Dr. Cecil K. Drinker—was sent to study with Dr. Melvin Knisley in South Carolina from 1949 to 1950. Miss Priscilla Gordon joined the laboratory staff in October 1951, and in February 1952, Miss Mary Graham left for a year at the Rigshospital in Copenhagen where she is now in the process of learning methods in use by Dr. Hausen and Dr. Warburg for making certain vascular pressure measurements. Miss Ina Gram Petersen, with similar experience in Copenhagen, came to us in exchange. Each year two medical students have been employed to help with the work throughout the summer.

3. Space

As the scope of the experiments grew, the space problem became acute and, in the absence of available expansion facilities, has remained so. During the summer of 1952, the laboratory ran from 7 A.M. to 2 A.M. daily, with different workers operating in shifts.

4. Financial support

The problem of sufficient funds is always with us, but a two-year grant from the U.S. Public Health Service and generous donations from friends of the Allergy Department have enabled the work to continue.

Microscopic studies of small blood vessels go back to Malpighi[1] in 1687. In 1922, Augustus Krogh[2] wrote: "The capillaries constitute the most essential part of the whole circulatory system. It is a little strange, therefore, to find that they have been neglected in an extraordinary degree." While much work has been done in the past thirty years on capillaries, this statement is still true.

It was first necessary to study the circulatory patterns of the minute vessels of internal organs of living mammals. The liver and subsequently the lung of both the guinea pig and the rabbit were chosen for this purpose. The procedure consists of exposing surgically the organ to be examined and then transilluminating it with light transmitted to it by means of a quartz rod. Direct microscopic examination of the capillary network under various magnifications is then possible. The final trick is to record these observations on colored motion picture film.

Examination of the functioning lung presents various obvious difficulties. One of these is the question of respiratory motion. A method devised to control much of this motion has given us some advantages over the technique of Wearn[3]. Changes in the vascular patterns of these organs have been observed and recorded both before and during anaphylaxis. Over 200,000 feet of motion picture film have been exposed in the process. The problem now is one of interpretation. Available data now indicate that in anaphylaxis:

1. Arterioles in the lung and liver contract.
2. Efferent sphincters and central venules contract in the liver.
3. White blood cells stick to the vessel walls.
4. Clumps of intravascular elements appear in all vessels.
5. Flow in the peripheral vessels stops before the effective heartbeat ceases.

Other concurrent problems are under investigation in the Allergy Laboratory. The circulation of the stria vascularis of living mammals is being studied by similar methods in collaboration with Dr. Francis L. Weille. This area may well prove important in hearing, as the stria vascularis is thought to supply blood to the organ of Corti.

It is appreciated that anatomical details and physiological reactions, as well as manifestations observed following anaphylactic shock, vary in different animal species and that these observations in animals are not necessarily transferrable to man. It is also evident that the technique of direct observation as described above is not as yet applicable to the human being insofar as larger organs are concerned.

It has, however, been possible to observe the circulation of the bulbar conjunctiva of patients with severe asthma, both before and during cortisone therapy. It now appears that cortisone causes a diminution of the number of vessels in a given field with compensatory dilatation of those vessels which remain open. Intravascular clumps of cells form under cortisone therapy, and vessel walls become hazy, suggesting the presence of edema. These preliminary data must clearly be subjected to careful review.

The Allergy Laboratory is developing into a well-equipped workshop for the basic study of problems related to this branch of internal medicine. This includes communication with other laboratories throughout the country interested in similar projects. Ours is one of the older laboratories in the Hospital.

Progress has not been rapid, but we face the future with confidence that more can and will be done for those afflicted with allergic disease.

Walter S. Burrage, M.D.,
Head of Allergy Department

REFERENCES

1. Malpighi, M.: Opera Omnia, Lugduni Batavorum, 2, Epistola ii, De Pulmonibus, 328, 1687.
2. Krogh, A.: The anatomy and physiology of capillaries, Yale Review Press, 1922.
3. Wearn, W. J., Erustene, A. C., Bromer, A. W., Barr, J. S., Germain, W. J., and Tschesche, L. J.: The normal behavior of the pulmonary blood vessels with observations on intermittance of the flow of blood in arterioles and capillaries, Am. J. Physiol. *109*: 266, 1934.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in some few instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

General Surgery

Cope, O., Labbe, J. P., Raker, J. W., and Bland, E. F.
Pheochromocytoma and adrenal cortical adenoma: Report of a case with both tumors and discussion of their relation.
J. Clin. Endocrinol. & Metab. 12:875-880.

Nardi, G. L.
Metabolic studies following total pancreatectomy for retroperitoneal leiomyosarcoma.
New England J. Med. 247:548-550.

Laboratory Science

Black, S., Jones, M. E., Flynn, R. M., and Lipmann, F.
Mechanism of ATP-acetate reaction.
Federation Proc. 11:189.

Elliott, W. H.
Enzymatic synthesis of glutamine.
Federation Proc. 11:207.

Gregory, J. D.
Further purification and chemistry of coenzyme A.
Federation Proc. 11:222.

Gregory, J. D., and Lipmann, F.
The nature of the sulfur in coenzyme A.
J. Am. Chem. Soc. 74:4017-4019.

Levintow, L., and Novelli, G. D.
Enzymatic synthesis of coenzyme from pantethine and other fragments. (Abstract)
In Division of Biological Chemistry of the American Chemical Society: Abstracts of papers presented at Atlantic City, N. J., Sept. 14 to Sept. 19, 1952, pp. 33C-34C.

Lipmann, F., Jones, M. E., Black, S., and Flynn, R. M.
Enzymatic pyrophosphorylation of coenzyme A by adenosine triphosphate.
J. Am. Chem. Soc. 74:2384.

Nachmansohn, D., Ochoa, S., and Lipmann, F. A.
Otto Meyerhof: 1884-1951.
Science 115:365-369.

Neurology, Neurosurgery, and Psychiatry

Clark, L. D., Bauer, W., and Cobb, S.
Preliminary observations on mental disturbances occurring in patients under therapy with cortisone and ACTH.
New England J. Med. 246:205-216.

Cobb, S.
Review of neuropsychiatry for 1951.
A.M.A. Arch. Int. Med. 90:410-421.

Finesinger, J. E., Shands, H. C., and Abrams, R. D.
Managing the emotional problems of the cancer patient.
In Clinical problems in cancer research, Sloan-Kettering Institute Seminar, 1948-49 (pub. 1952), pp. 106-121.

Weisman, A. D.
Nature and treatment of tics in adults.
A.M.A. Arch. Neurol. & Psychiat. 68:444-459.

Ophthalmology

Donahue, H. C.
Congenital ectasia of the cornia.
A.M.A. Arch. Ophth. 48:154-160.

Otolaryngology

Kelemen, G.
Mechanical injuries of the hearing organ.
In American Academy of Ophthalmology and Otolaryngology Instruction Course, (loose leaves, no pagination).

Pediatrics

Butler, A.M.
The therapeutic implications of disturbances in water and electrolyte metabolism in diabetic acidosis.
In A symposium on the clinical and biochemical aspects of carbohydrate utilization in health and disease, Baltimore, The Johns Hopkins Press, pp. 106-114.

* * *

VOLUNTEER GROUPS

LADIES' VISITING COMMITTEE
MASSACHUSETTS EYE & EAR INFIRMARY

On October 29 the Committee invited the wives of the doctors on the Medical Staff to a meeting at the Nurses' Home. Dr. Charles L. Schepens, Director of our Retina Foundation, gave a very interesting talk on "Modern methods of treating separated retina". Miss Phyllis B. Scott, Secretary for the Eye Bank and Director of Volunteers, told of the many places in the Infirmary where volunteers are needed. We hope that some of the wives will be inspired to help.

The usual contribution has been given for Thanksgiving, to provide a favor for every patient's tray.

At Christmas the Committee gives wreaths for the doors, ice cream, candy, etc. for the hospital party, and a small present to each patient on the wards.

BOARD OF MANAGERS
VINCENT MEMORIAL HOSPITAL

The Board had its regular monthly meeting in the Vincent Room on Thursday morning, November 13. Before the meeting, the Vincent Hospital family joined the Board for a fifth birthday party. Although the original Hospital, located on Chambers Street, was founded in 1891, the Vincent has annually celebrated the dedication of its new building, which took place in November 1947.

This fall, the Board of Managers announced, with deep regret, the resignation of Miss Dorothy Rackemann as its president. Miss Rackemann, who has held this office for the past four years, has accepted the position of head of volunteers at the Massachusetts Memorial Hospitals. Mrs. George Lewis, Jr. is the new president of the Vincent Memorial Hospital Board of Managers.

Mrs. Arthur W. Allen was the Hospital's visitor for November, and Mrs. W. Arthur Dupee, Jr. was in charge of the patients' Thanksgiving party. Christmas Day plans for the patients are under discussion between Miss Corkum and the Board.

MGH STAFF WIVES HOSPITAL COMMITTEE

At our October 22 meeting the following officers were elected for the year 1952-1953:

Co-chairmen Mrs. Joseph C. Aub
Mrs. Richard H. Sweet
Hospitality Mrs. Walter Bauer
Mrs. Edward D. Churchill
Treasurer Mrs. Bradford Cannon
Executive Secretary
Mrs. Dana L. Farnsworth
Recording Secretary
Mrs. Grant V. Rodkey
Corresponding Secretary
Mrs. E. P. Richardson, Jr.
Publicity Mrs. John W. Raker

Plans for the coming year emphasize hospitality to MGH visitors from other countries and their families. In their honor a tea was given in the Medical Staff Room of the Bulfinch Building on November 20. Staff wives who had expressed a particular interest in extending hospitality to overseas visitors were also invited. Subsequently, many Staff members entertained visitors and their families in their homes at Thanksgiving. Those who would like to invite visitors from other countries for Christmas, or at any other time, may obtain information concerning them by calling either Mrs. Walter Bauer, UN 4-2335, or Mrs. Edward D. Churchill, BE 5-3718.

Mrs. Milford D. Schulz has arranged a series of afternoon concerts for patients, to be given in the Chapel twice each month. The first of this series was given on November 11, when Mr. Homer Whitford, Director of Music, McLean Hospital, gave an organ recital. Later in the month students from Boston University gave a program. On December 10 the Belmont Women's Chorale, Mary Loud, Director, will give a short Christmas cantata with carols. Mrs. Helen H. Cushing will give a program of Christmas carols and organ music shortly before the holiday. Additional volunteers are needed to wheel patients to the Chapel, as nurses cannot be spared to do this. Any help in this respect would be deeply appreciated. Please call the Volunteer Office at the Massachusetts General Hospital, LA 3-8200, Extension 257, between 9 A.M. and 12 noon or between 2 P.M. and 5 P.M.

DISTAFF CLUB

The November meeting of the Distaff Club took place in the Penthouse on Wednesday evening, November 19. Dr. Carlos Tejada, from Guatemala, a Fellow in Pathology at the Hospital, gave an interesting talk on Guatemala, illustrated by motion pictures. The hostesses were Jean Talbert (Mrs. Rhett Talbert), Lida Javid (Mrs. Manucher Javid), and Edith Essig (Mrs. Carl Essig).

On Saturday night, December 13, we will have our annual Christmas party. Dorothy Nielsen (Mrs. Talmadge Nielsen) is in charge of the arrangements. We are planning to extend the hospitality of the holiday season to the unmarried members of the House Staff and to the doctors and their wives from other countries who are at the M.G.H. We expect the party will be a very gay occasion.

Ladies' Visiting Committee
Massachusetts General Hospital

Christmas at the M.G.H. is no less than a miracle. Music flows through the corridors and into every nook and cranny, walls and windows suddenly blossom into gaily painted scenes, Christmas greens are restricted only by law, and parties spring up over night for young and old—for everyone who can attend.

One annual party that has been scheduled for many years is that given in the Moseley Rotunda, sponsored and arranged by the MGH Ladies' Visiting Committee in conjunction with Hospital personnel, and attended by all adult patients who have the permission of their doctors. This year it will be on Monday, December 22, at 2:30 o'clock, and for an hour or so before that time there may be seen streaming through the corridors an orderly procession of wrappered men and women—on foot, in wheel chairs, and in beds—accompanied by volunteer "pushers", all converging on the Rotunda to see the fun. Once there, they will be entertained by a happy combination of Hospital and outside talent. The exact nature of the former is a well-kept secret, but it is expected that the ever-popular singing cowgirl, Georgia May with her guitar, will be included again, plus the addition of the well-known accordion player, "Herbie" Sulkin.

Another party sponsored by the MGH Ladies' Visiting Committee is for the children on Christmas Eve, usually complete with Santa Claus, presents, puppets, and so forth. The arrangements for this party are largely carried out by the personnel of the Children's Ward and the Occupational Therapy Department, though members of the Visiting Committee are always welcome to attend.

Advisory Council
to the School of Nursing
Massachusetts General Hospital

A meeting of the Advisory Council was held on October 28, in Miss Sleeper's office. Mrs. W. K. Jordan, Chairman of the Council, outlined the program of study for the meetings to be held in 1952-1953. It is the desire of this Council to study each year, along with other current business, one specific problem related directly to nursing education in the Massachusetts General Hospital, in order to become familiar with the difficulties which confront the faculty of the School and the nursing and teaching staff of the Hospital.

During the winter of 1951-1952, the Council attended various series of lectures given to the students by both doctors and nurses, and also observed the teaching of students on the wards.

For the meetings to be held in 1952-1953, Mrs. Jordan, announced that the subject to be studied would be "Research at the Massachusetts General Hospital and its effect on nursing and nursing education". Miss Sleeper introduced Dr. Robert L. Berg, Executive Secretary of the Committee on Research at M.G.H. Dr. Berg outlined the research programs under way at the Hospital, pointing out the problems they present, in the carrying out of patient care, to the nursing staff and the student nurses. There are 800 nurses in the Hospital (including student nurses), 200 research workers (full- or nearly full-time people), and an equal or larger number of technicians. When the house staff of doctors and the visiting physicians are added to this number, and the many different programs of research considered, it is not difficult to understand that a well-coordinated program which includes research, teaching, and care of the patient presents a variety of problems.

In November

Miss Anne Healey, Head Nurse of the Metabolic Unit of the Pediatric Ward, Burnham Memorial Hospital, spoke to the Council on "Nursing in the Pediatric Research Project".

In December

The subject will be "The impact of medical research on nursing and nursing education on the General wards". Miss Sarah Rowley, Medical Supervisor, will speak on the impact on the medical units, and Miss Adele Corkum, Supervisor of the Vincent Memorial, will speak on the same subject as regards surgical wards.

In January

Miss Mary Quinlan, Orthopedic Supervisor, will continue with "The impact of research on the orthopedic units", and Miss Marie Rearick, Supervisor and Instructor in Neuropsychiatric Nursing, will talk on "Research as it concerns the psychiatric units".

In February

The Advisory Council will meet with the faculty of the School of Nursing.

In March

The annual meeting and election of officers of the Advisory Council.

In April

Review of new programs in basic nursing education.

Schedules for ward observation of student teaching have been given to Council members, and members have been asked to attend as many sessions as possible.

Massachusetts General Hospital
Volunteer Service Department

Mrs. J. R. Harding of Brookline was featured by the *Boston Traveler* as "The October volunteer of the month". Since 1944 Mrs. Harding has given 6,800 hours of volunteer service to the Massachusetts General Hospital.

Among more recent gifts to our Archives collection are:

From Mrs. Eleanor B. Cass (mother of Dr. John W. Cass, Jr., Assistant Physician at M.G.H.)—a copy of *Who's who in the East,* published in 1951.

From Mrs. Samuel Mixter—Dr. Joseph Pearson Oliver's diploma from Harvard Medical School. Dr. Oliver was Mrs. Mixter's great-uncle. He was a House Pupil in the Medical Department at M.G.H. in 1870.

From Dr. W. Jason Mixter—a leaflet of very special value to us, since it is the only copy we have seen and because it is the third oldest printed document in our collection of papers concerning the history of the Massachusetts General Hospital—preceded only by the Jackson and Warren letter of August 20, 1810, and the incorporation documents of 1810 and 1811.

This leaflet, soliciting financial aid for the proposed General Hospital, is dated May 1816. The lapse of years between the date of incorporation and this appeal for funds is readily understood when one remembers that the War of 1812 wreaked its havoc upon New England and its shipping more destructively than upon any other section of the country—beginning with the Embargo Act of 1807 and carrying through until the Battle of New Orleans in 1815. However, by the spring of 1816 New England had recovered sufficiently to warrant a resumption of the plan to build a General Hospital in Boston, and the following printed leaflet was prepared for distribution to all the cities and towns within the Commonwealth:

> Boston, May , 1816.
>
> Gentlemen,
>
> The inclosed papers will explain the object of this communication. The legislature of the Commonwealth having made it the duty of the Trustees of the General Hospital to solicit the aid of the public for this important institution, they have considered that no mode was more likely to be acceptable and successful than to request a number of liberal and influential gentlemen in each town of the Commonwealth to obtain a small specific sum in such town; thereby equalizing the exertion and the contribution, and enabling every part of the Commonwealth to share in the honor of its foundation, and to have an equal claim to partake in its advantages.
>
> In the amount requested from each Town, the Trustees have carefully restricted their request to a sum in no case exceeding and in almost all cases, less than its relative ratio of wealth, as far as they could obtain information on the subject, leaving by far the greatest part of the burden of this contribution to be borne by the Capital, and by towns distinguished for greatness of wealth and population.
>
> With these views the Trustees request you Gentlemen to act as a Committee for the Town of [written in longhand] Windham and to obtain and remit to *James Prince Esq.* Treasurer

No. 36 in a series of Staff photographs
Mr. Henry J. Murphy, Assistant Director

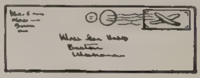
of the Massachusetts General Hospital Corporation, if possible, a sum not less than [written in longhand] 200 dollars, by subscription, in any form and in any amount, which will be likely best to effectuate the object and to equalize this charity among the benevolent.

Lest this establishment should be considered of a local nature, the Trustees take the liberty to observe that it is the great object of this institution to enable persons in all parts of the Commonwealth to avail themselves of the best medical and surgical aid, which our country affords, under the most advantageous circumstances. The Trustees also hope that the proposed asylum for the insane, by the liberality which they trust will characterise the contributions to it, will, at no distant period, relieve, not only many individuals, labouring under this heaviest of human calamities, but also all the towns of this Commonwealth of a great part, if not the whole of the burden, to which they are at present subject for their superintendance and support.

We rely gentlemen upon your co-operation in our exertions to attain this great object, and request that a return may be made of the result in your town, to either of the Trustees or to the Treasurer, JAMES PRINCE, ESQ. on or before the first day of August next.

We are Gentlemen, respectfully yours, &c.
(signed) T. H. Perkins
Josiah Quincy
Jos. May
Daniel Sargent
Tristram Barnard
Rd. Sullivan

When Dr. Mixter brought the leaflet in he asked us if we knew where the town of Windham is. We didn't, but said we would consult our road maps and let him know. Said maps gave no such town in Massachusetts, and this started us off on the search for its location. No geographies or atlases of that period produced the name of such a town. Finally, we took our problem to the Boston Athenaeum, the Boston and Brookline Public Libraries, and the Massachusetts Historical Society, among other places, offering the suggestion that perhaps two or more small towns of that era (one of which was Windham) might have joined together into one single town since the date of this paper. But still no solution was forthcoming until, quite by chance, one of the people with whom we talked mentioned the town of Windham, near Portland, Maine, as being the only one she could find near this locality. And with that, immediately, the flash of understanding struck! Of course, *that* was the town indicated in this paper, for Maine was a part of Massachusetts in 1816. Maine did not become a separate State until 1820. And so—for what it may be worth to all those whose ancestral lines carry them to Maine in 1816—beyond a doubt your forebears contributed to the fund which made our Massachusetts General Hospital possible.



New addresses:—

Dr. Mack L. Clayton (clin. a. *Or.* 1952), 1765 Sherman St., Denver, Colo.

Dr. Richard E. Goldsmith (clin. & res. fel. *M.* 1950), 229 Doctors' Bldg., Cincinnati, Ohio.

Dr. Ferdinand Haase, Jr. (past a. dir.), Albany Hospital, New Scotland Ave., Albany, N. Y.

Dr. Luis V. Larralde (gr. stud. a. *Path.* 1952), 23 #1103 Vedado, Havana, Cuba.

Dr. Leon Levintow (res. fel. *Biochem.* 1952), National Cancer Institute, National Institutes of Health, Bethesda 14, Md.

Dr. John D. Reeves (r.p. *R.* 1951), Laboratory of Biophysics, National Cancer Institute, Bethesda 14, Md. (effective Jan. 1, 1953).

Brief bits:—

Dr. Earle M. Chapman, Associate Physician on our Staff, addressed the Clinical Congress of the Connecticut State Medical Society, in New Haven, on September 17. His subject was "The medical management of hyperthyroidism". He also talked on the same subject before the Academy of Medicine, at Binghamton, N. Y. on October 21.

Dr. William R. Christensen (*W.M.* 1943) is now in the Department of Radiology, Salt Lake City County General Hospital, 2033 South State St., Salt Lake City, Utah, according to a very reliable source of information, but not from the Dr. himself (who has not notified us of a new address). We understand he is also Professor of Radiology at the University of Utah. Right, Doctor?

Dr. Edward D. Churchill, Chief of our Surgical Services, was a guest of the Excelsior Surgical Society meeting in Pittsburgh on October 24 and 25. The annual Churchill Lecture was given there by Dr. Francis D. Moore, a member of our Board of Consultation. On October 27 and 28 Dr. Churchill was guest speaker at a meeting of the Georgia Chapter of the American College of Surgeons, held in Columbus, where he spoke on "Wound healing" and "Surgical research". On November 6-8 he was guest lecturer at the Rocky Mountain Harvard Medical Alumni Association meeting in Denver. His subject was "The segmental structure of the lungs". On Saturday evening, November 8, he was a guest at an informal dinner and talk with the Denver Academy of Surgeons.

A letter, written in October, has arrived from Lt. John H. Kennedy, MC, USNR (a.r.s.). His address at that time was H & S Co., 1st Med. Bn., 1st Marine Division, c/o Fleet Post Office, San Francisco.

A note of apology for not answering your earlier inquiry as to my whereabouts since I left the White Building. I went on active duty with the Navy August 1, 1951, after a short vacation on Marthas Vineyard. I spent 2½ months at Chelsea Naval Hospital, doing ENT surgery, and then 10 months at the Naval Hospital at San Diego on the surgical service. After a month's indoctrination at Camp Pendleton, I was sent to the 1st Marine Division, where I'm at present doing a little surgery but am expecting assignment to a more forward unit any time.

At present I'm between Munsan and Seoul—closer to the former. We are within view of the searchlight marking the truce talks, and it seems absurd that the enemy lobs artillery over this corridor and into our positions.

While I was in San Diego, Robert Hopkins spent the evening with us. Robb Rutledge also has been out this way.

THE NEWS

No. 119 Boston, Mass. January 1953

McLEAN HOSPITAL

Clinical teaching and research activities continue at McLean Hospital, and since a more general note about this branch of the Massachusetts General Hospital in Waverley appeared in THE NEWS some time ago, this time we will give some not-too-technical notes on research activity and make some comments on the Clinical Service. Two different laboratories will be discussed.

The McLean Hospital Research Laboratory was dedicated in 1946 for research in the field of neuropsychiatry, using the tools of the basic medical sciences—chiefly biochemistry. The Director of Scientific Research has been Dr. J. Folch-Pi, who has an advisory committee now consisting of Drs. Stanley Cobb, D. D. Van Slyke, A. B. Hastings, R. Lorente de Nó, and Walter Bauer. The present professional staff consists of five M.D.'s and two Ph.D.'s in biochemistry. The laboratory building has 8,500 square feet of floor space, and houses excellent biochemical and histological laboratories with elaborate equipment, including three constant-temperature rooms (at 20°C., 4° C., and –15° C.), enabling great facility of procedure.

From the outset the work of the laboratory, as described for us here by Dr. Folch-Pi, has been aimed at the ultimate goal of establishing the "chemical anatomy" of the brain — that is, the distribution of its biochemical constituents in relation to its histological structure, and of extending such study to the brain in nervous and mental disease.

The initial step was the development of an array of new procedures and methods for isolation and identification of structural components of brain. Three new types of compounds have been discovered which exhibit features quite at variance with previously known tissue components. One of these types has been termed the proteolipides. These are lipide-protein complexes having as constituents protein and lipide moieties arranged so that the protein forms the core of the complex and the lipide the surface, thus giving them the solubility properties of lipides. Three of these substances have been isolated and one crystallized. The second group of new brain compounds are the strandins, which are lipide-carbohydrate complexes of high molecular weight. The third new group of compounds of normal brain are the phosphatide-peptides. In general, the conclusion seems unescapable that most, if not all, of the lipides and the proteins in the brain are not free but are combined as different types of lipoproteins.

Comparative studies on the chemical composition of the brain at different stages of postnatal development are in progress and show, for instance, that proteolipides, while absent in embryonal brain, appear coincident with the onset of myelinization, thus indicating that they are a component of myelin.

A second line of work, under Dr. Alfred Pope, has been the use of the principles and techniques of quantitative histochemistry for studying the distribution of certain enzymes within the architectonic layers of the cerebral cortex and correlating the results with details of the anatomical fine structure. In general, it appears that both in animal and in human cortex certain enzymes concerned with carbohydrate and protein metabolism (coenzyme I, cytochrome oxidase, dipeptidase) are localized principally in nerve cell bodies. Others presumed to be more immediately concerned with the conduction and transmission of nerve impulses (acetycholinesterase and adenosinetriphosphatase) are associated primarily with the plexuses of axones and dendrites. Comparative studies on cortical enzymology and neuropathology in relation to mental disease are in progress.

In addition, comparative biochemical studies have been made on brain tumor tissue and, by Dr. Huntington Porter in collaboration with Dr. D. Denny-Brown, upon the role of copper metabolism in Wilson's disease. Work also is in progress, in collaboration with Drs. R. D. Adams and B. Waksman, aimed at determining the identity of the antigenic factor in brain that causes experimental allergic encephalomyelitis.

* * * * *

The Laboratory of Clinical Physiology is under the direction of Dr. Mark Altschule, who also does the work in Internal Medicine. This laboratory performs the functions of a hospital clinical laboratory and, in addition, has a program of investigative work carried out on patients in the Hospital.

The initial project of the laboratory, described here by Dr. Altschule, consisted of a study of the immediate physiology of electroshock. This work yielded data on the mechanisms of the pulmonary and cardiovascular complications of electroshock therapy and resulted in improvements in procedure designed to prevent these complications. For example, the finding that patients with hypersensitive carotid sinus reflexes were prone to develop heart block or cardiac standstill during shock treatments led to the routine testing of all patients likely to receive such treatments. Atropine, given to patients with hypersensitive carotid sinuses before each treatment, prevents the occurrence of the potentially fatal cardiovascular complications.

In recent years the investigative work of the laboratory has taken the direction of study of the status of the anterior pituitary-adrenocortical system and of the intermediate carbohydrate and fat metabolism in psychosis. It has been known for half a century or more that carbohydrate and fat metabolism are disturbed in schizophrenic, manic-depressive, and involutional psychoses. It has been shown that this change is partly owing to starvation and it is probable that vitamin B deficiency also plays a role in many instances. However, even when these factors are controlled, about half of the recently admitted psychotic patients at the McLean Hospital still have abnormal glucose tolerance tests. The metabolism of lactate is even more regularly affected and that of citrate is quite regularly abnormal. It is evident that the utilization of small carbohydrate molecules is impaired in the psychoses studied and this abnormality may, in some instances, produce changes extending back in the chain of carbohydrate utilization to the glucose level. The nature and mechanism of the fundamental disorder is not yet clear. The possible influence of the adrenal cortical hyperactivity present in patients with psychoses of recent onset, of the commonly occurring glutathione deficiency, and of other factors is being studied. The importance of this type of study is readily apparent: the proper function of brain tissue, especially in the higher brain centers, depends largely upon the utilization of carbohydrates, and therefore impairment of normal metabolic processes involving carbohydrate may be highly significant in the production of evidences of abnormal function of the higher cerebral centers.

Disturbances in carbohydrate utilization might be expected to give rise to, or possibly be caused by, abnormalities in phosphate metabolism. A start in the study of phosphate metabolism has been made and it appears from the few experiments thus far made that abnormalities are present in psychotic patients.

* * * * *

Concerning the Clinical Service at McLean, we would ask, "What is it like to be admitted to the Hospital as a patient?" Perhaps an answer can be inferred from a description of the facilities and functions of the Clinical Service. We try to receive and treat each patient very individually and personally, thinking of each on multiple levels, such as the medical, physiological, surgical, environmental and social, psychodynamic, occupational, and religious. Thus, the Hospital must have complicated facilities, provide a human situation for the patient to live and grow in, and be at the same time observing and scientific. Various kinds of expressive and group activities are furthered among the patients by the large number of nurses (one nurse to five patients as averaged around the clock), by the different departments—particularly the Occupational Therapy Department and the gymnasiums, and also by the library, physiotherapy, ward activities, beauty parlor, coffee shop, and entertainments. For instance, during the past Christmas season there were appropriate services, dinners, teas, and sings. Each patient's feelings about his surroundings, his illness, and other people are considered. The physicians work with the patients' families and referring physicians, and make historical, physical, and psychological evaluations. Psychiatric treatment, of course, includes the physical and physiological — especially the use of insulin and electric shock, but the most time-consuming treatment is psychotherapy.

The verbal therapies take a third of the physician's time, as compared with a fiftieth of the time devoted to insulin and electric shock. There is much psychotherapeutic work to be done in rehabilitating and readjusting these people's emotional lives through psychotherapy, so as to bring about more maturity and the solution of conflicts. It is conspicuously easy to bring about remission of many acute psychoses through physiological treatment and through hospitalization, time, and rest; but we feel that the changes in emotional relationships which are brought about through psychotherapy are of great value to many people in the prevention of future mental illness. The results are not susceptible to exact measurement.

About fifteen patients live on each hall, and this plan has greater socializing than restricting aspects. Living conditions are physically pleasant — single rooms, good food, opportunities for activity, and beautiful grounds. Our policy is against isolation from the family. Visits to the patient are encouraged, and many patients visit their own homes. It is significant that after the first week of stay over half of our patients are voluntary.

Although the Hospital population has not increased in the last decade (about 200 patients), the admission rate has doubled, so that approximately a quarter of the beds are taken by acute cases which stay on the average of nine weeks, and are discharged as recovered or improved. There are about 300 admissions a year. We have about 450 employees.

Paul M. Howard, M.D.,
Acting Chief of Service

* * *

Dr. Stanley Cobb, Chief of our Psychiatry Service, received the honorary degree of Doctor of Science during the opening ceremonies of the Psychiatric Institute of the University of Maryland, held in Baltimore November 17-19. The citation which accompanied the degree was read by Dr. Jacob E. Finesinger, past Psychiatrist on our staff and now Professor of Psychiatry at the School of Medicine, University of Maryland.

Dr. Cobb gave a talk on "Some clinical changes in behavior accompanying endocrine disorders" at the Tuesday afternoon meeting of the ceremonies.

Dr. Francis M. Rackemann, a member of our Board of Consultation and past head of our Allergy Clinic, received the Medal of Public Health at the Armistice Day ceremonies held at the French Consulate in Boston. The medal, presented by M. Charles-Roux, Consul General of France, acting for the French Government, was given in recognition of Dr. Rackemann's outstanding work in the field of allergy.

Dr. Stanley M. Wyman and Dr. Laurence L. Robbins won the Silver Medal—the highest award and the only Silver Medal given this year at the annual meeting of the American Roentgen Ray Society, held in Houston, Texas, last September. This tribute was in recognition of their exhibit entitled "The roentgen demonstration of parathyroid adenoma".

The cornerstone of our new nurses' residence, Bartlett Hall, was laid on December 8. Mr. Lloyd D. Brace, a member of our Board of Trustees and the Chairman of the Trustees' Committee on Nursing, wielded the trowel for the laying, and Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service, gave a short talk on matters appropriate for the occasion. We quote this brief passage from Miss Sleeper's address:

> The name chosen for this new residence bespeaks our appreciation to the chief donor. It memorializes for the first time among the Hospital buildings the name of the Reverend John Bartlett, the Boston minister whose interest in providing humane care for the mentally ill of this community led to the founding of the first two units of the Massachusetts General Hospital—the McLean and the General Hospitals.

A gift of $560,000 from the Mary Bartlett Noyes estate was the initial donation to the $1,000,000-building fund. Mrs. Noyes was the Reverend John Bartlett's great-granddaughter. A portrait of John Bartlett and a photostatic copy of his letter of March 9, 1810 which resulted in the founding of the Massachusetts General Hospital, hang in our Archives Room.

Perhaps the most impressive moment during the ceremonies came when Miss Sleeper placed within the cornerstone a copper box containing the following items:

1. A copy of the *Boston Herald* of Monday, December 8, 1952
2. A copy of Miss Sleeper's remarks made at the laying of the cornerstone, with a picture of the building taken on December 8, 1952
3. A copy of the will of Mrs. Mary Bartlett Noyes
4. A copy of the current catalogue of the School of Nursing
5. A sample of the cloth used for student nurses' uniforms in 1952
6. A copy of the Nurses' Alumnae Association *Quarterly Record* of June 1952, containing articles about the School of Nursing: (1) A list of residences occupied since 1873 by student and graduate nurses at the Massachusetts General Hospital, compiled and signed by Miss Sally Johnson, Director *Emeritus* of the School of Nursing and Nursing Service; (2) A report of activities on March 17, 1952, when ground was broken for Bartlett Hall; (3) "We study our basic program", an article by Miss Sleeper describing the School program
7. A count of nursing personnel on December 1, 1952, in the General Hospital, the Out-Patient Department, Baker Memorial, and Phillips House
8. A copy of the *Massachusetts General Hospital News* of November 1952, containing an article entitled "The team concept in nursing" as used in the Baker Memorial, by Dorothy Perkins Newcomb, R.N.
9. A copy of the *Massachusetts General Hospital World* of November 1952, containing an article on "Award of service pins on Ether Day, October 16, 1952

An etched inscription on the box reads: "To the future nurses of the Massachusetts General Hospital from the nurses of the Massachusetts General Hospital, 1952 A.D." And we could not help but wonder at that moment when Miss Sleeper placed the box inside the cornerstone, if, perhaps, a few hundred years from now, a scene similar in some respects to that which occurred at the tomb of Tutankhamen in Egypt in 1922 might not be duplicated right here on our own grounds.

The Board of Trustees, at their meetings on November 14 and 28, voted:

To accept the resignation of Dr. Crawford S. Brown, in order that he may enter the service of the U. S. Navy;

To accept with regret the resignation of Dr. Lamar Soutter as Assistant Surgeon and to appoint him as Clinical Associate in Surgery, effective as of November 1, 1952;

To revise the vote of October 31 regarding Dr. Jerome L. Weinberger and to appoint him as an Assistant in Psychiatry.

To appoint:

Dr. Norman R. Bernstein as Assistant Resident in Psychiatry, beginning July 1;

Dr. William D. Cochran as Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Betty S. M. Eo-yang as Assistant Resident in Anesthesia, beginning January 1;

Dr. Sigurd B. Gundersen, Jr. as Second Assistant Resident in Surgery, beginning December 1, 1952;

Dr. Louis F. Johnson, Jr. as Assistant Resident in Anesthesia, beginning January 1, so that he may complete his residency training which was interrupted by the Korean War;

Dr. Robert B. Kearsley as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. James A. Petersen as Second Assistant Resident in Radiology, beginning July 1;

Dr. John F. Radebaugh, Jr. as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Savitri Ramcharan as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Jack H. Rubinstein as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Edgar J. Schoen as Assistant Resident on the Children's Medical Service, from February 1, 1953 through January 31, 1954, in order to complete his residency training which was interrupted by service in the U. S. Navy;

Dr. James M. Shannon as First Assistant Resident in Surgery, beginning January 1;

Dr. Robert S. Shaw as Assistant in Surgery, effective January 1, and to allow him to see a limited number of private patients at the Hospital;

Dr. Robert S. Shaw as Assistant Director of the Blood Bank;

Dr. Stanley Sober as Assistant Resident in Orthopedic Surgery, beginning January 1;

Dr. Ruth S. Weiss as Assistant Resident in Psychiatry, for the period April 1 through June 30;

Dr. Weldon W. West as First Assistant Resident in Surgery, beginning January 1.

At their meetings held on November 12, 19, 26, and December 3, the General Executive Committee voted:

To change the title of Dr. Henry M. Lloyd from Research Fellow in Medicine to that of Clinical and Research Fellow in Medicine.

To promote:

Dr. Wilma J. Canada from the position of Second Assistant Resident in Radiology to that of First Assistant Resident in Radiology, beginning January 1;

Dr. Freddy H. Frankel to the position of Resident in Psychiatry, for a period of three months, beginning January 1;

Dr. George M. Perrin from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period July 1, 1953 through June 30, 1954;

Dr. Robert B. Rosen from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period July 1, 1953 through June 30, 1954;

Dr. Paul M. G. St. Aubin from the position of First Assistant Resident to that of Resident in Radiology, beginning January 1;

Dr. Frederick G. Shaffer from the position of Third Assistant Resident in Surgery to that of Assistant Resident on the Urological Service, for the period March 1, 1954 through June 30, 1954, and as Resident from July 1, 1954 through June 30, 1955;

Dr. Elizabeth H. Sprague from the position of Intern to that of Assistant Resident on the Children's Medical Service, for the period January 1, 1954 through December 31, 1954.

To continue the appointments of:

Dr. Javier Correa as Clinical and Research Fellow in Medicine for a second year, beginning December 1, 1952;

Dr. Lawrence J. Essember as Assistant Resident on the Children's Medical Service, for the period July 1 through December 31;

Dr. Roberto F. Santos as Clinical Fellow in Medicine, through February 28.

To reappoint:

Dr. Leonard Atkins as First Assistant Resident in Pathology for another year, beginning July 1;

Dr. Fairfield Goodale, Jr. as First Assistant Resident in Pathology for another year, beginning July 1;

Dr. Raymond A. Justi as Second Assistant Resident in Pathology for the year beginning July 1;

Dr. Hanna Klaus as First Assistant Resident in Pathology for another year, beginning July 1;

Dr. Alexander C. Ritchie as Second Assistant Resident in Pathology for another year, beginning July 1.

To appoint:

Dr. Glenn E. Behringer as Clinical Assistant in Surgery, effective as of July 1, 1952;

Dr. Nibhondh Chunnanand as Graduate Student Assistant in Surgery for one year, beginning November 12, 1952;

Dr. Garnet J. H. Colwell as Clinical Fellow in Physical Medicine, beginning July 1;

Dr. Ismail El-Sebai as Research Fellow in Surgery, for a period of ten months, beginning November 15, 1952;

Dr. Charles Gaylord as Clinical Fellow in Radiology, beginning July 1;

Dr. Charles L. Minor as Clinical and Research Fellow in Surgery, for the period December 1, 1952 through June 30, 1954;

Dr. Fernando M. A. M. P. de Padua as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1, 1952.

COORDINATING COMMITTEE

As has already been reported in THE NEWS, the Coordinating Committee consists of two representatives (the chairman and one other member) from each of the following groups:

1. The Ladies' Visiting Committee of the Massachusetts Eye and Ear Infirmary
2. The Board of Managers of the Vincent Memorial Hospital
3. The Ladies' Committee of the Bay State Medical Rehabilitation Clinic
4. The MGH Staff Wives Hospital Committee
5. The Distaff Club
6. The Ladies' Visiting Committee of the Massachusetts General Hospital
7. The Advisory Council to the School of Nursing of the Massachusetts General Hospital
8. The Massachusetts General Hospital Volunteer Service Department

We hope to give an account of the activities of the Coordinating Committee in an early issue of THE NEWS.

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The November 2 tea given by the MGH Staff Wives Hospital Committee for doctors from other lands proved to be so very successful that plans are being made for a similar tea to be given on January 20 in the Medical Staff Room of the Bulfinch Building between 4:30 and 6 P.M. These occasions afford an excellent opportunity for new friendships to be made between MGH staff families and visiting doctors and their families from other countries. There are now here at Massachusetts General 120 such visitors, from 48 different countries. Attending the November tea were representatives from the English Speaking Union, the Pan-American Society, and the International Institute, as well as those members of our Committee who had expressed a desire to meet our foreign contingent. Every one of the 96 visitors who attended the tea was invited to an American home for Thanksgiving—a very gratifying accomplishment, indeed!

In the Brick Corridor, near the house post office, a bulletin board labeled "Newcomers" has been designated for the use of the Staff Wives Hospital Committee. On it will be posted the current *Harvard Gazette,* general information for newcomers to the M.G.H., and notices of recreational opportunities. A large envelope for inquiries and suggestions is attached to the board, and it is hoped that this will prove useful to those who desire further information or special help.

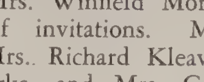
If you ever have theatre or concert tickets which you find you are unable to use, it would be very much appreciated if you would turn them over to the Hospital. In such instances please call Mrs. Weiss's office—LA 3-8200, Extension 828.

DISTAFF CLUB

Mrs. Frank C. Wheelock, Jr. and Mrs. Grant V. Rodkey of the Staff Wives arranged an outing to Babson Institute in Wellesley for a group of Distaff members on Monday, December 8. Mrs. Perry J. Culver, Mrs. Winfield S. Morgan, III, Mrs. Arthur S. Pier, Jr., Mrs. George S. Richardson, Mrs. Donald West, and Mrs. Earle W. Wilkins, Jr., acted as hostesses and entertained a large group of children at Mrs. Wheelock's home while their mothers went on the tour. Refreshments completed a most enjoyable afternoon.

The December meeting of the Distaff Club was our annual Christmas Punch Party for the MGH House Staff, and their wives or "dates", held on December 13 at 8:30 P.M. in the Penthouse. Mrs. Talmage Nielsen was chairman of the party. Mrs. Winfield Morgan was in charge of invitations. Mrs. George Nardi, Mrs. Richard Kleaveland, Mrs. John Burke, and Mrs. Gerald Foster decorated the Penthouse in festive style. Mrs. Stanley Crawford, Mrs. William Owen, Mrs. Robert Dudley, and Mrs. Rhett Talbert provided the refreshments. Mrs. Wilbur Thomas, Mrs. I. V. Manly, Mrs. Martin Levene, Mrs. Thomas Peebles, Mrs. John McClung, Mrs. Stephen Krane, and Mrs. Samuel Brendler were hostesses.

Some of our Distaff members have assisted Mrs. James H. Burns on three occasions by pushing wheel chair patients to and from concerts given in the Chapel and the Moseley Rotunda. The concerts are arranged by the MGH Staff Wives Hospital Committee. A group of Distaffers also acted as hostesses at the MGH family Christmas party for the children on December 23 and at the dance for adults given later in the evening.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in THE NEWS as a convenience for our readers. For that reason we ask you to send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS.

All requests for reprints are to go to the individual authors.

The following new titles have been received:

Biochemistry

Matoltsy, A. G.
A study on the structural protein of the vitreous body (vitrosin).
J. Gen. Physiol. 36:29-37.

Dermatology

Blank, I. H., and Miller, O. G.
A study of rubber adhesives in shoes as the cause of dermatitis of the feet.
J.A.M.A. 149:1371-1374.

Frazier, C. N.
The treatment of acute dermatitis: Guiding principles.
In M. Clin. North America 36, No. 5: pp. 1435-1443.

General Medicine

Hardy, H. L.
Clinical evidence for the latent and additive action of benzol with other toxic insults: Report of two cases.
Arhiv Az Higijenu Rada (Yugoslavian journal) 3, B.R. 1:1-6.

Hardy, H. L.
Experience accumulated in three years of an occupational medical clinic.
Indust. Med. & Surg. 21:424-426.

Hardy, H. L.
Ionizing radiation, by A. Hamilton and R. T. Johnstone. (Review)
Oxford Med. (loose-leaf) 21, 663:150-177.

General Surgery

Wight, A., Weisman, P. A., Rovit, R. L., and Cope, O.
Adrenal hormones and increased capillary permeability of burns: An experimental evaluation.
A.M.A. Arch. Surg. 65:309-317.

Laboratory Science

Blank, I. H.
Factors which influence the water content of the stratum corneum.
J. Invest. Dermat. 18:433-440.

Frazier, C. N., Bensel, A., and Keuper, C. S.
Further observations on the duration of spirochetemia in rabbits with asymptomatic syphilis.
Am. J. Syph., Gonor. & Ven. Dis. 36:167-173.

Neurology, Neurosurgery, and Psychiatry

Bakay, L.
Studies on blood-brain barrier with radioactive phosphorus. II. Hypophysis and hypothalamus in man.
A.M.A. Arch. Neurol. & Psychiat. 68:629-640.

Bonner, F., Cobb, S., Sweet, W. H., and White, J. C.
Frontal lobe surgery in the treatment of pain, with consideration of postoperative psychological changes.
Psychosom. Med. 14:383-405.

Farnsworth, D. L.
Psychiatry and higher education: Practical applications of psychiatry in a college setting.
Am. J. Psychiat. 109:266-271.

Lorenz, M.
Language concepts as related to psychiatry.
Quart. Rev. Psychiat. & Neurol. 7:123-138.

Ophthalmology

Leahey, B. D.
A socket stretcher for deformed sockets.
Tr. Am. Acad. Ophth. 56:279.

Leahey, B. D.
Thermal burns of the eye and adnexa.
Am. J. Ophth. 35:1077-1088.

Social Hygiene

Frazier, C. N.
The sexes in a restless world.
J. Social Hyg. 38:323-327.

Surgery—Reconstructive

Cannon, B.
The place of the plastic surgeon in medicine.
Rhode Island M. J. 35:477-479.

Cannon, B.
Testimonial to Dr. V. H. Kazanjian.
Plast. & Reconstruct. Surg. 9:294-298.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Leroy A. Schall, Chief of our Otolaryngological Service, flew to El Salvador as guest of honor at the First Congress of Otolaryngology of Central America. At the Congress, which met from December 12 to 14, Dr. Schall delivered six lectures on ear, nose, and throat subjects.

At the December 17 meeting of the Board of Managers, Dr. John R. Richardson was appointed Surgeon for Bronchoscopy and Esophagoscopy in the Department of Otolaryngology. Dr. Richardson has been serving on the staff as an Associate Surgeon.

The Managers confirmed the promotions of Dr. John E. McKeigue and Dr. Maurice Ruben from Assistants in Otolaryngology to Assistant Surgeons.

Other appointments on the Ear, Nose and Throat Service were announced at the Executive Committee meeting of the Board of Managers on November 10: Drs. John Trakas, Frederic J. McIntire, Jr., and Morris Swartz will join the Infirmary staff as Assistants in the Otolaryngology Department.

Several members of the staff took part in the December 17 meeting of the New England Ophthalmological Society, held at the Infirmary. Dr. Robert R. Trotter of the Howe Laboratory spoke on "Tonography", and Dr. Charles L. Schepens of the Rentina Service discussed "Scleral buckling operations in cases of retinal detachment".

At the evening session of the meeting, Dr. William Stone, Jr., Assistant in Ophthalmology, gave a talk on "A plastic artificial cornea: Preliminary report".

Writing does not come easy to me. As I start out, I feel insecure; I am confused and my thoughts are muddled. I am supposed to write about India from the point of view of an Indian—to convey to my friends at the M.G.H. the heart of this complex experience of being an Indian. I find this a difficult assignment. I left India seven years ago and it was my fate not to live there during the turning-point in her history. In the past seven years, under the impact of science, technology, ideologies, and personalities, I must have changed and I am sure I do not look at India today as I did when I was there. The impact has been so great and the influence so deep that I would feel more at ease writing about my own country from an American viewpoint.

I asked several of my friends what I should write about. They showed a wide range of interest and the questions they asked were numerous: Tell us something about the culture of the country. Do you really believe in this stuff about Karma and reincarnation? Is there any justification for the caste system? Is it true that marriages are arranged entirely by parents and that husband and wife meet as complete strangers? How does the Indian feel toward the British? Will India stay with the democracies or will she go over to the communists? What do you think about the Point IV Program? What is the calibre of present leadership in the country? What are the chief medical problems? Is it wise to start any intensive public health measures? Will India be able to support her ever-increasing population? Will birth control measures succeed? Tell us something about Yoga. Is it true that some Indians can go without food and air for days? How do you reconcile that with what you have learned about human physiology and chemistry? I shall try to answer some of these questions. My answers will not satisfy me. I do not expect them to satisfy anybody else.

Again and again I have found myself unequal to the task of analyzing the culture of a country. The subject seems to me too complex for adequate analysis. Hardly any trait of culture can be understood when taken out of its general setting. To grasp the meaning of a culture we must understand the individual as living in his culture, and the culture as lived by individuals. We need to have an intimate knowledge of the great gamut of customs, institutions, and ways of thinking which exist in a country. It seems absurd to me that I could ever really grasp the culture of America without having lived here for a few years. Western civilization has spread itself more widely than has any other local influence. Moreover, it has standardized itself over most of the globe. The average westerner has been led, therefore, to accept a belief in the uniformity of human behavior. He has never seen an outsider, perhaps—or the one he has seen has already been westernized. If he has traveled, he has very likely been around the world without ever having stayed outside a cosmopolitan hotel. He knows little of any ways of life but his own. The uniformity of custom, of outlook, that he sees spread about him seems convincing enough. He accepts without more ado the equivalence of human nature and his own culture standards. The relativity of what is considered social or asocial, normal or abnormal, is not seen in proper light.

Some educated Hindus tend to be a little self-conscious or apologetic about the customs of the poor millions in India, and are unwilling to attribute to them anything more than a gross, crude representationalism. The fact is that the villager's crudest representationalism is the end product—under the conditions of his life, surrounded as he is by threatening elements, adverse forces of economy and social structure—of the highest normative concepts in Hindu thought. The universal spirit, as most Hindus understand it, wears the present world as a garment; all persons and things are manifestations—forms taken by that spirit. The individual comes and goes as a form, but his shred or strand of the spirit goes on into other forms until, in the end of its pilgrimage, it is united with the supreme. All Indians know the concept of soul and oversoul, and they know intimately, from earliest childhood, the concept of the cycle of rebirths. It is not necessary to be able to read books in order to understand these ideas. They are expressed in many ways throughout the life of any Hindu, and he can hardly get through a single day without being reminded of them in the details of life.

What is distinctive in the broad mass of the Hindu people, as compared with all other great divisions of humanity, is the unquestioning, and largely unthinking, acceptance of transcendental reality in the common consciousness. The Hindu acquires this consciousness early. Long before he has learned to formulate his beliefs it is deep within him, ineradicable by subsequent surface processes. The universality of the spirit, the participation of each person in it, the transmigration of souls, the ultimate "realization of God" as a possibility for every man born —all these ideas, which are philosophical or religious in the West, are part of the most intimate mind of the most ordinary Hindu. Karma and caste are deeply imbedded in the whole life of India. Their influence permeates every part of the collective existence and cannot be separated from society, politics, literature, or thought in general. It is because religious or philosophical concepts long ago took social form that Hindu life differs so sharply from any known in the West—or, for that matter, in the East outside of India.

At some time in the prehistoric twilight, the sages of old perceived a continuity of the spirit from life to life and evolved the doctrine of reincarnation or rebirth. "Birth is inevitably followed by death and death by rebirth." From the earliest known period this has been the firm conviction of Hinduism. The rebirths are indefinite in number, depending upon the actions performed by the soul's garment, i.e., the embodied life, on earth. This world is Karmabhumi—the land of action, and what we do here constitutes our Karma—the burden of deeds upon our souls. If our Karma contains goodness and wisdom, our spirit is then reborn in a higher state of consciousness, nearer perfection and more harmonious with the Divine. This process goes on until the soul, at last, at whatever period that may be, attains perfection and is united with the supreme and infinite existence. Nothing we can do in this earthly life can possibly exempt us from the pains or pleasures which are our legacy from preceding lives, although we can, in this life, so build our Karma that the next life will be a step higher. We may also conduct ourselves in such a way that the next life will be a recession rather than an advance toward perfection.

Karma—deeds or action—governs the Hindu's terrestrial activity to a considerable extent, and is directly responsible for the caste system. We are born into a certain caste because our Karma has so determined it. We improve our Karma by fulfilling the duties of that caste, whatever it may be, without attempting to escape them or mitigate their rigors. There are seven or eight hundred main castes in India. All of them are supposed to fall within the great fourfold division of function made in the Vedic times: the Brahmin (teachers and educators), the Kshatriya (warriors and rulers), the Vaisya (agricultural, industrial, and commercial classes), and the Sudra (working and serving classes). These functional subdivisions no longer govern function. The professions, which rely upon a thick superstructure of westernized education—such as medicine, the law, and teaching in the higher institutions of learning—draw their recruits from all castes. All of this tends to break down the age-old rigidity of the system. However, the fact remains that there are innumerable customs about diet, water-drinking, association with others, and marriage which are based upon the caste system and still have absolute power over the majority of Hindus.

Such a close-knit web of being for individual and society makes it impossible to disturb any of the fundamental elements in the Hindu system without upsetting the rest. That is, perhaps, why so little evidence of dissent has appeared through the ages, and it is also why even the most oppressed classes make the best of their lot, in accordance with the Hindu Dharma, since these social rigors have been determined by past lives and will be mitigated in future ones. It is easy to see why the Brahmin labored through the centuries to make this so; and the Kshatriya, providing warriors and government to the polity, had no reason to question his lot. The Vaisya division and, above all, the Sudra, might have provided the elements of rebellion against Hinduism at some point, but nothing of the kind has occurred on any scale because the integration of the whole was too successful: A man or group of men might wish to revolt against some particular aspect of the caste system or, indeed, against that system in its entirety, but it would be difficult for him to revolt against the general structure of Hinduism without being treated as insane. Too much is involved.

Much of the system revolts the western conscience; it seems unjust in the extreme. I have never felt easy about the caste system. However, it must be said that the system has, for many centuries, given Hindu society a stability it could never have attained by its secular organization or political structure, which were seldom good. The caste system differentiated Hindu society from all others and, in fact, maintained it through long ages of political chaos when a lapse into barbarism would otherwise have been inevitable.

Superficially, it would seem that India, with all her poverty, would be a fertile ground for communism. The truth is different. If the communist vision is the vision of man without God, if it is the vision of man's mind displacing God as the creative intelligence of the world, then communism will have no appeal to the Hindu mind. The Hindu feels in his soul reverence and awe for life and the world. His mind is not tirelessly seeking "a reason to live and a reason to die". His basic beliefs, not the Point IV Program, will act as a deterrent to the spread of communism in India. I must add that there can be nothing but gratitude in the heart of every Indian for the Point IV Program. However, the magnitude of the problem is great and the Indians must find ways to develop their resources and accommodate themselves within their resources without being a burden to the economy of the U.S.A.

I do not wish to get bogged down in the details of these economic problems existing in India. I shall avoid them altogether. I would, however, comment on the problem of birth control and "overpopulation", and on the wisdom of instituting public health measures. Of infectious diseases, the four main ones are malaria, cholera, typhoid, and smallpox. About 100,000,000 persons in India are afflicted with malaria, 2,000,000 of whom die each year. Cholera kills about 150,000 persons each year. Typhoid and smallpox also take heavy toll. These deaths are easily preventable, and I am strongly in favor of instituting public health means to prevent them.

Birth control is a cause which faces obstacles in India, although in some ways its many Indian supporters face less specific opposition than do its American advocates. India has no laws like those of Connecticut and Massachusetts, forbidding doctors to disseminate birth-control information as needed. Poverty and ignorance, and the difficulty of obtaining proper instruction and the necessary materials, are the most serious obstacles to a birth-control program. It should be realized, however, that overpopulation is not the whole problem. India's population has actually been increasing at a slower rate than in such countries as England and Holland, whose peoples have almost doubled in the past fifty years. The relative density of the population per square mile in the Netherlands is three times as great as in India; with the United Kingdom the ratio is two to one. The colonial policy had a direct and devastating effect on India's

No. 37 in a series of Staff photographs
Mr. Edmund R. Mattos, Assistant Director

population problem: With the artificial retardation of her industry under British rule, millions of craftsmen were thrown back on the land, with agriculture as their sole occupation. With independence, the Government hopes for a rapid building up of Indian industry, so that much of the surplus population can be drawn off the overcrowded land into new industries, while irrigation projects and scientific agriculture will increase the yield of the land. Yet the realities of an expanding population do confront India, although nothing in the Hindu religion specifically forbids the practice of contraception.

While talking to the Distaff Club a few months ago, I noted a lot of interest in the way Indian marriages are arranged. The arranging of marriages for their children is done solely by parents. Consent of the bride and the bridegroom is not sought. Higher authorities—stars in the case of Hindus—are consulted. Astrologers compare the horoscopes, and after the groom's family and the bride's family have agreed the stars will often disagree. Search must then be continued further for a candidate with a suitable horoscope. Husband and wife meet as complete strangers after marriage. I have found little enthusiasm for such a marriage among my friends. I am not sure I will abide by this system *in toto*.

The matter of Nirvikalpa Samadhi—abstraction of the spirit from the body in union with the Brahma—is a puzzle to western minds. It is not uncommon for some "holy men" to stay in a "cataleptic trance" for months and years without food, remaining in one rigid posture. Burial ceremony is not uncommon in India. These men practise breath-holding rigorously, day after day for years. They usually go to a lonely riverside and sit in a rigid posture, legs crossed, trunk straight, absolutely motionless, from midnight till dawn, night after night for five, ten, or fifteen years. Then they are ready for burial. A hole is dug in the ground about six feet deep. They sit in the hole in their usual Samadhi posture. The earth is put back into the hole and the ground is made level. According to capacity, they stay there for a day, a week, or sometimes a month. At the time of burial, they expressly state that they must be taken out on a given date, at a given time. Julian Huxley was much impressed by this feat of breath-holding and urged American physiologists to go to India to study respiratory physiology on these people.

I have tried to put down in a bald, though clumsy, manner the governing motives of the Indian mind. The western mind is obstinate, and has hitherto encountered transcendentalism only in a few individuals such as Emerson, Schopenhauer, and the like. It refuses to admit the extent and complexity of this phenomenon. One's pity for the mind that can be so smug in its insularity is tempered by the reflection that most of us are the same.

Madan M. Singh, M.D.,
Assistant Resident in Medicine

New addresses:—

- Lt. Irving P. Ackerman, MC, USNR (*M.* 1951), U. S. Naval School of Aviation Medicine, U. S. Naval Air Station, Pensacola, Fla.
- Dr. Crawford S. Brown (a.r.p. *D.* 1952), 1677 31st St., N. W., Washington, D. C.
- Dr. John F. Hogan (*M.* 1949 & *C.M.* 1950), Davidson County Health Dept., County Court House, Nashville 3, Tenn.
- Dr. James H. Kelleher (clin. a. *U.*), 57 Jackson St., Lawrence, Mass.
- Dr. Charles S. Keuper (r.p. *D.* 1951), 713 Herder Ave., Schulenburg, Tex.
- Dr. Robert P. Smith (*M.* 1943), 195 South Union St., Burlington, Vt.
- Dr. Clarence A. Splithoff (*Or.* 1942), 3406 Webster St., Oakland 9, Calif.

Brief bits:—

- Dr. Mary A. B. Brazier, Neurophysiologist in our Psychiatry, Anesthesia, and Neurology Departments, was recently invited to make a tour of four research centers in the Middle West: at Washington University in St. Louis, at the University of Iowa in Iowa City, at the Mayo Clinic in Rochester, and at the Illinois Neurological Institute in Chicago. During her visit she was guest speaker at the St. Louis Society of Neurology and Psychiatry, and in the Department of Ophthalmology at the University of Iowa.
- Dr. Nathaniel W. Faxon, our Director *Emeritus,* has been asked by the new board of managers of Danbury Hospital to make a survey of the problems and policies of the hospital.
- Dr. and Mrs. Jack Graham, Assistant in Surgery, with their two children, Michael and Susan, sailed on the *United States* for a four-months' stay at the Radiumhemmet in Stockholm, where they will study with Dr. Hans L. Kottmeier. They had a rather rough voyage, Susan being the only one of the family who was not seasick. At the advanced age of six, Susan attended the Captain's dinner all alone. Michael has been enrolled in a Swedish school and feels quite important, since he is helping out in the teaching of English with an older group of boys.
- Dr. Henry H. W. Miles, past Assistant in Psychiatry at M.G.H., read a paper recently at a Psychosomatic Forum of the American Psychosomatic Society in New Orleans. Its title was "Psychologic and somatic factors in coronary artery disease", by Dr. Miles, Samuel Waldfogel, Ph.D., Edna S. Barrabee, M.S., and Stanley Cobb, M.D.
- Dr. William A. Reilly (*C.M.* 1928), is Director of the Radioisotope Unit at the Veterans Administration Hospital, 42d Ave. and Clement St., San Francisco 21, Calif.
- Dr. Alfred Yankauer (*C.M.* 1941) has moved to Albany, where he will assume his new responsibilities as Director of Maternal and Child Health Services for the New York State Health Department. His address is 39 Columbia St., Albany, N. Y.

THE NEWS

No. 120 Boston, Mass. February 1953

DEPARTMENT OF RADIOLOGY

During the past year the activities of the Department of Radiology have covered not only the normal routines required in a large hospital, but have increased in their scope. In this atomic age in which we live, the Department plays an important and growing role, and the Staff has kept abreast of the scientific advances and at the same time maintained a top program of diagnostic and therapeutic radiology, of resident and technical training, and of teaching.

Achievement of even a modicum of success in these endeavors depends upon innumerable factors, but especially upon the efficiency of departmental personnel. Certain changes in personnel have occurred, and the filling of vacancies has not been easy.

In March 1952, Dr. William R. Eyler left us to go into the field of private practice in Chicago. During the time he was with us he contributed greatly to the scientific as well as the active clinical work of the Department. As of September 1, 1952, Dr. James J. McCort left Boston to practise in San Jose, California. He, too, had been a valuable investigator along clinical lines, especially in clarifying the roentgen anatomy of portions of the lymphatic system. It was with real regret that we accepted the resignation of both these men.

We believe ourselves fortunate, however, in their successors. For the coming year we have secured for the General Hospital the services of Dr. William D. Nichol, a native of New Zealand, who had his training in radiology with Dr. Peter Kerley in London, England. Dr. Nichol is an outstanding diagnostic radiologist and has been loaned to us by St. Bartholomew's Hospital, London, for the year. He has contributed many interesting facts regarding the type of training available in Britain. Since September we have had in the Baker Memorial Dr. John Gibbons, who received his radiologic training at the University of Pennsylvania, and who has already proved his value to the Department.

On the first of January, 1953, Dr. C. C. Wang was promoted to the Active Staff, at the completion of his resident training program. We are indeed glad to have him continue his work with us.

Early in 1952, Mrs. Cecile Smith resigned as chief diagnostic technician at the General Hospital and was replaced by Miss Felicia A. Strympek. Miss Strympek, in association with Mr. Oliver E. Merrill, has been particularly interested in the organization of an adequate teaching program for student technicians. Her plans include closer personal supervision of students than heretofore; and making a good lecture and reading course available to them, as well as continuing the former excellent practical approach to radiology. Miss Strympek also has brought in outside interests, having obtained the help of some of the large companies which provide technical assistance in the field of teaching.

In a closely-knit department such as that of radiology, there are many people who carry out extremely important activities and who seem to receive little credit for the work they do. Without the technical staff, the doctors could not handle the large load that is carried in routine diagnostic and therapeutic procedures in the Department. Important contributions in the daily care of the patients have been made by all our technicians—notably those holding important positions, such as Miss Annie Lynch, Miss Altheda Leith, Mrs. Dorothy Barr, and Miss Maretta McCleave.

The secretarial branch of our personnel is another which seldom receives any special mention, yet whose services are vital and are deeply appreciated by the Staff. A mistake on the part of a secretary may be as serious as one on the part of a technician. Upon the secretaries we rely for accurate transmission of the information that is obtained from the examination. There have been numerous changes in the secretarial staff, due largely to the better financial opportunities outside a hospital. We have been fortunate, however, in keeping key individuals—Miss Kathleen Galvin, Mrs. Mildred Burns, and Miss Ruth Bassett, and the work has continued on its uniformly efficient level despite the many difficulties occasioned by a too-frequent change of assistants.

Improvement in the filing methods, under the supervision of Miss Ethel Look, has been marked. At the Baker Memorial, Miss Helen Zingarelli has continued her exceptionally good work.

There are others, too numerous to mention, to whom the Department is greatly indebted for loyal, conscientious service over a period of many years. One of those who has been most faithful and yet least known is Miss Madge McCallion.

An innovation in the resident training program has been provided this year. An arrangement was made with the Oak Ridge Institute of Nuclear Studies whereby Dr. Wilma Canada spent the month of August there, taking a basic course in radioisotope techniques. This was followed by a three-months' residency in the Oak Ridge Institute of Nuclear Studies Hospital (ORINS Hospital), where numerous unusual cases of varying types of malignancy are studied and treated by means of isotope therapy. Following Dr. Canada's return to the Massachusetts General Hospital, the ORINS residency is being filled for three months by another of our residents—Dr. Martin Levene.

The activities of that portion of the Department which is primarily interested in radiation therapy have been largely directed toward caring for an ever-increasing number of patients. The majority of these patients suffer from malignant disease, and they are treated with x-radiation, radium, or some radioactive isotope. This work is carried out in close association with other departments in the Hospital, chiefly with the Tumor Clinic.

During the past year Dr. Anne O'Donnell has assisted in the Therapy Department, and her help is proving most valuable.

The use of our second supervoltage generator of two-million-volt capacity continues, and in the past year an active program of rotation therapy, utilizing this unit, has been instituted. We have acquired thirty more needles of special design, loaded with cobalt^{60}. These needles are primarily of value for treatment of cancer in the lymph nodes of the neck. Another innovation during the past year has been the employment of radioactive colloidal gold in the treatment of uncontrolled ascites and pleural effusion when due to malignant disease. The use of this isotope, like strontium^{90} and cobalt^{60}, has become an integral part of the therapeutic program.

The employment of beta rays in the treatment of benign conditions of the conjunctiva and cornea has been carried out on a clinical level. In addition, a program of more fundamental inquiry into the effect of beta radiation on the cornea and conjunctiva is being initiated by Dr. Wang and Dr. Milford Schulz, in association with Dr. William Stone, Jr. of the Eye and Ear Infirmary.

An investigation, undertaken by Dr. Paul St. Aubin and Dr. Schulz in an attempt to elucidate the basic factors of radiation necrosis of bone, has been under way during the past year. Many rabbits have been irradiated—the laboratory facilities which the study requires having been generously supplied by Dr. Joseph Aub. The experimental animals have received doses within the bone which varied from 1000-3000 r and reached as high as 6000 r. The final results, including various roentgenographic studies, are to deal with the uptake of calcium^{45}, the phosphatase activity, and, if possible, radiographs of thin sections of undecalcified bone, in order to show the distribution of calcium^{45}.

In addition to irradiation experiments conducted by our own Staff, many animals have been irradiated in varying numbers and at varying intervals for investigative programs being carried out by numerous other services in the Hospital.

The problem of improving the results of treatment in carcinoma of the cervix has continued as a chief interest. Modifications in methods of treatment, by means of both radium and x-ray, are being explored by the Department of Radiology and also by the Gynecologic Service. Dr. Schulz is planning to spend the next few months in Stockholm and in other European cancer clinics, in order to observe methods and results of treatment with radium of carcinoma of the cervix and other forms of malignancy.

During the past year a considerable number of studies have been carried out in the Department, some of which have been or are to be published. Dr. Stanley Wyman and Dr. Laurence L. Robbins presented a paper at the annual meeting of the American Roentgen Ray Society in Houston, Texas, on "The roentgen demonstration of parathyroid adenoma"; this was accompanied by a scientific exhibit. The exhibit received the silver medal of the American Roentgen Ray Society, which was their highest award given this year.

At the meeting of the Radiological Society of North America, held in Cincinnati last December, Dr. George W. Holmes, past Acting Chief of Radiology and now Honorary Physician at M.G.H., gave the first historical lecture the Society has had on its annual program. Dr. Holmes's subject was "The Life of Walter Cannon". Dr. Cannon, who served as Consultant in Physiology at McLean Hospital, was one of the early and outstanding contributors in the field of radiology. The choice of Dr. Holmes for this presentation reflects honor upon him and upon our Department.

Dr. Wyman reports that the use of the Radiological Research Room has been increased during the past twelve months. Over and above the work which is being done with the cardiologists, there is a large amount of investigation going on with other services. In association with the Urologic Service, lumbar aortograms are being made to reveal renal vascular structures in both patients and experimental animals.

The Rapid Cassette Changer has proved to be an exceptionally serviceable device. It is used in a multitude of peripheral vascular problems to which it is applicable. The study of heart disease and certain allied problems by angiography and aortography, and neuromedical and neurosurgical investigations are being carried out as they have been in the past. Currently, the diagnosis of coarctation of the aorta as manifested on plain films is being studied, on the basis of the findings from angiocardiographic examinations of patients with this anomaly.

In association with Dr. Oliver Cope, Dr. Benjamin Castleman, and others, Dr. Wyman and Dr. Robbins are making a study of the entire problem of the manifestations of hyperparathyroidism.

A monograph on slipped capital femoral epiphysis by Drs. Armin Klein, Robert Joplin, John Reidy, and Joseph Hanelin is now in press, and in the January 1953 issue of the *Journal of Bone and Joint Surgery* a paper by the same authors on the treatment of the contralateral hip in slipped capital femoral epiphysis is to be published.

Dr. Hanelin and Dr. Schulz are collaborating in a clinical investigation into changes in renal morphology and function following heavy irradiation of the abdomen in patients with testicular and retroperitoneal tumors. It is hoped that supplemental animal experiments may be possible.

Dr. Wang and Dr. Schulz have been investigating the advantages of radiation therapy in Ewing's tumor.

Dr. Canada expects to work with Dr. Gordon Brownell, exploring the possibility of using a soft gamma emitting point source of a radioactive isotope for diagnostic procedures.

Other proposed investigations include the study of amyloidosis and its manifestations, and of intestinal vascular disturbance.

The clinical facilities, as well as the scientific inquiries to be found in this Hospital, and as they are affected by the ever-increasing use of radiation in various forms throughout the world, present a valued challenge to the Department of Radiology. It is hoped that we may continue to meet this challenge.

Laurence L. Robbins, M.D.,
Chief of Service

At the meeting of the Radiological Society of North America, held in Cincinnati last December, a dinner was given for Dr. George H. Holmes by graduates and other affiliates of our Department of Radiology who attended the meeting. These included Dr. Alexander S. Macmillan, Dr. Aubrey O. Hampton, Dr. Maurice Robinson, Dr. Hubert A. Shaffer, Col. J. A. Isherwood, Dr. William Shehadi, Dr. Walter Brown, Dr. Phillip Batchelder, Dr. Richard Batt, Dr. Clayton H. Hale, Dr. William R. Eyler, Col. Harold A. Vinson, Dr. John D. Reeves, Dr. Leslie K. Sycamore, Dr. Benjamin Schneider, Dr. Jack Spencer, Dr. Peter Mueller, Dr. Milford Schulz, Mr. R. S. Quick, Col. Frank Y. Leaver, and Dr. Laurence L. Robbins. Other guests included Mr. Frank Scholz, Dr. Wallace C. Miller, Mr. Edgar H. Patterson, and Dr. George M. Wyatt.

Dr. Holmes entertained with numerous humorous stories, and also provided the group with his usual common-sense suggestions.

The toastmaster of the dinner was Dr. Aubrey O. Hampton, former Chief of our Radiology Department.

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The following communication has been received from the Public Relations Division of the New York Academy of Sciences:

> It will interest you to know that Walter Bauer, M.D. . . . was among the forty-nine distinguished scientists who were elected to Fellowship in The New York Academy of Sciences at its Annual Meeting held on December 4. . . .
>
> Each candidate for this honor was nominated to Fellowship by the Council of the Academy from among the current 7,178 active and sustaining members of the Academy, in recognition of his outstanding scientific achievements.
>
> The New York Academy of Sciences, organized in 1817, is the fourth oldest scientific society in the United States, and its present membership is located in all forty-eight States, the District of Columbia, and forty-seven foreign countries.

The Board of Trustees, at their meeting on December 12, 1952, voted to appoint:

Lt. Leland C. Brannon, MC, USN, as Second Assistant Resident in Neurosurgery, for six months, beginning January 1;
Dr. Samuel Brendler as Senior Resident on the Neurosurgical Service, for six months, beginning January 1;
Dr. Frederic B. Mayo as Clinical Associate in Medicine, effective December 1, 1952;
Dr. Peter E. Sifneos as Assistant in Psychiatry, beginning January 1;
Dr. Earl M. Wedrow as Assistant Resident in Psychiatry, beginning January 1;
Dr. Frederick E. Whiskin as Resident in Psychiatry, beginning July 1.

The Trustees also voted to change Dr. Fritz Lipmann's title from Research Chemist to Biochemist.

At an earlier meeting, the Trustees voted to appoint Dr. Francis L. A. deMarneffe as Assistant in Psychiatry at the McLean Hospital, beginning January 1.

At their meetings held on December 10, 17, 24, and 31, the General Executive Committee voted:

To promote:

Dr. Clare Marshall from the position of Assistant Resident to that of Resident in Neurology for one year, beginning July 1.

To continue the appointments of:

Dr. John S. Bray as Clinical Fellow in Medicine, from October 1, 1952 through June 30, 1953;
Dr. John G. Freymann as Clinical and Research Fellow in Medicine, from November 1, 1952, in order that he may continue with the Huntington Memorial Laboratory group.

To reappoint:

Dr. Carl F. Essig, Jr. as Clinical Fellow in Neurology for one year, beginning January 1;
Dr. Si-Chun Ming as Second Assistant Resident in Pathology, beginning January 1.

To appoint:

Dr. Joseph Hofman as Clinical and Research Fellow in Surgery, for the period October 1, 1952 through June 30, 1953 (a late report of an October vote);
Dr. John D. Leidholt as Clinical Assistant in Orthopedic Surgery, beginning January 1;
Dr. William MacM. Lougheed as Clinical and Research Fellow in Neurosurgery, for one year;
Dr. Morten Smith-Petersen as Clinical Assistant in Orthopedic Surgery, beginning January 1;

Dr. Charles W. Wahl as Clinical Assistant in Psychiatry for one year, beginning January 1;

Dr. Oliver M. Wrong as Clinical and Research Fellow in Medicine, for one year.

To change the titles of:

Dr. Alice Bessman from Research Fellow to that of Clinical and Research Fellow on the Children's Medical Service;

Dr. Joachim S. Gravenstein from Fellow in Anesthesia to that of Clinical Fellow in Anesthesia, effective as of December 1, 1952.

The General Executive Committee also voted:

That the appointment of Dr. Elizabeth A. Koppel as Assistant Resident in Anesthesia be effective March 1, 1953 instead of January 1, 1952;

That Dr. Remedios K. Rosales be allowed to act as Assistant Resident in Neurology, for the period January 1 through June 30.

THE CARDIAC WORK CLASSIFICATION UNIT

A new stepchild of the Massachusetts General Hospital has come into being this fall with the opening of the Cardiac Work Classification Unit at the Bay State Rehabilitation Clinic. This Unit has long been a goal of the Massachusetts Heart Association and of the Division of Rehabilitation of the Commonwealth of Massachusetts Department of Education. The Division of Chronic Diseases of the Department of Public Health has also been an interested supporter.

The Rehabilitation Clinic has agreed to furnish quarters and administration for this cooperative venture. Dr. Dean A. Clark has been most cooperative during the period of organization in assisting in various ways. By special arrangement, X-ray work for the Clinic is carried on in cooperation with the Radiology Department of the Massachusetts General Hospital, and technicians from the Baker Memorial Hospital Laboratory furnish assistance after their regular hours. Miss Josephine C. Barbour has been most helpful with advice regarding social service matters and personnel.

With general agreement of the various organizations interested, an Executive Committee for the Unit has been set up, consisting of Drs. Augustus Thorndike, Howard B. Sprague, and Arthur L. Watkins, and Messrs. Edgar A. Perry and Theodore Chase. An Advisory Board includes Drs. Edward F. Bland, Mandel E. Cohen, M. Henry Clifford, and Paul D. White of the staff of this Hospital. Dr. Richard J. Clark has been appointed as Director of the Unit and Dr. James H. Currens as Assisting Director, both being members of the Massachusetts General Hospital staff and Cardiac Department. Dr. George E. Altman of the Beth Israel Hospital is also working as a Unit Cardiologist.

The purposes of the Unit are threefold: First, to furnish service to referred patients in the matter of evaluating them for proper placement in jobs in industry, relocating them to more suitable jobs within their own industry, or recommending them for vocational rehabilitation training through the State Department of Education. Second, the Unit aims to study further and enter into research regarding the total problem of matching cardiac patients to suitable work. Third—and most important—is the matter of education of patients, their families, physicians in general, and industrialists, as to the potentialities of various cardiacs for work and self-support.

"What can this Unit accomplish that practitioners or present cardiac clinics are not already doing?" is the question most frequently asked. The very excellent answer to this, recently given by Dr. Herman K. Hellerstein, director of a similar unit in Cleveland, is to the effect that the internist who can devote some two or three hours to each patient, who is a good social worker and an experienced vocational counselor, could do the job himself. In other words, the accomplishments of this Unit depend upon teamwork for which most individuals and clinics are not organized or equipped. Considerable time is devoted to each patient by cardiologist, laboratory assistants, social worker, and vocational counselor. Following thorough evaluation by each, a staff conference considers all cases in detail, in an attempt to arrive at optimum recommendations which are then implemented by the social worker and vocational counselor, most often through the State Division of Vocational Rehabilitation. Here, there is an excellent opportunity for liaison, in that Mr. Louis M. Tracy, the vocational counselor for the Unit, is, also, the supervisor of the Boston office for the State program. All too often in our clinics there may be a lack of adequate correlation between doctor, social worker, and outside agencies attempting to place or adjust patients in employment, and the patient is left hanging in mid-air somewhere along the line. This, we believe, can be overcome through the methods of this Unit. Furthermore, adjustment of the cardiac to suitable work is the primary aim of the Unit and time does not have to be consumed in regulation of dietary or medicinal therapy. While it is most important to determine that all patients are under optimum therapy, the Clinic concerns itself with this matter secondarily only, making recommendations to referring physicians to whom patients are returned with full reports.

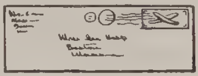
Interval follow-up visits are scheduled for all patients in order to observe the effect of work upon them and for reclassification where advisable.

It has early become evident that motivation, psychic factors, patients' fears, and lack of proper understanding of limitations and potentialities are all-important. Encouragement, explanation, reassurance, and even graduated work in one of the sheltered workshops to develop self-confidence, are essentials in this type of rehabilitation. The over-all evaluation of the patient in relation to his psychic and social environment is of far greater importance than specific exercise tolerance tests.

The services of the Unit are available to patients of any financial circumstance who have work problems related to cardiac disease. Referrals are by appointment only on recommendation of a physician. Patients pay whatever part of the cost they are able to afford. Financial deficits are met by the Massachusetts Heart Association.

Interested physicians are welcome as visitors at the Thursday evening conferences.

Richard J. Clark, M.D.,
Unit Medical Director



New addresses:—

Dr. N. Joel Ehrenkranz (*M.* 1950), George Williams Hooper Foundation, University of California Medical Centre, San Francisco 22, Calif. (until July 1).

Dr. Chester W. Fairlie, Jr. (*W.M.* 1942), 142 Steele Rd., West Hartford 7, Conn.

Lt. William F. Havemeyer, MC, USNR (a.r.s. 1948), U.S.S. *Consolation* (AH 15), c/o Fleet Post Office, San Francisco, Calif.

Dr. Falls B. Hershey (*E.S.* 1947), Dept. of Surgery, Washington School of Medicine, St. Louis 10, Mo.

Dr. Manucher Javid (r.s. *N.S.* 1952), University Hospitals, 13 University Ave., Madison, Wis.

Dr. John D. Leidholt (a.r.s. *Or.* 1952), 234 Marlborough St., Boston, Mass.

Dr. John L. McClung (*r.p. An.* 1952), 3102 Strawberry Lane, Port Huron, Mich.

Dr. James J. McCort (r.p. *R.* 1944), Santa Clara County Hospital, San Jose, Calif.

Dr. Isaac V. Manly (*E.S.* 1947), North Carolina Memorial Hospital, Chapel Hill, N. C.

Dr. Thip Pholpoke (gr. stud. a. *S.* 1952), Army Hospital, Bangkok, Thailand.

Dr. Morten Smith-Petersen (sr. r. s. *Or.* 1952), 266 Beacon St., Boston, Mass.

Dr. Lamar Soutter (a.r.s. 1941), 203 Commonwealth Ave., Boston, Mass.

Brief bits:—

Dr. Henry K. Beecher, Chief of our Anesthesia Service, presided, at the invitation of the Army, at a Conference on Artificial Respiration, held recently at the Army Chemical Center, Edgewood, Md.

Dr. Clemens E. Benda, Assistant in Psychiatry on our Staff, has been invited by the Minister of Public Health of the Government of Uruguay for a two-weeks' lecture tour in that country during the first part of February. Dr. Benda will give a series of lectures and hold conferences in hospitals and with scientific societies dealing with practical case work on cerebral palsy, Mongolism, and allied pediatric neuropsychiatric subjects.

Dr. William S. Clark, Assistant Physician at M.G.H., resigned as of December 31, 1952, to join the faculty of the Western Reserve Medical School as an Assistant Professor in Medicine. He will be director of the newly established Arthritis Study Unit at the University Hospitals in Cleveland, Ohio. This message from Dr. Walter Bauer, Chief of our Medical Services, includes the following: "Those of us who have known Dr. Clark since his arrival at the M.G.H. in 1945 will miss him greatly. We wish him every success in his new undertaking." Dr. Evan Calkins, who finished his year of service as Chief Resident Physician on December 31, will remain at M.G.H., taking Dr. Clark's position in the Robert W. Lovett Memorial Arthritis Study Unit.

Dr. Sylvester B. Kelley, Associate Visiting Urologist on our Staff, won the 1952 George Hamilton Prize for best parking in the Parkman Street lot. Congratulations, Dr. Kelley!

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. David G. Cogan, Director of the Howe Laboratory and Associate Surgeon in Ophthalmology, will fly to Cairo, Egypt, to take part in an Ophthalmological Congress which opens in Cairo on February 16. The Congress is being held in cooperation with the Golden Jubilee Meeting of the Egyptian Ophthalmological Society.

A visiting group of six guest lecturers, ophthalmologists from Europe and America, have been invited to address the Congress. At the request of the Egyptian Ministry of Health, this group is being sponsored by the World Health Organization of the United Nations. From the United States there will be Dr. Cogan, and Dr. Phillips Thygeson of San Francisco. The other special speakers will be Dr. Karl Lindner of Vienna, Dr. T. Keith Lyle of London, Dr. Rudolf Theil of Frankfurt, and another speaker to be announced.

Dr. Cogan will deliver three lectures —"Ocular dysmetria, flutter-like oscillations, and opsoclonus", "Radiation effects on the eye", and "Corneal physiology". Following the formal meetings of the Congress, seminars will be held over a ten-day period on various subjects of ophthalmological interest. This period will afford an opportunity for informal exchange of information and experiences.

Members of the Ophthalmological Section of the Brooklyn-Long Island Chapter of the American College of Surgeons spent a morning at the Infirmary on January 17. The visiting doctors went first to the Eye Operating Room galleries to observe surgery. Later, there were brief talks by Dr. Charles L. Schepens and Dr. Taylor R. Smith on the work of the Retina Service, and by Dr. Robert R. Trotter of the Howe Laboratory on "The early diagnosis of glaucoma".

A new service, known as the Hospital Dispatch Service, was activated at M.G.H. the first of the year. The reasons for its creation and the functions of this service are best explained in a letter sent on December 18 by Mr. Henry J. Murphy, Assistant Director, to all department heads at the Hospital. Mr. Murphy's letter reads:

> For many years it has been an M.G.H. practice to establish intrahospital transportation facilities within the various units. One of the most effective of these transportation groups has been the Nursing Auxiliary Service, located in the Bulfinch Building. This service, manned by a combination of volunteer and paid personnel, makes a very substantial contribution to the hospital effort.
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> Because of the success of the N.A.S. and a belief by the Nursing Department that this type of organization could be most effective on a hospital-wide basis, a survey was instituted of all hospital transportation.
>
> This survey has been completed recently. Outlined below are a few of the conclusions drawn from the material gathered.
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> 1. Many of the transportation groups are doing an excellent job within the areas in which they are permitted to work.
> 2. There is a hospital-wide need for more coordination between the transportation services.
> 3. There is also a need for more planning and understanding between the origin of the service and the recipients.
> 4. The Lampson Tube System could be used more effectively.
> 5. Personnel in general need to be made aware of the importance of the part played by the transportation services in the total hospital picture.
>
> As a result of this study, it was decided to establish a department that would be responsible for all intrahospital transportation. In its initial stage service will be limited to those areas which are currently providing their own transportation service. Once the initial period of trial and error is overcome, service will be extended to other areas where the need is apparent.
>
> This service is to be known as the Hospital Dispatch Service. Funds will be made available by transfer from those services to be incorporated. They are: Baker Information Messengers, White Information Messengers, Baker X-ray Messengers, White X-ray Messengers, Nursing Auxiliary Service, and Baker Messenger Service.

The Hospital Dispatch Service is based just outside the Moseley Rotunda. Juliet Vennard is Head of the Service. With its activation, the Nursing Auxiliary Service was discontinued, and Mrs. Acree of the past N.A.S. is now serving in the new H.D.S.

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THE BACTERIOLOGY LABORATORY

On July 1, 1952, the Bacteriology Laboratory, which had previously been a part of the Department of Pathology, was set up as a separate Hospital department. At that time there were several changes in the personnel responsible for the laboratory. Dr. Louis L. Dienes, who had been in charge of the laboratory since 1930, retired and was appointed Consultant in Bacteriology to the Hospital. The Hospital is fortunate in that Dr. Dienes will continue to carry on his research work here. The undersigned, who is in charge of the Infectious Disease Research Laboratory of the Hospital, was appointed Chief of the Bacteriology Laboratory for an interim period. Dr. Lawrence John Kunz (Ph.D. in Medical Sciences from Harvard College, 1951) was brought from the Department of Bacteriology and Immunology of the Harvard Medical School and made Assistant Chief of the laboratory. Dr. Kunz, who is an instructor in the Bacteriology Department of the Medical School, will continue his teaching activities and will provide a closer tie between the Bacteriology Laboratory of the Hospital and the Bacteriology Department of the Medical School.

Since July 1952 several additions and replacements have been made in the laboratory technical staff. This group of technicians continues to profit from the guidance and experience of Miss Marguerite E. Burke, who supervises the laboratory work.

Though the main function of the laboratory is the provision of good bacteriologic and immunologic services to the Hospital, we are pleased to report that an old system is being reintroduced which will enable the laboratory to participate in the medical education of the house staff. House officers from the Pediatric and Medical Services are now spending a month working in the laboratory and have the opportunity to learn some practical and, perhaps, useful bacteriology. The laboratory personnel, of course, profit from the presence of these clinicians. The Pathology Department will continue to rotate its assistant residents through the Bacteriology Laboratory as it has done in the past.

Dr. Kunz, whose research activities combine immunology and virology, is engaged in the investigation of a phenomenon involving immune hemolysis and in an analysis of the antigenic components of the mumps virus.

Dr. Dienes continues his studies started several years ago on the pleuropneumonia group of organisms and the transformation of common bacteria into such forms. Attention is centered at present on the conditions of this transformation and on its eventual pathological significance.

My research interests lie mainly in the realm of microbial biochemistry, and work is currently going on with regard to the pathogenesis of secondary infections in patients receiving chemotherapeutic agents, and the modes of action of antibiotics.

Members of the house staff and others are invited to discuss problems of mutual interest with the members of the Department of Bacteriology.

Thomas F. Paine, Jr., M.D.,
Chief of Bacteriology

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COORDINATING COMMITTEE

The first meeting of the Coordinating Committee was held on January 30, 1952, and since that time Dr. Clark has called four other meetings, at all of which he has presided.

The purpose of the Coordinating Committee is to utilize the combined thinking of the eight volunteer groups which make such invaluable contributions to the proficiency of the Hospital. Under this plan each organization, while maintaining its own identity, is better equipped to contribute to the many special projects of common interest. The plan also gives the administrative branch of the Hospital and the representatives from the volunteer groups opportunities to talk over problems of mutual concern.

Furthermore, informal luncheon meetings furnish additional opportunities for each group to become better acquainted with the activities of all the other groups and to plan for even greater cooperation in the future.

The members of the Coordinating Committee are concerned with certain problems which affect the M.G.H. and other institutions associated with it: questions pertaining to legislative matters, Civil Defense, hospitality, the philosophy behind fund raising, ways of recruiting volunteers, decorating projects, and similar undertakings.

At these meetings Dr. Clark has answered questions on such subjects as the ten-year plan for M.G.H., parking problems, the Minimum Wage Bill, the Hospital deficit, the Emergency Defense Committee at M.G.H., Blue Cross and Blue Shield payments to the Hospital, various building projects of the Hospital, as well as the many extramural activities of the Staff. As a member of the President's Commission on the Health Needs of the Nation, Dr. Clark has also described the work of this Commission.

VOLUNTEER GROUPS

Distaff Club

The January meeting of the Distaff Club was held on the 22d, at 8 P.M., in the Penthouse. Election of officers for the coming year was held. Hostesses for the meeting were Virginia (Mrs. Evan) Calkins and Pat (Mrs. Hugh R.) Dudley.

Ladies' Visiting Committee
Massachusetts General Hospital

At the 83d annual meeting of the Ladies' Visiting Committee of the Massachusetts General Hospital, held on Thursday, January 8, Dr. Clark presented a fifty-year MGH service pin to Mrs. Richard W. Hale. Aside from Mrs. Hale's great interest in the Ladies' Visiting Committee over these many years, she has contributed extremely valuable work during the last decade in preparing surgical dressings for the Hospital.

Massachusetts General Hospital
Volunteer Service Department

Besides the paid personnel of the Hospital, there were in 1952 approximately 465 Volunteers at the Massachusetts General Hospital who gave 42,938 hours of service. Twenty-eight of these Volunteers have served the Hospital for ten years or more; thirty of them for five years or more; and forty-eight Volunteers were given one-hundred-hour service pins during the past year.

These Volunteers work in almost every department and clinic in the Hospital, including the Nursing Department, the Blood Bank, Archives, Chaplain's Office, Credit Department, Fracture Office, Personnel Office, Post Office, Social Service, Occupational Therapy, Laboratories, Photographic Laboratory, Library Service, Linen Control, and in the preparation of supplies for the Operating Room.

Mrs. Francis E. Smith of Winchester, who has been a Volunteer in the Hospital for the past ten years, worked practically every day during the month of December helping to sort the thousands of letters and Christmas cards which flooded the MGH Post Office during the Christmas season. The rest of the year she works Mondays, Wednesdays, and Fridays in the Post Office and continues to give countless hours of Volunteer Service there.

Mrs. David E. Farrisey of Chestnut Hill was written up in a December issue of the *Boston Traveler* as the "Volunteer of the month". Her work at the M.G.H. has included the preparation of thousands of packages of sponges and rubber gloves for use in time of emergency; she engaged in the project of fingerprinting approximately 4000 people connected with the Hospital; she gave three days' service a week during the summer of 1951 in the Personnel Department; and she assembled and supervised the distribution, to the MGH staff, of the recently revised referral manual which ensures the continuance of patient care after discharge.

MGH Volunteers are also to be found in seventeen of the clinics in the Out-Patient Department. Mrs. Herbert Barry, Jr. is working under Miss Meenan as a "receptionist". This title hardly does justice to the important and useful work performed by this tireless Volunteer. Two mornings a week Mrs. Barry covers all the clinics on the second floor of the Out-Patient Department. She helps in many ways to keep patients happy: She explains the unavoidable wait when a record is delayed or an emergency detains the doctor; she brings coffee from the OPD lunch counter to patients who for one reason or another are unable to go for it themselves; she explains in simple terms the doctors' instructions; she offers magazines to those who must wait a considerable time; but, above all, her most important job is just letting a harassed patient talk to a sympathetic and understanding person who has the time to listen.

Mrs. Barry's work is part of a pilot plan which seems to be proving its worth. Probably the best proof of its value is that the personnel, nurses, secretaries, and others notice the difference on the days when Mrs. Barry is not here. Eventually, the O.P.D. hopes to have ten receptionists, and promises any Volunteer who can give one or more mornings each week a most interesting and rewarding experience for herself, as well as work which is of inestimable value to the Hospital.

Other new projects which the MGH Volunteer Department inaugurated in 1952 include the Book Cart Service in the Phillips House. Those working in the Phillips House Library Service are Miss Dorothy Bartol, Mrs. William F. Dean, and Mrs. Murray Lewis. The General Store Cart, another new project, is taken through the General wards by Miss Dorothy Bartol, Mrs. James Currens, Mrs. Virginia Hill, Mrs. Edith S. Kirkbride, Mrs. Wheaton Kittredge, Mrs. Richard Osborn, and Mrs. John S. Taylor.

Actually, Volunteers are drawn into almost every department of the Hospital. They help to alleviate the nursing shortage by their non-technical work in that department. They assist in many other departments, also, by relieving pressure not only on the Hospital workers but on the budget of the Hospital, as well.

Volunteers are always needed at the M.G.H.

MGH Volunteers who have worked 10 years or more: Mrs. Fuller Albright, Mr. William Barroll, Mrs. Herbert Barry, Miss Dorothy Bartol, Mrs. Serena R. Bentley, Mrs. Taylor Black, Mrs. Samuel S. Drury, Mrs. Nathaniel W. Faxon, Miss Ruth Agnes Fraser, Mrs. Francis C. Gray, Mrs. Richard W. Hale, Mrs. Arthur D. Hill, Mrs. E. W. Jenney, Miss Ethel Padden, Mrs. David Patterson, Mrs. Francis M. Rackemann, Miss Anna P. Revere, Miss Alice Ropes, Miss Marguerite Ryan, Mrs. Francis E. Smith, Mrs. A. L. Sneddon, Mrs. Martin E. Sullivan, Mrs. John S. Taylor, Mrs. Arthur Thiessen, Miss Elizabeth Townsend, Miss Ruth M. Waldron, Mrs. Conger Williams, Mrs. John O. Wilson.

MGH Volunteers who have worked 5 years or more: Mrs. George R. Alley, Mrs. Carl L. Billings, Mrs. F. D. Cadwallader, Mrs. Dora G. Daniels, Mrs. John L. Evans, Mrs. Edward M. Feeley, Miss Antoinette Freda, Miss Ruth Gile, Miss Adele R. Gruener, Mrs. J. R. Harding, Miss Mary C. Hardy, Mrs. Miles C. Higgins, Miss Blanche E. Houlahan, Mrs. Malleville McC. Howard, Mrs. James Irvine, Mrs. Paul Keene, Mrs. Herbert Kelley, Mrs. Carl J. Kesseli, Miss Margaret W. Kettell, Mrs. Allan Lewis, Mrs. A. S. Lucas, Mrs. Richard B. Neiley, Mrs. James A. Potter, Miss Kate Saunders, Mrs. Bonnie M. Sprague, Mrs. Percy F. Tibbetts, Mrs. Harold K. Veazie, Mrs. Guy Waring, Mrs. J. F. Wilber, Mrs. Fred G. Wilder.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs are listed each month in The News as a convenience for our readers. For that reason we ask you to send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers.

The following new titles have been received. Each title appears in a 1952 publication unless otherwise indicated. No further 1952 titles will be listed.

General Surgery

Scannell, J. G.
Medical progress: Thoracic surgery.
New England J. Med. 247:800-807, 843-850.

Scannell, J. G., Myers, G. S., and Friedlich, A. L.

No. 38 in a series of Staff photographs

Dr. Fred A. Simmons, Assistant Surgeon, Head of Fertility & Sterility Clinic

Significance of pulmonary hypertension in constrictive pericarditis: A pre- and post-operative study.
Surgery 32:184-194.

Waddell, W. R., and Burbank, C. B.
Cholangiojejunostomy (Longmire operation) for relief of biliary obstruction due to carcinoma.
New England J. Med. 247:929-932.

Waddell, W. R., and Wang, C. C.
Experimental studies in human gastric physiology—I. The effect of fat upon gastric evacuation after partial gastrectomy.
Ann. New York Acad. Sc. 56:83-92.

Neurology, Neurosurgery, and Psychiatry

Cobb, S.
Consciousness and cerebral localization.
Epilepsia, 3d series, vol. 1, Nov. 1952, no pagination.

Cobb, S., and Miles, H. H. W. (Editors)
Psychiatric conference: Migraine and character neurosis.
Am. Pract. & Digest Treat. 3:985-990.

Orthopedic Surgery

Reidy, J. A., Broderick, T. F., Jr., and Barr, J. S.
Tendon transplantations in the lower extremity: A review of end results in poliomyelitis. I. Tendon transplantations about the foot and ankle. II. Tendon transplantations at the knee.
J. Bone & Joint Surg. 34-A, No. 4:900-914.

Pediatrics

Corsa, L., Jr., Pugh, T. F., Ingalls, T. H., and Gordon, J. E.
Premature births as a problem of human populations.
Am. J. M. Sc. 224:343-360.

Urology

Colby, F. H.
Carcinoma of the bladder: Results of total cystectomy.
Canad. M. A. J. 66:144-147.

Books

Cannon, Ida M.
On the social frontier of medicine.
Cambridge, Harvard University Press.

Colby, F. H.
Essential urology, 2d edition revised.
Baltimore, The Williams and Wilkins Company, 1953.

Everyone who read that letter from Dr. Russell T. Congdon (*W.S.* 1909) which appeared in the March 1950 issue of The News will always remember it. Recently this brief, but just as cordial, note arrived from him:

> I am enclosing my check. I would miss The News very much.
>
> We are all well and busy. I have not forgotten the debt of gratitude I feel for the training I received under Drs. Mixter, Richardson, Cabot, and others.

This short letter has come from Dr. Hans J. Harder (a.r.p. *An.* 1952).

> You were so kind to send me a copy of The News because I was mentioned in it, and I thank you very much.
>
> I am still very interested in everything that happens in the "Old Mass. Gen. Hosp." because the Anesthesia Department gave me a wonderful time and a tremendous knowledge in my profession. Sometimes I am really homesick for Boston, especially now in the beautiful Christmas time.
>
> Could you be good enough to send me the monthly copies of The News? I am sure that one of my friends in Boston will subscribe for me. I will ask them within the next few weeks and will give you the information.

A letter with a new address has come from Lt. George B. Murphy, MC, USNR (*S.* 1952). From the USNS Gen. Leroy Eltinge TAP 154, c/o Fleet Post Office, New York, N. Y., he writes:

> I have sincerely enjoyed receiving my copies of The News. They have found their way here to the New York Port of Embarkation with facility, but to catch up with me now please change to the address above.
>
> At this point it looks as if I am going to see a lot of the world and very little of an operating room. However, I plan to just "relax and enjoy it".
>
> Warmest regards to all at the M.G.H.

From Dr. Laurens P. White (*M.* 1950), address 149 Castro Street, San Francisco, California, has come this note:

> Through devious channels I have been getting a copy of The News each month for some time, but would prefer to get it directly. Could you start sending it, and bill me?
>
> For 18 months I have been working at the Laboratory of Experimental Oncology, which is run by the Public Health Service and is a diverticulum of the University of California. In addition, my wife and I have been a last "port of call" for several MGH folk *en route* to Korea, the last two being Lee Cecil (*M.* 1950) and Lot Page (*M.* 1950).
>
> Our future plans are uncertain, so I can't give you anything dramatic for The News. We do hope to get back East before long, however.

We were delighted to receive even these few lines from Dr. Chiu-an Wang (*W.S.* 1944):

> This is just a brief note to inform you of the change of my office to 207 China Building, Hong Kong, China. I also wish to tell you that the Wang family has been well and has grown a bit—an addition to us of Ann, born July 8, 1952. Thus we have three daughters—one more to catch up with Dr. Clay and Dr. Linton!
>
> I have instructed my brother, Dr. C. C. Wang, to pay you for my subscription to The News. Kindly address it to this new office.
>
> Everything out here seems to be all right.

THE NEWS

No. 121 Boston, Mass. March 1953

REORIENTATION OF DERMATOLOGY

III. THE RESEARCH LABORATORY

With the reorganization of the Department of Dermatology in the Harvard Medical School and the Massachusetts General Hospital in 1948, foremost among the objectives was the development of a research laboratory. This was to be more than an amateur's attempt to learn something about the skin. It required men with the interest and scientific training, having a knowledge of the tools and methods of research, and possessing the ideas and ability to define the problems and undertake their solution.

Amazingly little is known of the dynamics in the function of the skin, although its anatomy has been the subject of study since Hebra introduced the ideas of Virchow in cellular pathology near the middle of the last century. Few thought of the skin as an organ or, if they thought of it as such, could define its cardinal function in terms of the total physiological system of which it was a part. The obvious is easily overlooked. That the skin serves as the body's great organ of protection seems hardly to have been recognized, so little were we concerned with its essential purpose.

The skin is the body's largest organ, accounting for about six percent of the body's mass. It is three times the size of the liver, if that is of any importance. Its spatial position is unique, for like no other organ except the eye it faces the world around us. It functions as a primary agency to insure the constancy of the internal environment without which mammalian life is impossible. It is the encompassing protector of homeostasis.

Man lives and moves in a world of varying heat and cold, of terrestrial solids, liquids, and gases, subjected to an almost chaotic variety of destructive forces. He lives also in an inward medium governed by circulating fluids which mediate between the shifting and perverse outer world of change and the inner stabilized world of constant temperature, of steady pH, and of orderly biochemical interactions.

The pre-eminent guardian of this inner equilibrium is the skin. And of the skin the epidermis, with its outward horny covering, is the most vital. Without the keratinous shield of the stratum corneum the body would lose its fluids, wither, and die.

The skin is a complex organ differing widely in its constituent parts. On the outward side, meeting the external environment, it is soft and vulnerable, yet here it offers stout protection to the vital functions of life. Without the narrow zone of epithelial cells, dead and hardened at the surface, life could not endure. This is the epidermis, which varies from about 0.1 to 0.2 millimeters in thickness. Only epithelial cells compose its substance. It is without blood vessels. For nourishment and the disposal of waste it depends upon the diffusion of fluids through the barrier lying between it and the supporting vascular understructures.

Lying uppermost on the stratified cells of the epidermis is a narrow zone of dead or dying epithelium, the horny layer or stratum corneum. So simply designed, the living epidermis exists that in the product of its continuous death the greater life of the body may be preserved.

It is the epidermis which has been occupying our attention in the laboratory. The epidermis with its vital function is wholly dependent for its survival upon the deeper structures of the dermis. Where the epidermis is tender and yielding, the dermis provides a tenacious and tough material of collagenous nature which gives support to the cutaneous envelope. Upon its outlying vascular elements, its secretory activity, and the horny epithelium of the epidermis, the regulation of bodily temperature is strongly dependent. Vasomotion and secretory activity of the cutaneous glands, and perhaps other functions not well defined or understood as they affect the integumentary system, are governed by the autonomic nervous system with its connection through the hypothalamus with the higher centers of the psyche, and through the humoral influences of the glands of internal secretion.

And not least, the dermis keeps the body aware of its surroundings through the sensory nerves with which it is generously endowed.

Not long ago a leading medical educator stated that prior to World War II there were no more than five persons with doctoral qualifications engaged in full-time dermatological research in the United States. When one considers the high incidence of medical problems arising from the skin or in which the skin participates, and how obvious and available for experimental study the skin happens to be, one would expect it to rank high among the subjects of medical research. The fact is, it ranks among the lowest.

The new research laboratory at the Massachusetts General Hospital was opened for work in January 1949. It may be of some historical interest that it came to occupy one of the oldest buildings making up the Hospital. This is Bradlee Ward E, once a surgical amphitheatre and wards, and later the wards of the Children's Medical Service. Over a period of six months preceding the opening of the laboratory a strange collection of rooms, large and small, holding much of interest for the collector of architectural and hospital antiquities, was transformed into modern research laboratories with an air-conditioned animal room. There are laboratories for biochemistry and histochemistry and for tissue culture and microbiology. In addition to these, the department supports a laboratory located at the Harvard Medical School. This works in close association with the laboratory of physical chemistry.

The original staff of two full-time research workers and two technicians has grown to include seven full-time research workers, two part-time workers, and seven technicians.

The central problem under investigation in the laboratory relates to the epidermis and its keratinous covering. A major part of the work is directed to a study of the chemistry of keratinization and the relation of the epidermis to the diffusion of water through the skin. Other than certain morphological changes to be observed in the maturing epidermal cells, very little is known of the mechanism by which keratin is formed and nothing as to the disturbance of the process in disease.

Errors in keratinization are perhaps the most frequent accompaniment of cutaneous disease, whether it arises from inflammation, metabolic inadequacies as in vitamin A deficiency, or in neoplastic processes. Biochemical and histochemical studies are in progress to determine the chemical transformations occurring within the epidermal cells which lead to the formation of keratin.

The keratinizing process is involved in the aging of the skin and also in the late reaction to ionizing radiation. Both conditions may be the precursor of carcinomatous disease in the skin. With a biochemical characterization of keratinization, it should be possible later to learn something of its pathogenic implications.

Related also to the same epidermal structures is an investigation of the diffusion of fluids through the skin and the loss of water under varying conditions of atmospheric humidity. This includes the location of the barrier to the loss of water and the problem of hydration of the keratinous surface. Already this has resulted in a better understanding of dry skin and the rationale of therapeutic measures directed toward the relief or prevention of surface dehydration. This problem is intimately connected with the effect of detergents on the skin.

The disruption of the horny layer of the epidermis has a bearing on the susceptibility to infection and the penetration of toxic substances which may produce disease far removed from the site of entry or contact with the pathogenic agent. In this connection a study was made on the action of various chemical agents on the bacterial flora of the skin. The apparent capacity of some to reduce quantitatively the resident bacterial population was found to result from changes in electrical charge between the skin and the bacterial cell which held the organisms more securely to the skin, the organisms being released under circumstances affecting the alteration of the charge on the cell. From this investigation an improved technique for degerming the skin was developed which is now being used as standard surgical procedure in this and other hospitals.

The phenomenon of vesiculation and blistering is a characteristic of the epidermis. A definition of the biochemical lesion resulting from exposure of the skin to the vesicating arsenical gases seemed good reason for further investigation of the mechanism of intermediate carbohydrate metabolism of the skin. Vesication in one form or another is one of the most frequent reactions of the skin in disease. It occurs as a reaction to chemical hypersensitivity and to infection. In the eczematous dermatoses of intrinsic origin, vesiculation, although of microscopic proportions, is chronic and recurring. And in pemphigus the phenomenon reaches its largest and most destructive proportions.

Related also to the epidermis is the process of neoplasia. Certain azo dyes and aromatic amines are potent sensitizing agents, which after repeated contact with the skin are carcinogenic. The effect of certain of these chemicals on embryonic skin of the chicken growing in tissue cultures has led to reproducible cellular changes, the nature of which is now under investigation as to their chemical identity and genetic significance.

A more practical application of the interest in epidermal sensitization has led to the identification of chemical agents employed in the fabrication of plastic adhesives which are responsible for contact allergic dermatitis. With this information it should be possible for the manufacturer to eliminate these substances from such articles as shoes and adhesive plaster. However, more study needs to be given to the mechanism responsible for reactions due to this cause.

Directly related to the patient has been a study of the plasma proteins in pemphigus by electrophoresis and a newer method of fractionation developed in part in one of the laboratories of the department. The lipoproteins in the diseases of lipid metabolism, some of which affect the skin, are at present under study.

Farther removed from the problems of the skin, yet well within the field of interest, has been a prolonged study of the factors influencing the localization of syphilitic disease. This is part of the general problem of the biology of syphilis which has occupied our attention for many years. It is not so much the problem of syphilis as a specific disease which intrigues us as it is the many aspects of an infectious disease characterized by recurrent episodes of activity, often quite dissimilar in localization and form, which occupy in their progression a very long passage of time. The natural history of a disease which unfolds itself from a reaction at the portal of entry of the infecting organism to a final climax of destructive proportions years later or to a gradual waning of the infection until it passes beyond clinical or even bacteriologic recognition is an object of wonderment.

A study of the course of infection early and late in its progression has yielded information regarding the presence of *Treponema pallidum* at the site of localization of active disease, but there remains an obscure period of latency lying between the beginning and the end in which the behavior of the infecting organism and the mechanism whereby the distant foci of disease, as in the cardiovascular system, are established and maintained is unknown. It was this obscure period in the life of the disease which has been investigated.

For the laboratory animal, at least, it was found that *Treponema pallidum* may inhabit the blood stream for prolonged periods of time in the absence of any evidence of tissue reaction or inconvenience to the animal, in some cases even to its death in old age or when the serological evidence of disease had vanished.

These are the problems which have interested the people working in the laboratory. They are but a few of the many avenues by which one could approach the unrevealed secrets of the skin. In no area are there so many unexplored recesses of knowledge.

Chester N. Frazier, M.D.,
Chief of Dermatology Service

This month will be climaxed by the sixty-first Annual Vincent Club Show, given for the benefit of the Vincent Memorial Hospital. Performances will be held at New England Mutual Hall, Wednesday through Saturday evenings, March 25 through 28, at 8:30, with a matinee Saturday afternoon at 2:30.

The new or Provisional Members of the Club have been working since the first of December to secure advertisements for the Vincent Show Program. As we go to press, they and the Advertising Committee have $24,000 worth of advertising contracts salted away.

Rehearsals for the Show are now going on daily. It promises to be quite different and very exciting this year. "Pass the salt, Mr. Jones" is an original musical comedy, written by Mrs. Richard M. Grandin and Mrs. Stearns Poor. It deals with the denizens of the deep—mermaids, Davy Jones, the lost island of Atlantis, atomic scientists, and a mysterious radioactive metal—not to mention jesters, dancers, singers, and the Vincent Drill.

Tickets will be on sale at New England Mutual Hall every day, Monday through Friday, beginning March 9, from 9:30 to 5, and on Saturdays from 9:30 to 1. Tickets range in price from $1.25 to $5. The box office telephone number is COpley 7-0180. Mrs. Edwin F. Cave is the chairman of the Ticket Committee.

* * *

Dr. Dean A. Clark, our General Director, has been appointed Clinical Professor of Preventive Medicine at the Harvard Medical School.

The Board of Trustees, at their meetings held on December 26, January 9 and 23, and February 4, voted:

To approve the location of the new Pathology Building between the Baker Memorial and Charles Street;

To create a new rank on the Active Staff to be known as "Consulting Visiting Surgeon" or "Consulting Physician", etc., in accordance with recommendations submitted by the ad hoc committee appointed February 7, 1952;

To grant leave of absence to Dr. Edward D. Churchill for January and February;

To accept with regret the resignation of Dr. William S. Clark as Assistant Physician, effective as of December 31, 1952;

To accept with regret the resignation of Dr. H. Bristol Nelson as Assistant Obstetrician, effective January 15;

To accept the resignation of Dr. Chiu-chen Wang from the position of Assistant Radiologist, effective January 1.

To appoint:

Dr. Morris H. Adler as Clinical Associate in Psychiatry;

Dr. Betty Q. Banker as Assistant Resident in Neuropathology, beginning July 1;

Dr. Evan Calkins as Assistant in Medicine, effective January 1;

Dr. Pierre M. Dreyfus as Assistant Resident in Neurology for one year, beginning July 1;

Dr. Parker Heath, Jr. as Assistant Resident in Medicine, beginning May 1;

Dr. Mark R. Knapp as Assistant Resident in Anesthesia, beginning November 15;

Dr. Louis W. Lewis as Assistant Resident in Anesthesia, for three months, beginning March 1;

Dr. Russell M. Nelson as First Assistant Resident on the Surgical Service, beginning April 1;

Dr. Joseph Stokes, III, as Resident in Medicine, beginning July 1;

Dr. Morton N. Swartz as Chief Resident in Medicine, beginning January 1.

At their meetings held on November 5, December 17 and 24, and during January, the General Executive Committee voted:

To promote the following men from

Interns to Assistant Residents in Medicine, beginning July 1:

Dr. John T. Binion
Dr. Beverly W. Cobbs, Jr.
Dr. Herschel D. Collins
Dr. William L. Morgan, Jr.
Dr. James A. Pittman, Jr.
Dr. Kenneth J. Ryan
Dr. John B. Thomas
Dr. Yang Wang

To promote the following men from Assistant Residents to Residents in Medicine, beginning July 1:

Dr. James B. Field
Dr. John H. Knowles

To continue the appointment of:

Dr. Robert M. O'Neal as Clinical Fellow in Pathology for one year, beginning July 1.

To appoint:

Dr. Morris E. Chafetz as Clinical and Research Fellow in Psychiatry;
Dr. N. Joel Ehrenkranz as Resident in Medicine for one year, beginning July 1;
Dr. Jonathan B. Gill as Clinical Assistant in Psychiatry, effective as of January 14;
Dr. Thomas H. Gilmore as Clinical Fellow in Psychiatry, for six months, beginning January 1;
Dr. Alfred E. King as Graduate Student Assistant in Surgery, for the period January 1 through March 5;
Dr. William R. Owen as Clinical Fellow in Medicine, for six months, beginning January 1;
Dr. William M. Tait as Clinical Fellow in Radiology, beginning July 1;
Dr. Chiu-chen Wang as Clinical Fellow in Radiology, beginning January 1.

In order that all Hospital personnel, professional and otherwise, may be informed of a certain procedure in effect here at M.G.H., we are including a copy of a letter sent out recently by Dr. Clark to all Department Heads. The letter reads:

> One of the duties of our archivist is to keep a record of the location in the Hospital of every item of historical significance concerning the Massachusetts General. Instances of the removal of items, with no notifications having been sent to the archivist, have resulted in most embarrassing situations, particularly when visitors from afar have come to the Hospital to see our collections. As an illustration: a portrait that had been hanging for years in the Medical Staff Room was found (quite by accident) to be missing, and much time was needlessly consumed before its new location was discovered—out at McLean Hospital.
>
> In order that our records mav be complete and correct, whenever an item is 1) added to our collection, 2) withdrawn from our possessions, or 3) moved to another location within the Hospital, notification of such procedure should immediately be sent by the person responsible for the addition, withdrawal, or change of location of the item, to Cora F. Holbrook, Archivist.
>
> I urge your cooperation in this matter.
>
> (Signed) Dean A. Clark, M.D.,
> *General Director*

* * *

New addresses:—

Dr. Richard T. Barton (*Otolar.* 1945), 9754 Wilshire Blvd., Beverly Hills, Calif.
Dr. Joseph L. Braudo (a.r.p. *C.M.* 1953), Department of Cardiology, Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. John F. Bresnahan (a. dir. 1918), 4670 Pine St., Omaha, Nebr.
Dr. Harrie R. Chamberlin (*C.M.* 1949), Department of Pediatrics, University of North Carolina School of Medicine, Chapel Hill, N. C.
Dr. Charles P. Gore (a.r.p. *Psychiat.* 1952), 1 Grosvenor Court, Grosvenor Hill, Wimbledon, London S.W. 19, England.
Dr. Edwin C. Hoodless (a.r.s. *Or.* 1952), St. Joseph's Hospital, Victoria, British Columbia, Canada.
Dr. Fred H. Howard (*C.M.* 1949), Department of Pediatrics, Tulane University School of Medicine, New Orleans, La.
Dr. William J. Kerr (*W.M.* 1916), Box B, Blue Lake, Humbolt County, Calif.
Dr. Sergio A. Leiseca (gr. stud. a. *S.* 1952), 29 Alpine St., Cambridge, Mass.
Dr. H. Eugene Patterson (a.r.p. *C.M.* 1952), 1111 W. Yakima Ave., Yakima, Wash.
Dr. Walter A. Reif (fel. *An.* 1952), 11 Hoeheweg, Bern, Switzerland.
Dr. Horace P. Stevens (*W.S.* 1907), 985 Memorial Drive, Cambridge, Mass.
Dr. Laurence D. Trevett (a.r.p. 1933 & r.p. *N.* 1934), 274 Commonwealth Ave., Boston, Mass.

Brief bits:—

Dr. Joseph C. Aub and Dr. John E. Gordon, both of our Staff, are members of an international team of 15 leading medical men sent on a teaching mission to India. The mission is sponsored jointly by the United Nations World Health Organization and the Unitarian Service Committee.

Dr. Benjamin Castleman, Acting Chief of Pathology at M.G.H., is going to Guatemala in March and to England in August. We hope to have details concerning these trips later.

Dr. Earle M. Chapman, Associate Physician at the Hospital, went to Steubenville, Ohio, on February 10, to deliver a lecture on "Industrial diseases as seen by an internist".

Dr. Fletcher H. Colby, Chief of our Urology Service, was elected Secretary and Treasurer of the Clinical Society of Genito-Urinary Surgeons, at their annual meeting, held in Rochester, N. Y., in February.

Dr. John F. Gibbons, Assistant Radiologist on our Staff, has been appointed as diplomate of the American Board of Radiology.

Dr. Benson B. Roe (*W.S.* 1943) announces the removal of his office to 384 Post St., San Francisco 8, California, for the practice of general surgery and thoracic surgery.

Dr. William H. Snyder, Jr. (*W.S.* 1933) writes briefly, in the second response we have received to our "singleton" letters, that he has been in the practice of surgery in Hollywood since leaving the General. He sends best wishes to all his friends.

From the office of Dr. James C. White, Chief of our Neurosurgery Service, come two items of interest: The Decima Asamblea Nacional de Cirujanos, in Mexico City last November, conferred upon Dr. White a diploma "por su meritorio trabajo y labor docente Internacional en el campo de las Ciencias Neurológicas"; a Spanish translation of *The autonomic nervous system,* by Drs. White, Smithwick, and Simeone, is being published by Artecnica of Buenos Aires.

* * *

THYROID CLINIC AFFAIRS

The year 1953 marks the 40th anniversary of the Thyroid Clinic at the Hospital. A study of respiration was begun by Dr. James Howard Means in 1913, in a triangular room below the present Out-Patient Amphitheatre. The orientation of Dr. Means and his colleagues in those early days quite naturally turned toward the thyroid because of the dominant role of that gland in controlling respiratory processes. Actually, it was 7 years later that regular weekly meetings of the workers in the clinic were held for the assessment of patients and the discussion of their specific endocrine problems.

From its beginning until the present, the Thyroid Clinic has performed a dual role within the Hospital. On the one hand it has helped in the care of patients and on the other it has attempted through clinical and laboratory investigations to explore the physiology of the thyroid gland and its role in the economy of the body and in disease states. As the years have passed, more and more emphasis has been placed on laboratory studies, but one should hasten to add that the end in view has always been the care of the patient. For example, in 1939 there began under the direction of Dr. Saul Hertz studies of the physiology of the thyroid gland as measured by the use of radioactive iodide. At its inception this study was done entirely on experimental animals, but by 1942 sufficient information had been accumulated to warrant the use of radioactive iodide as a therapeutic agent in the treatment of Graves's disease. Since that time, patients all over the world have had the benefit of this form of treatment, and in addition diagnostic tests employing radioiodide have been developed.

Each morning, in the Metabolism Laboratory on the first floor of the Bulfinch Building, determinations are made of the basal metabolic rate. After the patient has rested for a half-hour or longer, the rate at which he consumes oxygen is measured, and subsequent to this he sees one of the research fellows or visiting physicians for appraisal in the light of the available clinical and laboratory data. At this time appropriate treatment may be prescribed, or further laboratory studies may be ordered. If the patient presents a particularly difficult problem in diagnosis or management, he may be asked to return either on Tuesday afternoon at 2 o'clock or Wednesday morning at 11 when the various members of the Hospital staff who are interested in thyroid disease meet together. In this way, the patient derives the benefit of the combined opinions of several physicians and several surgeons. In addition, these clinic meetings serve as teaching exercises for students, house staff, and visitors.

The Thyroid Laboratory occupies a large part of the east end of the Bulfinch basement. In addition to its research facilities, it is equipped to measure the protein bound iodine of the blood and to determine the utilization of radioactive iodine by patients. These two measurements, coupled with the basal metabolic rate, usually enable the clinician to make a satisfactory estimate of the metabolic status of the patient and to assess the function of his thyroid gland.

One of the principal projects of the Thyroid Clinic over the years has been a study of the effectiveness of radioactive iodide in the treatment of Graves's disease and of the physiological consequences of radioactive iodine therapy. Over the course of 10 years the clinic has treated approximately 500 patients. Radioiodide has been established as an effective agent for the treatment of this disorder. Almost all of these patients are still under periodic observation. This group is the largest and most carefully studied of any in existence.

In addition to Graves's disease, radioactive iodide is sometimes of benefit in the treatment of carcinoma of the thyroid.

For a number of years the investigators in the Thyroid Clinic have been interested in thyroid cancer and in devising ways and means of improving the treatment of this disease. This has been a combined project of the physicians who have explored the value of radioactive iodide, and of the surgeons who have aided by obtaining biopsy material and in carrying out the necessary surgical procedures for the extirpation of the tumors. In addition, many patients with carcinoma of the thyroid have graciously lent themselves for extensive investigations on Ward 4, wherein observations have been made of the metabolic fate of radioactive iodide and of the effects of large doses of radioactive iodide on the patient as a whole, on his tumor, and on his bone marrow.

The activities of the Thyroid Clinic have not been confined to studies on man. The laboratory has been concerned with certain chemical studies on thyroid tissue, on the production of cancer of the thyroid by various agents, and on the effects of radiation on thyroid tissue. Each investigator in the clinic has his own laboratory project. The problems of the laboratory are so closely related to the problems of the patient as to make them inseparable.

The remarkable growth of medical physics, particularly as related to radioactive isotopes, has inevitably meant that the Thyroid Clinic, through its use of isotopic iodine, has required the close cooperation of the physicist. Three years ago Dr. Gordon Brownell joined the Thyroid Clinic and subsequently established his own Department of Physics in the Research Building. Since that time a productive and warm relationship has existed between Dr. Brownell and the Thyroid Clinic.

The clinic is very proud of its close association with other thyroid clinics and laboratories. Since 1942 there has been close cooperation and friendly interchange of information between our group and that under the direction of Dr. Samuel Haines, an MGH graduate (*W.M.* 1921), at the Mayo Clinic. Over the years our clinic has also enjoyed a cordial relationship with the important groups in London, especially those of Sir Charles Harington at Mill Hill, Dr. Selwyn Taylor of the Hammersmith Hospital, and Dr. E. E. Pochin of the University College Hospital. Drs. Means and Lerman of this clinic and Sir Charles have had a joint project on chemical analogues of thyroxin in progress for twenty years. More recently there have been cooperative enterprises with the clinic of Dr. Richard Goldsmith in Cincinnati, and for the past two years the Thyroid Clinic has enjoyed a most happy and cordial kinship with the Instituto del Bocio at the University of Cuyo, Mendoza, Argentina. Perhaps our most important and productive association has been with Professor Robley Evans and the Department of Physics at the Massachusetts Institute of Technology.

The clinic is also proud of the many friendships it has established with physicians and investigators from many parts of the world who have visited with us from time to time. Over the years we have had innumerable happy opportunities to exchange information with visitors from nearly every country of Europe and Central and South America, and on occasion with friends from Africa and the Far East. The education which the Thyroid Clinic has derived from these visitors is immense. For an example, it was one such visitor who provided the spark which led to an expedition from the Thyroid Clinic to the Argentine Andes in 1951, for the study of endemic goiter.

The exciting thing about the thyroid gland is that, in spite of 40 years of active investigation and research, many baffling problems still beg for attention. For instance, the cause of Graves's disease is as illusive as ever. The treatment of Graves's disease is good, but by no means perfect. We still have much to learn of the nature of goiter, and especially of the benign and malignant tumors of the thyroid gland and of their treatment. No one even knows to this day why goiter exists in areas of iodide abundance, such as the Eastern Seaboard of the United States, nor does one know why an occasional patient with Graves's disease suddenly develops a rapid progressive protrusion of his eyes which may be so severe as to lead to permanent impairment of vision. These problems and many others occupy us now and will continue to occupy us in the years to come.

John B. Stanbury, M.D.,
Assistant Physician
and *Head of Thyroid Clinic*

BIOGLET

Dr. Edward Dunn, Assistant Resident in Surgery—born in Englewood, New Jersey, February 4, 1925; New York University; U. S. Army: 98th Field Hospital, Pacific Theatre, 1943-46; M.D., Syracuse University, 1951; Intern in Surgery, Presbyterian Hospital, New York City, 1951-52; home: Englewood, New Jersey.

I think there is such a thing as a "surgical instinct" and that it comes from the effect of the wonderfully evolved human hand upon the brain, or vice versa. "Surgeon", after all, is a corruption of "chirurgeon" (Greek — cheirourgos) — or handicrafter—he is the doctor who treats disease by manipulation. Manipulation, of course, is primitive, and even when the hand is separated from the diseased object by the length of an instrument, it represents a shorter nervous circuit than the one which leads to the gathering and administration of herbs and simples, or to the propitiation of offended deity. When a man is transfixed by an arrow, for example, the need to remove it is obvious and the technique of doing it is learned by trial and error —with the hands. It takes more subtlety and more education to see how a diseased part is benefited by potions or penicillin administered remote from the site of injury—and still more to understand the mysterious workings of sacrifice and prayer. The activities of sorcerer and priest thus represent something higher in the evolutionary scale, and closer to that pure *a priori* reasoning power, uncontaminated by manipulative experiment, which philosophers would have us believe is man's greatest distinction and highest glory.

While the surgeon, then, goes back in evolution to an instinct—the monkey picking the head of the other monkey, the child taking his doll apart—the physician, evolved from sorcerer and priest, stands at the end of a long religious and scientific historical development whose most primitive sources are already complex.

It seems unfair, accordingly—and certainly ironical—that the surgeon, a relatively ignorant fellow, monkeying with disease because he just can't keep his hands off it, should have had so much success in treating this enormously complex, delicate, and subtle body of ours. He has gone on from removing the arrow to excising the diseased organ or tissue; to playing plumber and electrician rearranging the body's system of pipes, tanks, and wires; and finally to trespassing on the physicians' domain by pruning the overactive tissues that produce the excessive humors responsible for systemic disease. A lot of his success has probably been viewed by contemporary physicians as like that of a small boy making a recalcitrant slot machine work by kicking it.

One hundred years of success has made the surgeon a vain fellow, his vanity only made worse insofar as he has been aware of the physicians' feeling that more luck than cleverness has made him successful. With his robes, his ritual, and the histrionics of his operating theatre he seems to seek to impress the awed spectator that this is no mere handicraft, but a difficult, elaborate, and sacred art, teachable only to the elect, and then only at the cost of long watching, fasting, and prayer. How splendid for him if the ritual grows more elaborate: the audience, with the advent of color television, larger and further removed from the all-too-human aspects of the sacrificial scene; the training longer, costlier, and more ascetic; and the elect pinnacled on a taller and more multiply-layered hierarchic pyramid.

But this is not splendid enough, and another revolution—of vanity, perhaps—prevents this flowering of baroque art from occurring—vanity, because by that road the surgeon sees himself becoming merely a useful, but dangerous and temperamental, demiurge in the keep of the sorcerer-physician. Furthermore, the rites without novelty are not spectacular; the established procedures to some degree grow simpler rather than more complicated; and new things now come more from science than from art and empiricism.

Led only by the primordial manipulative instinct, the proud dream of the barber surgeon, struggling in the hard school of experience, could become, in turn, the vainglory of an impressive priestcraft, and then the vanity of a highly-paid technician. But something in the tradition of the whole healing art reaches out to prevent this from happening.

A specialty can be viewed narrowly or it can be seen as part of the whole social fabric. Cicero, trying to outline what the ideal orator should be like, found it necessary to bring in broader and broader human attributes and concluded that the perfect orator should be the perfect man. There is something grandiose and imperialistic in assigning so large a role to the orator; but it is also inevitable, so long as specialists are men, that the perfect specialist must be the perfect man. Similarly, the surgeon, as he tries to absorb physician and scientist into his being, becomes more human. Paradoxically, it may be an act of vanity for a man to seek a role larger than himself, but the result is humbling to the man. Furthermore, by maintaining science and medicine in its scope, surgery accepts two strongly developed and specifically humbling traditions—the scientists' acceptance of fact, and the physicians' ideal of service to mankind.

Recognizing the impulsions toward narrowness and vanity which, one would think, are almost intrinsic to the specialty of surgery, the tradition of the Massachusetts General Hospital has long been that the surgeon should be humble, and that he should be broad in his sympathies and interests.

I am smug and provincial enough to believe that that tradition has met with striking success. Ask yourself if you find enough stimulation to work and learn here, and then whether you are comfortable here—and if the answer to both questions is in the affirmative, I am right.

Dr. Beecher, particularly at the end of a long and fussy operation, likes to ask the rhetorical question, "Are surgeons people?" My considered answer to that, in terms of the M.G.H. would be—"Yes, only somewhat larger than life-size."

Vanity, you see, is almost inevitable.

George S. Richardson, M.D.,
Assistant Resident in Surgery

* * *

HAPPY BIRTHDAY—GENERAL STORE

After some months of consideration and investigation of previously established shops in other hospitals, the Ladies' Visiting Committee received permission from the Trustees on December 13, 1940 to establish the General Store in the then recently-abandoned cashier's quarters in the Moseley Building; and with the loan of the Katheryn Hoyt Watson Fund, which was a $1000 unrestricted legacy to the Ladies' Visiting Committee, stock was purchased and the doors were opened on March 5, 1941.

The Store was established and has since been maintained to meet, primarily, the needs of the MGH family; and Mrs. Crouch, the first director, quickly established so warm a relationship with this group that on the first birthday a cake was received from an appreciative lay patron, a singing telegram from a group of doctors, and a poem from "the boys down under", i.e., the boiler room employees. With Mrs. Crouch at the start, and Mrs. Burnell and Mrs. Warton for the last ten years, the Committee feels that this close and happy relationship with the Hospital has been preserved.

The Store was a financial success from the start, stock gradually being built up in response to the special demands of its customers, and by the end of 1943 it had paid back the $1000 loan and had turned over $1000 more to be spent by the Ladies' Visiting Committee in various ways for the benefit of the Hospital and its patients. For the first few years profits were allowed to accumulate, to establish a nest egg for possible future developments, and in 1951 $8000 was sent to the Treasurer of the M.G.H. to be invested, its interest to be added to the capital, until it might be needed by the Store. The average net gain for the 11 years is approximately $4000 per year, from which $27,000 has been turned over to the Ladies' Visiting Committee. These funds are used by that Committee as its "General Fund", covering many needs and helping support many pioneer activities in the Hospital. This yearly income has freed the members of the Committee from individual financial responsibility in supporting their program, so that visiting the sick and rendering various other services to the Hospital are all that is now required from its members.

In looking back over the Store's monthly reports to the Ladies' Visiting Committee, we live again the days of war shortages. By May 1943, candy, chewing gum, and stockings were all "short", and when we got in a supply, days were hectic! Names were entered on a waiting list, and when a shipment of stockings came in, in December, 104 pairs were sold in a week—every one of which had to be separately measured. When cigarettes came in, they were divided into three lots so that people on duty on different days might have a chance at them; and when they were put on sale they went out as fast as change could be made. The Store did all it could to keep distribution fair; and by October 1947 a note in the minutes of the Committee reads, "Rayon stockings are now in plentiful supply."

Little change has been made in the physical set-up of the Store, though a washbasin was installed in the stock closet in 1949—much needed where so many greeting cards must be handled, and the collapsible doors were added in 1951, behind which the racks can be locked up when the Store is closed. No extra space has been officially added to the original, but the racks have increased and have grown out into the corridor to a healthy degree!

Following out its main purpose of serving the Hospital as best it could, cigarette machines from which the Store gets the return were installed in four places in the Hospital. However, our profits from these machines are only one-half of that made "over the counter", the buyer pays 1¢ more per pack, and the chance of our making a secondary sale is lost whenever the machines are used. A postage stamp machine and two Coca-Cola machines also "work" for the Store. In 1952 the proceeds of the latter were turned over to the MGH Staff Wives Hospital Committee to cover the expenses of entertaining doctors here from other countries.

In 1947 the experiment of having a cart with limited supplies visit the wards was tried and given up, but in 1952 this project was revived and is now a successful and expanding adjunct to the Store.

An $80 day brought great cheer at the start, but now there are many days with receipts of over $200. The record for a single day—$451.00—was reached in Christmas week of 1949. Something like 48,000 greeting cards were sold last year—an indication of the volume of just one of many items.

Mrs. Burnell and Mrs. Warton have earned the gratitude of everyone for their cheerful and tireless efforts to keep the stock up and in order, as well as to wait upon the loyal patrons, to whom our thanks is justly due.

In the years ahead, it is our hope to fill the needs of our customers, so that they, in turn, by their patronage may help to fill other needs in the Hospital.

Helen R. Gray,
Treasurer of the General Store

[Encomiums to the General Store staff from all of us at M.G.H. for a grand job well done, and best wishes for many happy returns of your birthday.—*Editor*]

VOLUNTEER GROUPS

LADIES' VISITING COMMITTEE
MASSACHUSETTS EYE & EAR INFIRMARY

The Annual Meeting of our Committee was held on January 14. The following officers were elected:

Mrs. V. H. Kazanjian, Chairman
Mrs. F. T. Hunter, Vice-Chairman

Our Annual Rummage Sale will be held at Horticultural Hall on April 14. Rummage of any kind is urgently needed—bric-a-brac, china, glass, clothes, household utensils, etc. Rummage will be gladly received at any time at the Nurses' Home, 14 Embankment Road.

As this is our main source of revenue, we shall be very grateful for any contributions.

BOARD OF MANAGERS
VINCENT MEMORIAL HOSPITAL

The Board of Managers of the Vincent Memorial Hospital has been meeting regularly on the second Thursday of every month. As usual, the reports from the monthly visitor and the nursing supervisor were discussed. The members of the Board were especially interested in the informal report given them at their January meeting by Miss Constance McGrath, the Vincent's Medical Social Worker. It was pleasant, too, to join with the members of the Massachusetts General Hospital Ladies' Visiting Committee at luncheon.

Several members of the Board, as well as Miss Carlisle and Miss Corkum, served as sight-seeing guides for the new members of the Vincent Club when they visited the Hospital before embarking on their Provisional project of securing advertisements for the annual Vincent Show Program.

The Board of Managers of the Vincent regret the loss of Miss Adele Corkum, and hope she will find her back-to-school work interesting and rewarding.

LADIES' COMMITTEE
BAY STATE MEDICAL REHABILITATION CLINIC

I wonder if you know about the Bay State Medical Rehabilitation Clinic, where civilian teen-agers and adults who have been handicapped by accident and disease are taught how to use what they have left and therefore become useful to themselves and to others. This Clinic, located on the grounds of the Massachusetts General Hospital but completely independent of it, was started less than two years ago under the guidance of Dr. Augustus Thorndike, President of the Corporation, and Dr. Arthur L. Watkins, Medical Director. This Rehabilitation Clinic serves all handicapped patients, wherever they may reside, if they have been referred by a physician, clinic, or hospital. The Clinic has had patients from all over New England and from a number of other States in this country. Also, patients have been admitted from Panama, Mexico, and South America. The United Mine Workers of America, Welfare and Retirement Fund, always has eight patients for rehabilitation services at the Clinic under their sponsorship. An average of 25 patients a day are brought here either by car, taxi, or public transportation; or, if hospitalized, by wheel chair from one of the buildings of the Massachusetts General Hospital.

At the Bay State Medical Rehabilitation Clinic, under the guidance of the medical director, a team made up of social workers, physical therapists, occupational therapists, and volunteers, work with the patient to help him carry out the specialized treatment and training, planned by the physician, that will enable him to regain a maximum use of himself as an individual. Instead of sitting in a wheel chair at home or being waited upon by his family, the handicapped individual goes to the Rehabilitation Clinic and gradually adds to the list of things he can do for himself, thereby adding to his mental health and happiness. Many people know that physical therapists teach the handicapped such things as how to walk with braces or with an artificial leg, how to get in and out of a chair, and how to climb a stairway that has a railing. But quite a few individuals do not seem to realize that occupational therapy is not just "busy work", but is, rather, an interesting method of exercising the muscles to increase motion in an arm or shoulder. Instead of using calisthenics, the handicapped person performs purposeful activities, such as carpentry, weaving, printing, typing. The occupational therapist also instructs the patient in ways to dress, eat, and keep house for herself, for the Clinic has a complete kitchen—a retraining center for the handicapped housewife.

And where does the Volunteer Service fit into this medical rehabilitation picture? The Volunteer Service is in operation at the Bay State Medical Rehabilitation Clinic five days a week—individual volunteers being scheduled for one half-day a week. Volunteers push wheel chairs from the Massachusetts General Hospital buildings to the Clinic, prepare morning coffee for patients and staff, do errands for the physical therapists, assist the occupational therapists, and sometimes go shopping for special supplies they may need. Volunteers add the human touch to the Clinic by helping both the patients and the staff.

The Ladies' Committee of the Clinic is ever searching for volunteers who have willing heads and hearts and hands. The Committee's functions are threefold: to find volunteers to actually help at the Clinic; to give publicity to the medical rehabilitation service rendered at the Clinic; and to raise funds to cover the cost of extras, such as furnishings, equipment, parties, taxi transportation for the needy, and recreation for the hospitalized patients. The handicapped patients who are hospitalized because they are at present helpless crave to be a part of the outside world. Viewing television is one way to make him feel he is in touch with the outside. The Ladies' Committee was given a television set for the Clinic, and evening volunteers wheel handicapped patients from the Hospital to the Clinic for television evenings on Mondays and Wednesdays. It was the Ladies' Committee which saw to it that the Clinic building was attractively decorated, and by securing donations of furniture from interested friends the Clinic has assumed a homelike atmosphere. It is the Ladies' Committee that arranges for morning coffees in various communities around Boston, to raise funds for Clinic needs.

The Bay State Society for the Crippled and Handicapped, the Easter Seal Society, gives financial support to the Bay State Medical Rehabilitation Clinic. The Eighth Annual Report of the Easter Seal Society says, "An enviable record of service was achieved by the Bay State Medical Rehabilitation Clinic which is supported by Easter Seal funds. For the fifteen months of operation ending September 1, 1952 the center admitted 276 patients for specialized treatment and training. Concerned with helping physically handicapped adults return to useful living, it has, during that same period, discharged 223 of its patients. Of that number, 48 have been restored to gainful employment, three-quarters of these to their former employers. Fifteen housewives were restored to homemaking and 18 patients were made more self-independent at home. Another 68 patients were helped and then referred to other agencies to complete treatment or for vocational training."

Thank you for telling others about the Bay State Medical Rehabilitation Clinic and its service to adults who have been handicapped by accident or disease.

Harriet F. Griswold,
Chairman, Ladies' Committee of the
Bay State Medical Rehabilitation Clinic

DISTAFF CLUB

The Distaff Club held its monthly meeting on January 22 and elected new officers for the coming year. They are:

President	Mrs. Thomas Peebles
Vice-President	Mrs. Richard Kleaveland
Secretary	Mrs. Charles Huggins
Treasurer	Mrs. John Binion
Housing	Mrs. Jack Tetirick

Those members who have just successfully completed their year as officers are:

President	Mrs. Stuart Ragland
Vice-President	Mrs. Wilbur Thomas
Secretary	Mrs. John Burke
Treasurer	Mrs. John Freymann
Housing	Mrs. Rhett Talbert

In the coming year we hope to have new projects which will encourage a larger attendance at all meetings. This is the one opportunity for the wives of the house staff to meet each other, and our goal is to build an active organization. We started the year successfully with a record dance in the Penthouse on February 14. Notices of all coming events and meetings will be posted on the new Distaff Club bulletin board in the Brick Corridor. We hope the husbands will relay any news to their wives.

The new officers are looking forward to working with all of you.

MASSACHUSETTS GENERAL HOSPITAL
VOLUNTEER SERVICE DEPARTMENT

The Boston Metropolitan Chapter of the American National Red Cross has appointed Mrs. John O. Wilson of Lincoln as Chairman of day Nurses' Aides at the Massachusetts General Hospital. Mrs. Wilson has been a volunteer here for over ten years, and at present assists in the Tumor Clinic every Monday.

As *day* Nurses' Aides are urgently needed in the Hospital, Mrs. Wilson suggests that all who are interested in this service should write for information and the date of the next course to

Boston Metropolitan Chapter
American National Red Cross
17 Gloucester Street
Boston, Massachusetts

mentioning that they have a special interest in serving at the Massachusetts General Hospital.

At the present time there are 72 volunteers who are Red Cross workers at the Massachusetts General, 26 Nurses' Aides, 4 Red Cross Arts and Skills workers, and 42 Gray Ladies.

More volunteers are always needed.

MASSACHUSETTS EYE & EAR INFIRMARY

The Ophthalmic Staff of the Infirmary has set up a fellowship in honor of Dr. Frederick H. Verhoeff, Consulting Chief of Ophthalmology. This new fellowship will come chiefly from a fund collected by the Staff. The income will be used for research and study at the Eye and Ear and will be administered by a committee composed of members of the Ophthalmological Department.

A Bronze Star with Combat V was awarded to Dr. William Montgomery, Resident in Otolaryngology, for service in Korea. The presentation was made on February 11. Dr. Montgomery, who served with the Marines as a battalion surgeon, received the medal for "heroic achievement under fire"—in this case, care of the wounded during an artillery barrage. Dr. Montgomery has also received the Purple Heart and a Commendation Pendant with Combat V.

Several Infirmary doctors took part in the New England Ophthalmological Society meeting, held at the Infirmary on February 18. Dr. Abraham Pollen and Miss Ann Stromberg, orthoptic technician, presented a discussion on "Practical orthoptics". Dr. Robert R. Trotter spoke on "An ophthalmic survey in the Ryukyu Islands". At the evening meeting, Dr. Albert E. Sloane gave "An initial report on school vision testing problems".

Dr. W. Morton Grant of the Howe Laboratory read a paper before the Ophthalmological Section of the Philadelphia College of Physicians on January 15. Dr. Grant's subject was "Various aspects of the study of glaucoma".

Miss Madeline Shipsey, Case Work Supervisor in the Department of Social Service, has been appointed as a special lecturer at the Simmons College School of Social Work. Miss Shipsey assists Miss Harriet Bartlett, Professor of Social Work, in conducting monthly workshop sessions for the field work supervisors, who are in charge of the hospital field work of Simmons students.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column.

The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staffs, so that our readers may keep up to date on *current* Massachusetts General and Eye and Ear literature. *This purpose has been destroyed when authors or departments have postponed for several months the reporting of such titles.* In a few instances these reports have been withheld until after the close of a calendar year, and then lists of all titles which appeared during the previous twelve months have been submitted—too late to appear in our month-by-month listing.

Our aim still is to make it possible for our readers to find in our publications column, conveniently arranged under subjects, *all* titles of *current* material emanating from our two hospitals. *That aim can become a reality only through your cooperation.* Therefore, we repeat our monthly plea that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address. Your title should be classified with respect to subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Surgery

Churchill, E. D.
The architectural basis of pulmonary ventilation.
Ann. Surg. 137:1-11.

Neurology, Neurosurgery, and Psychiatry

Ballantine, H. T., Jr., and White, J. C.
Brain abscess: Influence of the antibiotics on therapy and mortality.
New England J. Med. 248:14-19.

Orthopedic Surgery

Barr, J. S., and Record, E. E.
Arthrodesis of the ankle joint: Indications, operative technic and clinical experience.
New England J. Med. 248:53-56.

Sterility

Simmons, F. A.
Correlation of testicular biopsy material with semen analysis in male infertility.
Ann. New York Acad. Sciences 55:643-656.

Simmons, F. A.
Robert Latou Dickinson: An appreciation.
Fertil. & Steril. 4:1-9.

News concerning Dr. John B. Kinmonth has reached us through Dr. John P. Monks, Assistant Physician on our Staff. A note from Dr. Monks reads:

> On a recent very brief and flying trip to Europe I saw Dr. and Mrs. John Kinmonth. He was a Fellow in Surgery at M.G.H. three years ago. He and his wife are close friends of mine—indeed, my wife is their eldest's godmother. Ralph is now 3½, and is as handsome a child as comes. His younger brother bears the good Scotch-Irish name of Fergus.
>
> John, as I understand it, is now second in the chain of surgical command at Bart's (St. Bartholomew's Hospital) in London. He does general surgery, but still has time for his special field of interest of relieving arterial spasm caused by wounds. He said that Dr. Simeone (*W.S.* 1936) wrote him recently that three cases in Korea had been successfully treated according to John's ideas. He also has started acting as an examiner in surgery for the medical students' final hurdles.
>
> He looked very fit, and recalled with pleasure his days at M.G.H.

A most interesting letter has come from Dr. Arthur C. Guyton (*W.S.* 1943). His was the first response we have had to letters we are sending out to all MGH "singletons"—those MGHers who have the distinction of being the one and only alumnus of Massachusetts General in their particular countries, States, or cities. We have asked for information regarding their own activities and also for anything of particular interest in the "local color" category. It seems as if some engaging and significant replies should be forthcoming.

Dr. Guyton writes:

> I was very much pleased to receive your recent note requesting that I send you a letter for publication in The News. Recently, for other purposes, it was necessary that I get together a list of my activities and publications. Therefore, instead of attempting to rewrite this information I will simply send you a copy of the material which has already been gathered, and you may choose from it whatever you desire.
>
> It is surprising to me that I am the only alumnus of M.G.H. in Mississippi, and I hope this state of affairs may be remedied soon. As you possibly know, this State at present is undergoing a tremendous expansion in medical facilities, including the construction of an entirely new medical school at Jackson. The basic unit of this school is now being built at a cost of slightly over $9,000,000. In addition to this, several private hospitals to be operated in conjunction with the school are now under construction in the immediate vicinity of the basic unit. Therefore, we soon will have a medical center in Jackson which should attract many alumni from the M.G.H.
>
> My own position with the present smaller medical school located at Oxford, Mississippi, is Chairman of the Physiology and Biophysics Department. When the new plant in Jackson is completed, we will transfer our activities to this new locus, with the idea of expanding our department.
>
> The opportunities for medicine in Mississippi are tremendous. The number of patients per doctor in this State is approximately four times as great as the number of patients per doctor in the Boston area. It is very surprising to enter one of the smaller hospitals in this region and find therein a great variety of very serious diseases or surgical problems, many of which, I was taught in Boston, are relatively rare. Yet, despite the great amount of pathology to be found, there is still a great need for competent doctors to cope successfully with the problems.
>
> Geographically, the winters are very mild compared with those in New England, and the summer temperatures are not a great deal different. The long spring and fall months are particularly delightful, though I must say this is not entirely conducive to tedious indoor work.
>
> Those of us who have previously worked at the Massachusetts General Hospital always look back to it as a mecca of medical knowledge. Therefore, once again I want you to know how happy I am, always, to hear of the activities at the M.G.H. I also welcome this opportunity to give you a small insight into what we are doing in the State of Mississippi.

The enclosed data mentioned above

THE GENERAL STORE—CHRISTMAS WEEK, 1952

includes an amazing list of professional accomplishments and a broad range of outside interests, such as training in wood and metal work and in glass blowing; the procurement of both amateur and commercial radio licenses, and licenses for first-class radiotelephone and second-class radiotelegraph work; and electronic development work in medical research equipment. He has developed a special patient hoist for paralyzed individuals, an electrically guided and propelled wheel chair for one-finger operation which requires pressure of less than an ounce (now in commercial production), and an automatic knee locking brace for paralyzed legs (now in the process of further adaptation by the Mellon Institute for Industrial Development).

A picture of Dr. Guyton, taken in 1947 at Warm Springs, Georgia, while he was demonstrating the electric wheel chair he had invented, may be found in the February 1948 issue of THE NEWS. As most of you know, Dr. Guyton was stricken with polio in 1946, six months after he had returned to M.G.H. for his residency training which had been interrupted by two-years' service with the U. S. Navy.

Titles of 34 publications by Dr. Guyton (all of which have appeared since 1946, incidentally) show that his professional interests are not confined to polio alone. As he says in an article in the November 1952 issue of *Wellesley Alumnae Magazine,* which Dr. Castleman very kindly brought down to us:

> . . . I am also just as much interested in the other fields of medical research as in polio, if not more so. For instance, the challenge of heart disease—which has been my major interest for many years—is infinitely greater than is the challenge of polio, for heart disease is equally crippling and far more prevalent than is polio. Though the research that I have done on heart disease does not carry the same public interest as does the development of eye-catching gadgets, I am more than sure that the value of the work from our cardiac laboratory is vastly more important medically than anything I have done or ever will do concerning polio. . . .

The list of Dr. Guyton's publications is posted on the bulletin board near the foot of Treadwell stairs for all those who are interested.

We hope Dr. Guyton will not object to our remembering, in print, the splendid adjustment he made when he found his chosen field of surgery closed to him. Because of this and the many honors that have been conferred upon him since his graduation from both high school and university with the highest scholastic average in his class, it is easy to understand why he was chosen by the United States Junior Chamber of Commerce as one of the Ten Outstanding Young Men of America for 1951.

A letter from Lt. James M. Davis, MC, USAR (*S.* 1948), written in Japan last January, contains news about several MGH-ers in military service over there. His letter reads:

> The MGH NEWS has been forwarded regularly by my wife and is enjoyed more than ever.
>
> Thought I'd write to let you know what the MGH people in this area are up to. I've been lucky enough to see quite a few of them in the past few months. Within a week of the time I arrived in Japan I ran into Austin Vickery and Bob Scully who, as you know, are assigned to the 406th General Medical Laboratory here in Tokyo. I was assigned to a hospital a few miles from Yokohama. After being there only six weeks I returned to the States for Part I Surgical Board examinations, and was lucky enough to get back to Jacksonville just two days after our third child, Katherine Walker, was born.
>
> On my return to Japan I was assigned to Tokyo Army Hospital, and soon found that Harry Makel is the Chief of Anesthesia and John Duggan is on the Pediatric Service. John and Kae will soon be leaving for the States for him to take his boards.
>
> Christmas day was happily spent with John Littlefield and Bob Hopkins at the home of Olivia and Jim Lefevre in Yokohama. (Olivia Swain, formerly, who worked in Dr. Francis D. Moore's lab at the M.G.H.) Bob and John are on a hospital ship which was in dry dock during the holidays.
>
> Roger Wilcox was recently in Tokyo on leave from Korea, but I didn't have a chance to see him. He hopes to head home in the next month or so.
>
> I believe it would be best for you to continue sending THE NEWS to my Jacksonville address, as I'm not at all sure how permanent my stay here will be.
>
> My best to all at the M.G.H.

We are always particularly pleased to receive letters from those who have been here at M.G.H. on fellowships. This letter, enclosed with his subscription to THE NEWS, came from Capt. Joseph E. Levinson, MC, USAR (clin. & res. fel. *M.* 1952).

> Since leaving the M.G.H. last June I have wandered about some of the arthritis clinics in Scotland and England, relaxed in Paris, begun and ended a private practice in internal medicine and a teaching affiliation with the Medical College in Cincinnati, and am about to embark on a recall to active duty as a Captain with the Army. I have been assigned to the Army and Navy Hospital in Hot Springs, Arkansas.
>
> There are many MGH alumni in Cincinnati. Among the more recent arrivals are Gordon Black (GU Surgery, 1950) and Richard Goldsmith (Thyroid Group, 1950).

This note was attached to a subscription card from Dr. Henry W. N. Bennett, Assistant to Dermatology from 1928 to 1936. His address is 1448 Elm Street, Manchester, New Hampshire.

> Not much to write about. Am in my 80th year. Most of my associates in Dermatology and South Medical have passed on. I still keep regular office hours, and am a consultant at two local hospitals. This will not be so much longer, I fear. Thrombosis of the central vein of the right retina and the beginning of glaucoma is the diagnosis of the eye men here.

This delightful letter came not long ago from Dr. Nils Bengt Skanse (res. fel. *M.* 1948).

> It is a great pleasure to receive THE NEWS. It is a big event each time it arrives, and I hasten to read it with the same enthusiasm as children show for comic strips and as I felt when I read *Barnaby* in Boston. I am surprised at the amount of interesting information you are able to collect for each issue.
>
> We are now living at Malmoe, Sweden. I work on the Medical Service of Malmoe General Hospital, which is part of the University of Lund.
>
> The highlight of last year was the visit of Dr. Means and his lovely family in July. Dr. Means was in very high spirits and just as enthusiastic and vigorous as ever, or perhaps even more so. One day we took a ride round the countryside to look at churches, old castles, and so on. Toward evening we passed an old tower, and we couldn't keep Dr. Means away from climbing all the stairs. The rest of us were too tired.
>
> I must tell you a little story for the MGH baseball fans. Last October I got a telephone call from Dr. Rulon Rawson in New York, who wanted some information. The telephone call came through just as we were listening to the final game of the world series. I was then able to tell Rulon the score after five innings of play, which he didn't know. Thus, this piece of information went from Ebbetts Field in Brooklyn to Malmoe, Sweden, and then back to New York. Quite an odd detour!
>
> If any people from the good old M.G.H. are ever here in Scandinavia, I hope they won't forget that M.G.H. has a metastasis in Malmoe, Sweden.
>
> My wife joins me in sending best wishes to you all.

THE NEWS

No. 122 Boston, Mass. April 1953

DENTAL SERVICE ACTIVITIES

In the reorganization of the Harvard School of Dental Medicine the clinical facilities of the Massachusetts General Hospital are used in the training of students and interns and also at the fellowship level. Key staff positions are held by appointees of both institutions. For investigative work, laboratory facilities of the Harvard School of Dental Medicine are available. Most of the laboratory studies being made are the result of clinical observations on patients at the Hospital.

Over a period of several years a study of salivary gland disease has been in progress. The observations were based upon the clinical, gross and microscopic findings. An attempt was made to evaluate sialography as a diagnostic aid. At the present time, over 400 patients with salivary gland disease have been studied and, as a result, the value of sialography has been established. In this large group of patients diseases of the salivary glands other than neoplasia and obstructions are recognized and have stimulated further research. In particular, patients may have painless swelling of the parotid gland, in which X-ray examination visualizes a cystic dilation of the duct radicles. Associated with these abnormalities is a marked increase in the viscosity of the saliva. This finding has stimulated studies on secretory control, variations in chemical and physical composition, and isolation of enzyme systems. Observations, so far, suggest many new concepts of salivary physiology.

In the consideration of any disease of the oral cavity, the local environmental factors are numerous and often difficult to isolate. Mucous membrane changes may be readily observed, but little understood. Studies made on excised mucosa from patients showing progression of changes, such as atrophy and leukoplakia, have revealed alterations in glycogen metabolism. The accessibility of the mucous membranes of the oral cavity has stimulated further study on mucous membrane physiology.

While much fundamental work is in progress in the laboratory, the Dental Clinic has its share of common complaints. The "canker" sore is now assuming the respected position as a subject for study. The causes of "canker" sores have been numerous. These have included allergy—bacterial, viral, and psychosomatic. Recently, serum complement fixation studies have been made, using herpes simplex antigen. This antigen is also used to skin-test individuals having recurrent "canker" sores. The results of this study reveal much information refuting the herpes simplex etiology.

Among other complex common complaints of patients in our Clinic is the unexplained pain along the distribution of the trigeminal nerve. At the present time every effort is being made to study this problem.

The above abbreviated description of some of our activities may suggest a revision of the meaning of the word "dental". We hope, however, that it means a more scientific approach to the study of diseases of the oral cavity.

David Weisberger, M.D., D.M.D.,
Chief of Dental Service

* * *

On Good Friday, April 3
there will be a short meditation service
in the Chapel
at one o'clock

* * *

On December 20, 1952, Dr. Edward D. Churchill, Chief of our Surgical Services, was made "Membre honoraire étranger" of La Société Belge de Chirurgie.

As we told you in our January issue, Dr. Stanley Cobb received the honorary degree of Doctor of Science during the opening ceremonies of the Psychiatric Institute of the University of Maryland, held in Baltimore last November. Since that notice appeared, we have secured a copy of the accompanying citation which was read by Dr. Jacob E. Finesinger, past Psychiatrist on our staff and now Professor of Psychiatry at the School of Medicine, University of Maryland. Our transcript of the citation reads:

> Dr. Stanley Cobb is the Bullard Professor of Neuropathology at the Harvard Medical School and Psychiatrist-in-Chief at the Massachusetts General Hospital. Dr. Cobb is one of the eminent neurologists and psychiatrists in this country. He graduated from the Harvard Medical School in 1910 and has spent most of his professional life at the Harvard Medical School. In 1928 he organized the Neurological Unit at the Boston City Hospital, which became an outstanding institution. He organized the first psychiatric department in a general hospital, at the Massachusetts General Hospital in 1934. He was among the first to recognize the importance of psychiatry in a general hospital and was a leader in recognizing the importance of psychoanalysis in psychiatry and medicine. His range of activities has been broad, and he is recognized in contemporary psychiatry as a scholar, investigator, and teacher. He has made contributions in the field of epilepsy, cerebral circulation, and psychosomatic medicine. He is the author of five volumes and is at present an editor of the *A.M.A. Archives of Neurology and Psychiatry*, the *American Journal of Psychiatry*, and *Psychosomatic Medicine*. His influence in the field has been great, and many of his students occupy leading positions in American neurology and psychiatry today.
>
> If I may add a personal word, Judge Cole, I have known Dr. Cobb well—and have worked with him for almost twenty years. To me, in addition to his other attainments, he is eminent in being a rare human being who has the unique faculty of finding and bringing out the best in those associated with him. It gives me great personal pleasure in presenting my former chief, my teacher, colleague, and friend, Stanley Cobb, for the honorary degree of Doctor of Science.

Dr. C. Guy Lane, past Chief of Dermatology at M.G.H. and now a member of our Board of Consultation, attended the 10th International Congress of Dermatology, held in London, England, last July. He was privileged to be presented to the Duke and Duchess of Gloucester, as the representative of the United States on the international committee which welcomed the Duke and Duchess to the Congress. Dr. Lane was also honored by being selected as one of the Honorary Vice-Presidents from this country to preside at the sessions of the Congress.

Dr. Lane also presided at the 11th annual meeting of the American Academy of Dermatology and Syphilology, held in Chicago on December 6-11. He turned over the gavel as President on the latter date to his successor, Dr. M. H. Ebert of Chicago.

The French Academie de Chirurgie has made Dr. James C. White, Chief of the ~~Neurology~~ Service at Massachusetts General, an "associé étranger".

* * *

Every subscriber to THE NEWS who contributes a donation over and above the subscription fee receives a note of appreciation from us. However, we wish to take this opportunity to express our thanks publicly to all our many contributors. As you may know, the small subscription fee does not cover the cost of production; therefore, we are most grateful for every supplementary donation.

During the year 1952, a total of $557.50 was received in addition to subscription fees—a very handsome amount, in our estimation!

* * *

MSCSN BALL

The Massachusetts State Council Student Nurses will hold a semiformal dance on April 16, from 8 to 12 P.M., at Longwood Towers in Brookline.

Music will be furnished by Russ Kelsey.

Price of tickets is $3.00 per couple, tax included.

Tickets are necessarily limited in number to 200—so first come, first served.

Tickets may be obtained from your own State Council representatives or from:

Miss Bonnie Gough—Massachusetts General Hospital

Mr. William Maurello—MGH Post Office Box 425

Miss Louise Jackson—Beth Israel Hospital

Miss Janet Spratt—Massachusetts Memorial Hospitals

Miss Marjorie Wheeler—Massachusetts Memorial Hospitals

Miss Barbara Gouthrie—Children's Medical Center

All student nurses are cordially invited.

The Board of Trustees, at their meetings on February 20 and March 6, voted:

To accept with regret the resignation of Dr. Nicholas M. Greene as Assistant Anesthetist, effective April 30;

To accept the resignation of Dr. Gustav G. Kaufmann from the position of Assistant in Medicine.

To appoint:

Dr. F. Dennette Adams to the Board of Consultation, as of July 1;

Dr. Ruth L. Cort as Out-Patient Resident on the Children's Medical Service for one year, beginning July 1;

Dr. James A. Flagg as Assistant Resident in Anesthesia, beginning January 1, 1954;

Dr. Thomas C. Hall as Assistant Resident in Medicine, beginning January 1, 1954;

Dr. John W. Hayden as Assistant Resident in Orthopedic Surgery for one year, beginning April 1, 1954;

Dr. Verner S. Johnson as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1954;

Dr. William L. Kermond as Assistant Resident in Orthopedic Surgery, beginning July 1;

Dr. Philip L. McCarthy as Assistant in Dermatology, effective as of February 1;

Dr. Richard V. Wilson as Assistant Radiologist, beginning July 1.

Officers elected at the Annual Meeting of the Corporation were the same as last year with the exception of Dr. Arthur W. Allen, who was appointed by the Governor as a Trustee, replacing Dr. Francis P. McCarthy—February 4, 1953.

A note from Dr. W. Franklin Wood's office informs us that on February 2 Dr. Frederick E. Whiskin resigned as Assistant Psychiatrist from the McLean Hospital Staff.

At their meetings held on February 11, 18, and 25, the General Executive Committee voted:

To reappoint:

Dr. Melvin L. Taymor as Clinical Assistant in Surgery, assigned to Gynecology.

To appoint:

Dr. Giok S. Ang as Graduate Student Assistant in Medicine, assigned to Cardiology, effective January 1;

Dr. George Eisenman as Research Fellow in Anesthesia, beginning June 1;

Dr. Hermes C. Grillo as First Assistant Resident in Surgery, beginning March 1;

Dr. Adolph L. Gundersen as Second Assistant Resident on the Surgical Service, beginning April 1;

Mr. Helmut Hilz as Research Fellow in Biochemistry, effective as of the day he reports for duty next fall;

Dr. Gerald A. Kerrigan as Clinical and Research Fellow on the Children's Medical Service, effective as of July 1, 1952;

Theodore O. Macklin, A.B. as Research Fellow in Psychology, effective as of February 25;

Dr. André J. V. Ostende as Graduate Student Assistant in Surgery, for a period of six months, beginning February 1;

Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine, effective as of January 1;

Dr. Mary L. Scholl as Research Fellow in Neurology, for a period of four months, beginning January 20.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column.

As we told you last month, the purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. We also repeat, again in italics: *This purpose has been defeated when authors or departments have postponed for several months the reporting of titles.* Therefore, we again make our monthly plea that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address. Your title should be classified with respect to subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

General Surgery

Cope, O., Nardi, G. L., Quijano, M., Rovit, R. L., Stanbury, J. B., and Wight, A.
Metabolic rate and thyroid function following acute thermal trauma in man.
Ann. Surg. 137:165-174.

Wight, A., Raker, J. W., Merrington, W. R., and Cope, O.
The ebb and flood of the eosinophils in the burned patient and their use in the clinical management.
Ann. Surg. 137:175-183.

Laboratory Science

Nardi, G. L.
The *in vivo* conversion of glycine to serine.
Science 117:160-161.

Otolaryngology

Kelemen, G.
Nonexperimental nasal and paranasal pathology in hereditarily obese mice.
A.M.A. Arch. Otolaryng. 57:143-151.

MASSACHUSETTS EYE & EAR INFIRMARY

Last month the Infirmary held open house for Fellows of the American College of Surgeons. On the mornings of March 2-5, the operating room galleries of both services were open to visitors. As the New England Otolaryngological Society's annual meeting had been planned in conjunction with the program of the College of Surgeons, visiting otolaryngologists could attend the regular clinical meeting of the Society, held in the Infirmary on Wednesday morning, March 4. The Ophthalmology Department arranged an exhibition of stereoscopic photographs taken by Dr. David D. Donaldson, showing diseases of the anterior segment of the eye. Informal discussions on retina detachment and tonography were presented on Tuesday and Wednesday mornings, respectively.

Infirmary staff members took part in the formal meetings of the College of Surgeons. At the Section on Ophthalmology, held on March 2, Dr. Virgil G. Casten spoke on "Strabismus: Current attitudes". Dr. Brendan D. Leahey read a paper on "Fixation of corneal grafts". Dr. Edwin B. Dunphy presided.

Dr. LeRoy A. Schall was the presiding officer for the March 4 meeting of the Section on Otolaryngology, held in joint session with the New England Otolaryngological Society. The afternoon was devoted to a panel discussion on "Traumatic injuries of the face", in which Dr. Varaztad H. Kazanjian and Dr. Edgar M. Holmes participated.

THE CARDIOVASCULAR RESEARCH LABORATORY

Heart disease is mankind's most successful enemy. More people die every year from maladies of the heart and blood vessels than from any other cause. Small wonder that the Massachusetts General Hospital, throughout the years, has devoted attention to the conquest of the diseases of this family. Although total victory is not yet in sight, many battles have been won. Among the most dramatic of the Hospital's contributions have been important advances in electrocardiography and in the surgery of the pericardium. Pioneer research on the importance of the sympathetic nervous system in cardiovascular disease was done here. Dr. Richard Cabot announced the theme about which all of this work has been woven when he drove home the prime importance of seeking out the causes of disease.

Two years ago the Trustees implemented a resolve of the Research Committee to add another string to its cardiovascular bow. The Cardiovascular Research Laboratory was set up in almost ideal quarters on the first floor of the Research Building. The Hospital's earlier attacks on heart disease had been from the standpoint of the physiologist and the clinician. This new front was to be biochemical. Although our Trustees are typical Boston business men, this action of theirs represented a gamble. Could study of the chemistry of cells unlock the mysteries of cardiovascular disease? We do not yet know, but in the following paragraphs is outlined the direction in which our efforts are leading us.

The pump of the cardiovascular system is the heart. If one wants to have a proper understanding of the working of this pump, one has to know something about its motor. This motor is heart muscle. Thus, it is natural that the Laboratory has taken an interest in the biochemistry of muscle in general, and of cardiac muscle in particular. In charge of this phase of the work is Dr. John Gergely, a physician who also holds a Ph.D. degree in physical chemistry. Dr. Gergely is admirably qualified for this task, having learned muscle biochemistry from the pre-eminent master in this field, Professor A. Szent-Gyorgyi.

Researches in the past decade have shown that the contractile matter of muscle consists of two proteins: myosin and actin. They combine to form actomyosin. The energy source for the muscle machine is a phosphorus-containing organic molecule, adenosine triphosphate—ATP for short. The energy of the foodstuffs is stored in this compound, which in turn reacts with the contractile proteins of muscle, enabling them to perform work.

A problem of interest in this field is the nature of the interaction between myosin and actin, and the events occurring when ATP reacts with actomyosin. This problem is studied in the Laboratory by means of light scattering, a method which is extremely useful for obtaining information about the size and shape of protein molecules.

As mentioned above, the transfer of energy to the muscle machine occurs during the combination of ATP with the contractile proteins. We are trying to find out what happens during this interaction by working with ATP radioactively labeled in either its carbon or phosphorus atoms.

Another problem under investigation is the structure of myosin and actin. Both proteins seem to be built up of smaller units. The study of the chemical groups involved in linking the subunits together is an important step in obtaining insight into the mechanism of muscle action.

The problems mentioned above are of general interest in muscle biochemistry. Current work in the Laboratory is also concerned with specific differences between cardiac and skeletal muscle. Research along this line is directed toward comparing the two types of muscle from the point of view of the combining ratio of myosin and actin, of molecular size and shape, and of enzymatic activities.

So much for the pump, and its motor, gears, and fuel. Now we must consider the pipes leading from it. These are of equal importance, because their narrowing and blockage can be disastrous. This is the disease known as arteriosclerosis, or, in more popular terms, "hardening of the arteries". Many organs of the body can be affected by this process. As their blood supply is reduced or cut off, their ability to carry out their normal function is lost. The most serious harm to the body results when the organ involved is a vital one, such as the brain or the heart itself. If a large artery to the brain becomes obstructed, paralysis of a part of the body is apt to follow. If an artery supplying blood to the heart muscle is blocked, coronary occlusion is said to have occurred, and the heart may no longer be able to carry on its job of pumping blood to the rest of the body.

What is the cause of these disasters? We are not sure whether the primary abnormality is in the wall of the artery or in the chemical composition of the blood. At least we do know from a descriptive standpoint approximately what happens. Early in the development of the lesions, fatty deposits appear just under the inner lining, or intima, of the vessel. These grow to form large, yellow plaques which protrude into the lumen of the vessel and narrow the passageway. Later, calcium may also deposit. These lesions are often the site of formation of blood clots, or thrombi, which completely block the artery. We do not know whether the initial deposition of fat in the arterial wall must be preceded by damage to that wall. There is evidence from some animal studies that such is the case. On the other hand, abnormal concentrations of fat in the blood, or abnormal combinations of fat and protein, may be capable of producing the damage. We have elected to direct our efforts first at the chemistry of the fats in the blood, partly because we think there is a good chance that these compounds are the primary offenders, and partly because they are amenable to study with the techniques now at our disposal.

Probably the most important compound in the fatty deposits in the arteries is cholesterol. Cholesterol is present in every cell in the body. Almost every cell is capable of making it. It is also present in a normal diet, the best source being egg yolk. Cholesterol is a normal constituent of the blood. Clinical studies have tended to show that persons with manifestations of arteriosclerosis have higher than normal blood cholesterol levels, on the average. The difference is not striking, and the degree of overlap between the groups is so great that in a particular individual a measurement of the blood cholesterol is of little or no value for estimation of the degree of arteriosclerosis present. Nevertheless, the relationship is real, as is evident from statistical analysis of well-controlled groups of patients studied by Gertler, Garn, and Lerman at this Hospital.

Further support for the notion that cholesterol is important in the production of arteriosclerosis is to be found in the observation that members of the animal kingdom other than man show little arteriosclerosis, and their blood cholesterol levels are relatively low. Arteriosclerosis may be produced in animals, however, by cholesterol feeding.

With all of these facts in mind, we decided to devote a large share of our time to the question of the nature of the mechanism which controls the concentration of cholesterol in the blood. Dr. Donald S. Fredrickson has occupied a key position in this phase of the work. As stated above, human beings eat cholesterol and they manufacture it. They also burn it and excrete it. In a complicated situation of this kind, often described as a "dynamic equilibrium", the interrelated processes can be studied effectively only with the aid of tracers. Consequently, much of our work has involved isotopic techniques. We are studying cholesterol synthesis from acetic acid labeled with radioactive carbon, and from water labeled with radioactive hydrogen. We are following cholesterol absorption, excretion, and oxidation with the aid of these same isotopes. Development of techniques for the preparation of radioactive compounds necessarily preceded biochemical experimentation with them. Measurement of carbon fourteen, once considered difficult, was a routine matter when we began this work. Counting radioactive hydrogen, on the other hand, remains a tricky business which only a few laboratories have undertaken. Our ability to do it is entirely the result of the efforts of Mr. Alden V. Loud, who patiently perfected a counting system suited to our needs. We hope that eventually we will be able to give a complete description of the factors which control the cholesterol content of the body.

In conclusion, perhaps a few words are in order about the prospects of success in this effort to find the cause and cure of arteriosclerosis. Does Mother Nature hold this secret so tightly that we cannot learn it, short of complete knowledge of the workings of the cell? Such may be the case, but I am inclined to a more optimistic view. Precipitation of materials from solution is a process which is fairly well understood. Prevention of it surely is not beyond our ability.

The Cardiovascular Research Laboratory is still in its infancy. We are still trying to earn a place for ourselves in the Massachusetts General Hospital's illustrious laboratory family. If we fail to solve the problems set for us, we can say that the problems were too difficult, should we lack the courage to admit that the investigators were too inept; but I doubt if we can blame our environment.

Ivan D. Frantz, Jr., M.D.,
Assistant Physician
and *Chief Cardiovascular Investigator*

BIOGLETS

Dr. John T. Binion, Intern in Medicine—born in Commerce, Texas, March 30, 1929; B.S., East Texas State College; Research Fellow, Department of Medicine, Southwestern Medical College, University of Texas, Dallas, 1949-50; M.D., Southwestern Medical College, University of Texas, 1952.

Dr. John D. Constable, Intern in Surgery—born in London, England, June 21, 1927; educated at home and at schools in England, Switzerland, and Cambridge, Massachusetts; A.B., Harvard College, 1948; M.D., Harvard Medical School, 1952.

Dr. Ira A. Ferguson, Jr., Intern in Surgery—born in Atlanta, Georgia, September 2, 1929; A.B., Emory University, Atlanta, 1948; M.D., Emory University, 1952; home: Atlanta, Georgia.

Dr. Raymond A. Justi, Assistant Resident in Pathology—born in Mark, Illinois, September 6, 1924; A.B., DePauw University, Greencastle, Indiana; M.D., Loyola University School of Medicine, Chicago, Illinois, 1948; Intern, Cook County Hospital, Chicago, June 1948 – June 1950; U. S. Army: Captain, serving in Japan and Korea, August 1950 – September 1951; Camp McCoy Station Hospital, September 1951 – January 1952; Minneapolis Armed Forces Examining Station, January 1952 – June 1952.

Dr. Leon Reznick, Resident in Dermatology – born in Worcester, Massachusetts, November 22, 1924; A.B., Harvard College, 1946; M.D., Harvard Medical School, 1950; Intern on the Medical Service, Peter Bent Brigham Hospital, Boston, Massachusetts, July 1950 – June 1951; home: Dorchester, Massachusetts.

Dr. Kenneth J. Ryan, Intern in Medicine—born in New York City, August 26, 1926; U. S. Navy: Naval Air Corps and Submarine Service in the Pacific Theatre, 1943-46; Northwestern University, Evanston, Illinois, 1949; M.D., Harvard Medical School, 1951.

Dr. Bernard B. Stone, Assistant Resident in Neurosurgery—born in Revere, Massachusetts, April 20, 1924; Boston College, 1942-44; M.D., Tufts College Medical School, 1948; Intern, Worcester City Hospital, Worcester, Massachusetts, 1948-50; U. S. Navy: service in this country and in Korea on the hospital ship U. S. S. *Haven*, 1950-52.

Dr. Jacob Stovner, Assistant Resident in Anesthesia—born in Norway, March 14, 1916; military service: medical service with the Royal Navy, 1941-45; M.D., University of Oslo, Norway, 1947; practice of General Medicine and Surgery, 1947-49; Intern in Anesthesia, 1949; World Health Scholarship for the study of Anesthesia in Great Britain, 1951; temporary Head of Anesthesia Department, Aker Hospital, Oslo, Norway, 1952.

Dr. John B. Tallon, Assistant Resident in Radiology – born in Cornwall, Ontario, Canada, October 29, 1924; B.A., St. Michael's College, University of Toronto, 1947; M.D., McGill University Medical School, 1951; Intern, Montreal General Hospital; home: Cornwall, Ontario.

Dr. Yang Wang, Intern in Medicine—born in Tangshan, Hopeh, China, May 12, 1923; Yenching University, Peiping, 1940-41; St. John's University, Shanghai, 1942-43; M.B., National Medical College of Shanghai, 1948; Health Division, Sino-American Joint Commission for Rural Health Reconstruction, ECA, Canton, China, 1948; Fellow in Pathology, Free Hospital for Women, Brookline, Massachusetts, 1949-50; M.D., Harvard Medical School, 1952; home: Peiping, China.

Dr. Howard S. Yaffee, Assistant Resident in Dermatology—born in Brookline, Massachusetts, October 14, 1927; A.B., Syracuse University, 1947; M.D., Harvard Medical School, 1951; Intern in Medicine in the Veterans Administration, Yale University Program, at Newington and New Haven Hospitals, Connecticut July 1, 1951 – June 30, 1952.

Your editor suggested to me recently that I might like to set down a few thoughts in this column. She flattered me to the extent of adding that my words might deal with other than a strictly medical topic, thus implying that my reflections regarding non-surgical matters might interest those who chance to peruse this page. Indeed, Drs. Benjamin Barnes, Robert Shaw, Thomas Green, and George Richardson of the surgical resident staff have previously written such excellent letters that I am led to believe that surgeons are not all unschooled in the art of exposition.

As an amateur ecologist I am vitally concerned with the conservation of America's natural resources and, by the same token, with the preservation of the fair face of the land. How deep are the scars on that fair face! A glance at any billboard-bedecked highway with the view beyond obscured, or a summer Sunday spent hopscotching fragments of broken bottles littering New England's beaches, remind one that our country is not as beautiful as it once was. Yet the problem goes far deeper than appearances. A few examples will illustrate my point.

In a profligate manner we have set the land to plow in the West, producing wheat far in excess of our capacity to consume, apparently spurred on by greed and the specious economics of government parity price supports. All the while we disregarded the warnings of the soil conservationists. Today we learn that we are threatened by drought and dust perhaps more devastating than the blight of the 1930's. In areas of many Western States the natural water table has receded to below critical levels, largely a result of wasteful consumption and bad soil economy. Where range grass once grew, cattle must be fed upon prickly pears.

A large tributary to the Mississippi River was named "Ohio" by the Indians. This, translated, means "beautiful river", but the resemblance to beauty today is one in name only. Polluted by the untreated refuse from numerous industrial communities, the river has become an eyesore and a major health problem in the large area which depends upon it for water supply. Its value as a recreational facility is potentially great but actually nil, for who can imagine fishing, swimming, or boating in a sewer? Yet we are told that it is possible to dispose of the refuse of a city and the wastes of industry in more desirable ways.

The frightful industrial smogs in many areas are now an old story. Some of these conditions have been poisonous and have even resulted in loss of human life. Suffice it to say that it is not necessary to foul the air, because scientists know of safer and more esthetic ways to dispose of these chemicals and dusts, though no doubt such methods might be more expensive than the present ones. Today and in the future we are faced with a much more ominous threat of air contamination—viz, the air-borne by-products of atomic fission. One must be a physicist to comprehend fully the magnitude of the threat. We are assured that were the problem to go beyond our ability to control it, as well it might in the event of atomic warfare, there would be dire consequences for all living creatures—man included.

A last illustration of the thesis comes to mind for all of us who love hunting as a sport while maintaining a deep interest in the conservation of our wild life for future generations. Some steps in the right direction have been taken, to be sure; but the laws are so ill-conceived in many States and the regulation of those who carry lethal weapons so irresponsible that the annual harvest of the dwindling deer herds in many areas is inversely proportional to the harvested hunters.

In some other countries, I have seen that the waste of resources is not so wanton and the scars on the land not so deep. The peasant in Germany and France has tilled the same fields for 2000 years. These fields are still fertile because of wise conservation involving crop rotation, fertilization of the soil, and prevention of erosion. Truly scientific forestry and careful utilization of timber resources in Germany far exceed the general practice in the United States. Nowhere have I seen better kept or handsomer cities than in Switzerland. To litter the streets with paper and other refuse in a Swiss city is a misdemeanor which is punished by a heavy fine. In the rural areas of England one is struck by the loveliness of the countryside and the tidy way in which man has gone about his living off the land. The people seem to have a respect for the land and its resources, and for the appearance of the places where they reside.

I have been admittedly critical, and the criticism in this brief essay is not constructive. Let me hasten to add that I have often thought about what should be done to conserve our wealth of resources and the beauty of America. However, it is not now my purpose to pursue the subject further. I do believe, though, that it is the responsibility of each of us who has children to help these little ones acquire an appreciation of the beauty of the world in which they live. Children should learn to respect the land and its resources, and to feel responsible for the conservation of our natural heritage, just as they must learn to respect and heed the rights and feelings of other persons.

Clifford J. Straehley, Jr., M.D.,
Assistant Resident Surgeon

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The third in the series of "International Teas", given by the MGH Staff Wives Hospital Committee this year, was held on March 17 in the Medical Staff Room of the Bulfinch Building. This tea, like the preceding ones, was well attended by our members and the visitors from abroad who are currently at the

Hospital. The Committee is exceedingly pleased with the popularity of these teas and will continue to hold them periodically.

All members of the Staff Wives Committee are invited to attend a morning coffee at 10:30 on Wednesday, May 6, in the living room of the Walcott House. Officers will be elected for the coming year, the annual report will be read, and Dr. Henry K. Beecher will address the meeting as guest speaker.

Dr. and Mrs. Bradford Cannon have once again offered the use of their home in Lincoln for a picnic to be given on Saturday, May 23, for the members of the House Staff and their families, as well as the visitors from abroad and their families. The picnic was a memorable event of last year, and one we are all looking forward to again.

Additional books and phonograph records are urgently needed for the House Staff Club Rooms. Please leave donations at the front desk of the White Building, clearly marked "Penthouse". They will be deeply appreciated.

It is difficult for those who come to the M.G.H. from other lands to find apartments—particularly furnished ones. Therefore, a committee has been established by Mrs. Richard H. Sweet to collect a supply of furniture for the use of those who are lucky enough to find unfurnished apartments. If you have something to contribute, please send a card to Mrs. Sweet, 27 Chestnut Street, Brookline 46, Massachusetts, or telephone her at Longwood 6-5671.

* * *

Plans have already been made for the 1953 summer courses in Clinical Pastoral Education at Massachusetts General Hospital. These courses, conducted under the auspices of the Institute of Pastoral Care, Incorporated, are now given at nine Chaplain Supervisors Training Centers in the United States. Besides the Massachusetts General, these centers include: University Hospital, Ann Arbor, Michigan; Miami Valley Hospital, Dayton, Ohio; Emanuel Hospital, Portland, Oregon; Augustana Hospital, Chicago, Illinois; and Medfield State Hospital, Boston State Hospital, Tewksbury State Hospital and Infirmary, and Worcester State Hospital, in Massachusetts. At Augustana Hospital in Chicago, courses will not be offered this summer. Additional training centers will be opened in the future in institutions having competent pastoral supervision, contributing professional personnel, and which maintain treatment programs.

Rev. James H. Burns, Protestant Chaplain at Massachusetts General, will again be in charge of the work here, which includes a course for 18 students from June 1 to July 10, and one for 12 teachers, chaplains, or clergy from July 13 to August 21.

A folder has been issued giving information on such subjects as goals, training centers, courses of instruction, eligibility, application procedures, fees, living accommodations, financial aid, and academic credit. In case you may not have seen the folder and may know of someone who might be interested, we are quoting the following from its pages:

The four primary objectives of the Institute of Pastoral Care in its Clinical Training Programs are as follows:

1. To enable the student to gain a fuller understanding of people, their deeper motivations and difficulties, their emotional and spiritual strengths and weaknesses.
2. To help the student discover more effective methods of ministering to individuals and groups and to intensify his awareness of the unique resources, responsibilities, and limitations of the clergy.
3. To help the student learn to work more cooperatively with representatives of other professions and to utilize community resources which may lead toward more effective living.
4. To further the knowledge of problems met in pastoral care by providing opportunities for relevant and promising research.

At each center the Chaplain Supervisor is in charge of all instruction. He is assisted by as many qualified associates as the enrollment may require. The ratio is five or six students per leader. Guest lecturers from each institution and its community are invited to participate in the scheduled seminars. While the programs at the centers vary in content, depending upon the nature of each institution, all utilize the clinical approach of actual work with people under pastoral supervision, such work being recorded and submitted to the Chaplain Supervisor and his associates for constructive evaluation and class instruction. Selected books and articles are assigned for reading and review. Ample opportunity for personal conferences is provided. The daily schedule requires approximately eight hours of attendance at the training center. Ordinarily there are neither evening assignments nor night classes, and all students are usually free on Saturdays and Sundays.

All applicants shall be enrolled in or alumni of seminaries or other accredited religious training schools, or shall have had a minimum of three years of professional religious work, or shall present other similar qualifications. In those centers where two sessions are offered, enrollment in the second is usually restricted to persons who have had previous training or professional experience. In order to provide an ecumenical group, ordinarily not more than one-third of the total enrollment in any session shall be from one denomination or faith. . . .

The tuition charge at each center is $60.00 for a six-weeks' session and $120.00 for a twelve-weeks' session. A deposit of $5.00, which is later applied to the tuition cost, must accompany each application. This deposit is returned only if the applicant is not accepted. . . . All checks should be made payable to the specific Chaplain Supervisor of the center where training is desired.

While a few centers are able to provide room and board in return for some limited service to the institution, in most centers the cost is assumed entirely by the student. Full information concerning living arrangements will be supplied *upon request* by the Chaplain Supervisor. Final plans, however, shall be made by the student.

Applicants who desire local preaching appointments or supply work should communicate directly and in advance with their denominational representatives. In some areas scholarship grants can be secured through a local seminary or denominational office. These arrangements, however, must be made by the student. . . . Clergymen who have had previous clinical pastoral training may apply for appointments as Course Assistants or Clinical Associates. A few teachers of pastoral care, parish ministers, and chaplains, as well as students enrolled in the four seminaries affiliated with the Institute (Andover Newton Theological School, Boston University School of Theology, Episcopal Theological School, and Harvard Divinity School) are eligible for scholarship aid through the Institute of Pastoral Care.

Upon receipt of certification from the Institute of Pastoral Care most seminaries and theological colleges grant three to six credits for each six-weeks' course. If credit is to be requested the student should make arrangements with his seminary for Institute certification to be accepted, before he applies to a Chaplain Supervisor for admission to a training program.

Copies of the folder from which we have quoted may be obtained from the office of Rev. James H. Burns, on the second floor of the Moseley Building.

New addresses:—

Dr. Robert K. Brown (*W.S.* 1939), 1624 Gilpin St., Denver 6, Colo.
Mr. A. L. d'Abreu (v.s. pro tem 1951), 12 Church Road, Edgbaston, Birmingham 15, England.
Dr. Roderick Heffron (*E.M.* 1931), The Commonwealth Fund, 1 East 75th St., New York 21, N. Y.
Dr. Alfred O. Ludwig (*E.M.* 1932), 82 Marlborough St., Boston, Mass.
Dr. S. Forrest Martin (*Oph.* 1938), 165 Bay State Road, Boston, Mass.
Lt. Walter T. St. Goar, MC, USAFR (*M.* 1950), Gunter Air Force Base, Montgomery, Ala. (from Mar. 23 until May 1).
Dr. William J. Shriber (a. *M.* & a. *Phys. M.*), Beth Israel Hospital, 330 Brookline Ave., Boston, Mass.
Lt. Roger E. Wilcox, MC, USAR (*S.* 1949), 8063 MASH, APO 301, c/o Postmaster, San Francisco, Calif.
Dr. James B. Wyngaarden (*M.* 1949), National Heart Institute, National Institutes of Health, Bethesda, Md.

Brief bits:—

Dr. William P. Beetham, Surgeon in Ophthalmology at the Eye and Ear Infirmary, recently attended a symposium on medical ophthalmology at the New Orleans Academy of Ophthalmology, where he gave three lectures on diseases of the outer eye as related to general disease, and participated in five round-table discussions.

Dr. Walter S. Burrage, Associate Physician and Head of our Allergy Clinic, and Dr. John W. Irwin, Clinical and Research Fellow in Medicine, addressed the 9th Annual Meeting of the American Academy of Allergy, held in Boston in February. The subject of the address was "Microscopic observations of the pulmonary circulation of living mammals before and during anaphylaxis". Dr. Burrage is the president of the Academy.

Dr. Irwin and Dr. Burrage presented a colored moving picture, demonstrating microscopic observations of the pulmonary circulation of arterioles, venules, and capillaries of the mammalian lung, before the American Association of Anatomists at the Annual Meeting in Columbus, Ohio, on March 25.

Dr. Grantley W. Taylor, Visiting Surgeon on our Staff, has returned from Paris and Morocco where he was invited to speak on the subject of cancer before the Société de Chirurgie de Paris and the Société de Médicine du Maroc.

This letter—and a fine one it is—has come in response to our "singleton" letter sent to Dr. Lawrence K. Lunt (*W.M.* 1916), the only MGH-er practising medicine in the State of Wyoming. From Double Four Ranch, Wheatland, Wyo-

No. 39 in a series of Staff photographs
Dr. Ivan D. Frantz, Jr., Assistant Physician and Chief Cardiovascular Investigator

ming, Dr. Lunt writes:

I am very sorry to have been so long in answering your request from this solitary MGH-er in Wyoming. It has not been from neglect, but because I have hoped I might find something of interest to write about.

From the medical point of view, there is little I can report at first hand, except the general impression that there are some excellent doctors in the State and some mighty poor ones, which holds true of any State in the Union! The State Health Department is headed by a very active and excellent man, Dr. Franklin D. Yoder. The State Society and the State Board of Medical Examiners are doing a fine job of keeping medical standards up to a high level. Except for the few relatively large cities, practice is of the rural type, each doctor having to do most everything and, in many instances, doing it well. As we happen to live pretty well off the beaten track (35 miles from town) and in the mountains, reached over not too good roads, and with always something that seems to require doing, I have shamelessly neglected attending any medical meetings, but I understand they are of good quality and are generally well attended.

As in several Western States, osteopathic physicians are represented on the State Board of Medical Examiners, so are legally licensed to practise. It has surprised me how many people swear by chiropractors—people of whom one would expect more discrimination! Possessing the title of "Doctor" out here raises the question as to what kind—osteopathic, chiropractic, or some other strange cult—or, more legitimately, veterinary.

There is still plenty of room for improvement in the understanding on the part of physicians with an M.D. of the many kinds of human illness requiring a knowledge of and sympathy with the effects of emotions on physiological processes.

In order to be of whatever use possible, I have kept my license to practise, but this is confined to rare emergencies and to having a supply of medicines on hand, especially antibiotics, to use when a neighbor comes in or calls me out for some malady. We are in a tick area and I have seen several cases of Colorado tick fever, my wife and my son and I having had it. It is relatively mild, not leaving any sequelae, lasting a week or so with characteristic ups and downs of temperature, but with an aftermath of general misery for two or three weeks.

Diseases of cattle have interested me, finding them in many instances not unlike those of humans. It surprised me, though it shouldn't have, to find that all the newest medicines—sulfas and antibiotics—are extensively and effectively used on livestock. Many animals, like humans, are now saved where formerly they could not have been. Though the veterinary medicines are a bit cheaper than those for human use, the treatment is quite expensive because of the correspondingly larger doses needed. Veterinary Medicine is closest to Pediatrics in that it is impossible for the animal under treatment to verbally cooperate as to location and nature of symptoms!

Some years ago, I remember a colleague retiring and taking up farming in New Hampshire. It seemed to me a strange thing to do, and I fear I was rather censorious. Yet here am I, doing much the same thing and loving it! Being able to be out-of-doors much of the time, having animals about to observe, horses to ride, deer so plentiful they constitute at times almost a nuisance, beaver in one's front yard (fascinating, but annoyingly destroying one's best and most beautiful trees and having to be trapped), plenty of fresh air, lots of time blowing by at a high rate of speed, not too many periods of real cold and only occasionally more than a few inches of snow, never any oppressive heat, cool nights all through the summer—it all adds up to what seems to be, to this family, a pretty satisfactory way to live.

Our older son, after serving through the war in the Air Force out in the Pacific, elected to become a rancher and since his return from a second tour of duty as Radar Observer, again in the Pacific (Japan), has settled down with us. The younger son, after some years of thinking he was going to be a rancher, switched to medicine and is now in his third year at P & S (Columbia). Till now he has been able to spend vacations here, enjoying the ranch work but more than satisfied with his objective. Both boys have been more or less bitten with the rodeo bug and have tried their luck, unsuccessfully, on the bare-back broncs and the Brahma bulls. It has been interesting to find how many men and boys are preoccupied with this sport—and a real sport it is, and how absorbed they become in it, just as others become absorbed in golf, tennis, or sailing. The rodeos in the small towns are far more fun and interesting than the big shows, and one sees almost as much skill and finesse in them.

We have enjoyed having our daughters and their families visit us, and many friends find their way over the confusing roads (so called) to our valley. We like to think we will have much more of the same enjoyment—more than we would be allowed in the normal course of things. On the whole, not a bad way to spend one's time—new and interesting situations, new problems, old pleasures renewed, and learning that it is more sensible to play along with the changing seasons than to fight against the inevitable.

Good luck to you and The News.

This report has arrived from Dr. William N. Christenson (*M.* 1949):

Early in January I was released from active duty with the Navy, and have returned to civilian life as an assistant resident on the Medical Service at the New York Hospital. Please change my address for The News to 525 East 68th Street, New York 21, N. Y.

A short note has come from Dr. Ellsworth H. Trowbridge, Jr. (a.r.p. *N.* 1940), which reads:

I am still located in the Bryant Building, 1102 Grand, Kansas City 6, Missouri.

Besides maintaining a laboratory in the office suite, I am in charge of the brain wave laboratory at the University of Kansas Medical School and have established a new laboratory at Menorah Medical Center.

This note has come from Dr. Leland F. Carter (*Oph.* 1926):

Have just returned from the West Indies cruise of the Pan-American Association of Ophthalmology—a most delightful way to soak up sunshine, renew old friendships and make new ones (including the distaff), and to learn plenty!

Sorry none of the boys from Boss-ton were along, but I met many Eye and Ear Infirmary alumni from elsewhere.

I enjoy The News in all its departments.

A letter from Dr. Bernard G. Stall, III (*M.* 1947) says, in part:

Enclosed is my subscription to The News. This act represents the culmination of three years of intention.

Please note my change of address to Medical Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, N. Y. After reverting to an inactive military status (Oct. 31, 1952), I began work here in association with Dr. Lewis K. Dahl (c.r.p. 1947). Recently we were joined by Dr. George C. Cotzias (*M.* 1944). Therefore, it would seem that we constitute a rather pure MGH metastasis in this isolated scientific community.

THE NEWS

No. 123 Boston, Mass. May 1953

MASSACHUSETTS EYE & EAR INFIRMARY

In the years since the war, research has become an increasingly important function of the Massachusetts Eye & Ear Infirmary. Through this Hospital's affiliation with the Harvard Medical School and close association with the research being carried on at the Massachusetts General Hospital, investigations here into the causes of blindness and deafness are a part of a much larger research effort than would be possible in one institution operating alone. In this fertile environment, the staff of the Infirmary serve as consultants in ophthalmology and otolaryngology for all units and often collaborate with them in specific projects. With larger funds available from Government agencies, the amount expended on research at the present time represents a sizable percentage of the total Hospital budget.

Because of this rapid growth, the Board of Managers recently decided to consolidate the two existing research committees into one combined Committee. This new Committee will have the responsibility for the over-all policy of the total research being carried on in the Infirmary. Mr. William H. Claflin, III, representing the Board of Managers, was made Chairman; the Chiefs of Services, the Dean of the Medical School, the Director, and the staff members active in research are also on the Committee. Dr. Robert L. Berg acts as Executive Secretary. The following serve on the Committee:

Mr. William H. Claflin, III, Chairman
Dr. LeRoy A. Schall
Dr. Edwin B. Dunphy
Dr. George P. Berry
Mr. Francis S. Hill
Dr. Moses H. Lurie
Dr. Philip E. Meltzer
Dr. Herman J. Sternstein
Dr. George Kelemen
Dr. Francis L. Weille
Dr. David G. Cogan
Dr. Charles L. Schepens
Dr. Merrill J. King
Dr. Parker Heath
Dr. William Stone, Jr.
Dr. Robert L. Berg, Executive Secretary

In addition to the responsibility for general policies, the Committee will function to relieve the investigators of many administrative burdens relating to the non-scientific aspects of their projects and should also be able to assist them in obtaining research funds. It will be a means of intercommunication between investigators and should stimulate the exchange of ideas among the various groups.

As adequate space for research has been one of the major problems at the Infirmary for some time, the Committee will be actively concerned with the planning of a new research building into which all units, now widely separated, can be brought together. Several areas have been under consideration for the construction of this building, which necessarily will have to be adjacent to the Infirmary clinics, but, at the moment, no definite decision has been possible.

In the past, the social implications of blindness and deafness never have been properly appreciated by the public, and far too little has been done to find and remove the causes of such crippling handicaps. Literally, millions are expended annually in caring for the blind and the deaf, but pathetically little, until recently, has been given for research into the cause and cure of either. As there are comparatively few eye and ear centers in the country, the Infirmary feels a tremendous responsibility in providing facilities for productive research.

One of the great challenges for research here can be illustrated by the increasing incidence of the comparatively new disease of retrolental fibroplasia, which was first described by the late Dr. Theodore Terry at the Infirmary in 1942. This disease, which occurs primarily in premature babies, has spread so widely that it is now regarded by many to be the principal cause of blindness in infants.

As an example of the seriousness of this disease, over 300 of these children have been followed in the Infirmary clinics during the last few years. At the Perkins Institution for the Blind, the first cases of children blinded by retrolental fibroplasia were admitted in the fall of 1945 — 3 of 54 admissions. Since then their enrollment of such cases has steadily mounted so that, between 1945 and 1952, they have admitted 96 children with retrolental fibroplasia. In the fall of 1952, more than one-half of the new admissions were such cases — 19 of 36 admissions.

The Infirmary has been searching for the cause of this disease since 1942, and at the present time is collaborating with Boston Lying-in Hospital and the Children's Medical Center. As many groups throughout the country are now investigating the disease and reporting their findings, it is hoped that the combined efforts of a coordinated nation-wide research program will prove successful in combatting retrolental fibroplasia in the not too distant future.

This particular research program is not necessarily more important than the other interesting work going on in both services of the Hospital. For example, the clinical study of pressure-regulating mechanisms in glaucoma being carried out in the Howe Laboratory is of tremendous importance because of the large number of people suffering from this disease. The aim is to discover more about the cause of glaucoma and to improve the treatment of this condition. Tonography, a method of measurement developed in the Howe Laboratory, has been found to be an indispensable adjunct to existing methods of clinical examination.

The Howe Laboratory is also studying the effects of ionizing radiation on the lens. This is being done currently in two ways: first, by contacting all persons who have received a known amount of x-ray through the eyes, incidental to x-ray therapy of the head region, and re-examining their eyes; and secondly, studying the opacification of the lens in rabbits exposed to various doses of x-rays and neutrons.

At the Retina Foundation, a study of the fine structure and chemical properties of the vitreous body and tissues of the eye is in progress. This group is also working to improve the mathematical methods for computing optical instruments, in order to make better instruments for use in the examination and treatment of cases of retinal detachment.

Then there is the work of the Winthrop Foundation, which for a number of years has been studying the influence of the lymphoid tissues of the nasopharynx on the Eustachian tube as a cause of deafness, particularly in children. The Foundation is also investigating the effect of x-ray or radium upon these tissues, as it bears upon the improvement of hearing.

The recently initiated study on atrophic rhinitis was brought into being from the need to evaluate new methods of treatment for this troublesome disease. Another comparatively new research project is the work on cold virus — a study which we hope will add to the sum total of knowledge being brought to bear against the common cold.

These projects, picked at random, are mentioned primarily to show the great need for a specialized hospital whose staff is interested, not only in basic research, but in the specific problems of otolaryngology and ophthalmology.

Francis S. Hill,
Director

Mrs. Paul Doehler, teacher of the Esophageal Voice classes held at the Infirmary, has been chosen to enter a nation-wide contest to honor the handicapped individual who has done most for other handicapped persons. Mrs. Doehler has been nominated as a candidate by the Massachusetts Division of the American Cancer Society, which sponsors the Boston voice classes, and by the Rhode Island Division, as Mrs. Doehler also teaches speech classes in Providence.

Mrs. Doehler has been teaching Esophageal Voice classes at the Eye and Ear since 1944. Some ten years ago it became necessary to remove her larynx because of cancer. When she found herself faced with the loss of normal speech, she consulted with Dr. LeRoy A. Schall, Chief of the Ear, Nose and Throat Service. He told her of a new theory of esophageal speech for the laryngectomized which, unlike former methods, used no mechanical devices to aid in speaking. Mrs. Doehler got in touch with the man who was exploring this new method, and very soon she had mastered the basic technique of swallowing air and causing it to vibrate against the esophagus, to produce sound without vocal chords.

Before her operation, Mrs. Doehler had been an English teacher. She had studied speech therapy, phonetics, and voice training. In teaching remedial reading, she had worked with those who had speech difficulties. It was not long after her operation when Mrs. Doehler developed an esophageal speech method that capitalized on her previous knowledge. By proper use of the lips and tongue and teeth, she herself mastered, and now teaches her students to acquire, a new voice which, although somewhat husky, has clear enunciation and good tone quality.

Mrs. Doehler now devotes her entire time to teaching laryngectomized patients and has already taught 600 men, women, and children to speak again. Last summer she was elected Secretary of the International Association of Laryngectomies at their first meeting in Cleveland, Ohio. Very recently she completed a manual, setting forth her methods of instruction in esophageal voice. To be published under the aegis of the Cancer Society, Massachusetts Division, this will present for the first time a textbook that can be used by teachers and patients.

The Annual Meeting of the Eye and Ear Alumni Association was held on April 14 and 15 at the Infirmary. Morning sessions were devoted to surgical clinics and presentation of cases; the afternoon and evening sessions to papers.

The Alumni Dinner was given on the evening of April 15 at the Harvard Club. Dr. Thomas Davis had been invited as guest speaker. He gave a lecture, with motion pictures, on a trip "From New Zealand to Boston by ketch".

The Boston Eye Bank will give the first hospital showing of the organization's new motion picture on May 12. The film explains the program of the Eye Bank through the story of one patient's corneal graft operation. Designed primarily for the lay public, it presents the work of the Eye Bank so that the prospective donor will understand just how a gift of eye tissue after death can be used to restore sight.

The film — in color and sound — was made at the Eye and Ear in March. It was produced by Sturgis Grant & Company, who several years ago filmed *They speak again*, a brief documentary on the Infirmary's Esophageal Voice classes. The Junior League of Boston sponsored the new picture.

Eyes of service will be available to community groups free of charge and is expected to play a large role in publicizing the work of the Eye Bank. Such lay education is essential, since only the active interest and cooperation of the public make this program possible.

The picture will be shown both in the morning and in the afternoon on May 12 — Hospital Day — at the Infirmary. All who are interested are most cordially invited to attend.

Dr. Joseph S. Barr is in Indonesia with a group of medical scientists. The team is under the auspices of the World Health Organization and the Unitarian Service Committee. Dr. Frederick J. Stare, Professor of Nutrition at the Harvard School of Public Health, is the other New England member of this international team.

Dr. Henry K. Beecher has been appointed by the Secretary of the Navy to be Honorary Consultant to the Surgeon General of the Navy.

Dr. Benjamin Castleman spent two weeks in March as Visiting Professor of Pathology at the Universidad de San Carlos de Guatemala in Guatemala City, where he gave a series of five lectures and three clinico-pathological conferences under the auspices of both the university and the Colegio de Médicos y Cirujanos. He had a chance to put "Rudy" Herrera (*E.S.* 1943) on the mound in his home field.

Dr. and Mrs. Castleman were house guests of Dr. Pablo Fuchs, who spent a year on the MGH Surgical Service during the war and who now is a professor of surgery and one of the foremost surgeons in Guatemala.

In addition to being royally entertained and given a chance to see many parts of the country (and it really is "the land of eternal spring"), Dr. Castleman was honored by being made an Honorary Professor of the University and an Honorary Member of the Juventud Médica — a student organization similar to the Boylston Society at Harvard.

At the meeting of La Société de Chirurgie de Lyon [France] on January 29, Dr. Edward D. Churchill was elected Membre D'Honneur Étranger.

Dr. Nathaniel W. Faxon is Acting Director of Mount Auburn Hospital, pending the selection of a new Director.

The Board of Trustees, at their meetings on March 20 and April 3, voted:

To promote Dr. Claude E. Welch to the position of Visiting Surgeon, effective as of February 20;

To change the appointment of Dr. Frederick E. Whiskin from Resident to Assistant Resident in Psychiatry, beginning July 1, 1953, and Resident as of January 1, 1954.

To appoint:

Dr. John F. Brock as Visiting Physician pro tempore, for the period May 11 through May 16;

Dr. Charles R. Campbell as First Assistant Resident in Pathology for the year beginning July 1, replacing Dr. Hanna Klaus;

Dr. Henry H. Faxon to the Board of Consultation;

Dr. Leland S. McKittrick as Consulting Visiting Surgeon, as of July 1;

Dr. George F. Odland as Assistant Resident in Dermatology for one year, beginning July 1;

Mr. E. Michael White as Assistant Director and to assign him as administrative head of the Out-Patient Department. Mr. White will continue to serve as Director of Organization of the Massachusetts General Staff Associates.

To appoint the following Medical and Surgical Interns for the year beginning July 1:

Medical

Charles G. Barnett
Zanvil A. Cohn
Daniel D. Federman
Howard S. Frazier
Lamont W. Gaston
David J. L. Luck
Robert F. Moore
Stuart H. Mudd
Joseph R. Petranek
Harvey D. Rothberg, Jr.
Jan Wolff
Donald N. Wysham

Surgical

Edwin L. Carter
Harry B. Ditmore, Jr.
Edward L. Ferguson
John A. Mannick
Harold L. May
Jens G. Rosenkrantz
Edwin W. Salzman
George D. Zuidema

To appoint the following to the Ladies' Advisory Committee to the School of Nursing:

Mrs. Lloyd D. Brace	three years
Dr. Dean A. Clark	three years
Dr. Rita M. Kelley	three years
Mrs. Van Courtlandt Elliott	five years
Mrs. Harris Fahnestock	five years

At their meetings during March and on April 1, the General Executive Committee voted:

To promote:

Dr. Earl M. Wedrow from the position of Assistant Resident to that of Resident in Psychiatry, beginning July 1.

To reappoint:

Dr. Fa-Chi Dunn as First Assistant Resident in Dermatology, for the year beginning July 1;

Dr. Leon Reznick as Resident in Dermatology, for the year beginning July 1.

To appoint:

Dr. Jacques Y. Chatillon as Clinical and Research Fellow in Medicine for one year, beginning March 11;

Dr. Nechama deShalit as Clinical Fellow on the Children's Medical Service for one year, beginning March 19;

Dr. Jacques O. Gagnon as Clinical Fellow in Medicine, beginning July 1;

Lt. Col. George W. Geiss as Clinical Fellow in Physical Medicine, beginning April 1;

Dr. William E. Reynolds as Clinical and Research Fellow in Medicine, for the period March 15 through December 31;

Dr. Samuel R. Schuster as Clinical Fellow in Pathology, for a period of six months, beginning July 1;

Dr. Robert B. Sloane as Resident in Psychiatry, for the period April 1 through June 30.

At an earlier meeting the General Executive Committee voted:

That Dr. Leland C. Brannon be appointed as Clinical and Research Fellow in Neurosurgery for the period January 1 through June 30, and that his appointment as Assistant Resident become effective July 1.

* * *

BIOCHEMISTRY LABORATORY

The biochemical approach has more and more become the dominant avenue leading to the understanding of living organisms and of the processes by which they perform such functions as we attribute to the living state. Zoology, botany, genetics, microbiology, and that composite mixture of all of them, medicine, are recognizing more and more the central position of biochemistry. Although each of these branches of the biological sciences has its own peculiar biochemistry, there is a general pool of biochemical phenomena which is common to all living things. It appears proper, therefore, that in an institution like ours, there exists some center doing pure fundamental biochemistry aimed at the general understanding rather than at a special application. Our biochemical research group thus represents an ideological center for the various more or less applied biochemical activities occurring all around in clinical departments and in the research laboratories of our new Research Building.

What are we more precisely doing in our "lofty" region on the fifth floor of the Research Building? From the early beginnings with Dr. Cope on White 4, through our more extensive activities on the top floor of the Bulfinch Building, we have been developing and mapping a relatively new field of biochemical research concerned with the synthesis of body material — the study of biosynthetic mechanisms.

The constant need for energy supply is one of the most fundamental characteristics of all living beings. Cellular respiration or, more specifically, the burning of foodstuffs, has long been known as a main source of energy. However, how this initial combustion is converted into useful energy has been one of the stubbornly evasive problems which has long puzzled the biochemist.

The over-all metabolism of an organism may be understood as an interplay of breaking down and building up. Since it is generally easier to break down than to build, it was also easier to understand how such functions as, for example, intestinal digestion, occur: Food is broken up through specific agents, biocatalysts, or enzymes which gently cleave apart large particles to smaller and smaller units. These reach the blood stream through the body cells. There they are burned partly and used partly for building or rebuilding the ever changing organism. Our understanding of the mechanisms involved in this building up of body material has started to develop only during the last two decades, first slowly and now recently with considerable speed.

Of great importance for the advance in this new field has been the realization that vitamins are more essential parts of many biosynthetic enzymes. The whole family of the so-called "B-vitamins" represents to the biochemist a variety of peculiar chemical compounds which the animal is shy of synthesizing, but rather imports from the outside. Thiamin, nicotinic acid, riboflavin, pantothenic acid, biotin, and others respectively form the core of enzyme systems which fulfill very special metabolic functions. In the form of a particular "coenzyme", every one of these vitamins covers a certain metabolic territory. The first vitamins, the territory of which was mapped out, were thiamin, nicotinic acid, and riboflavin. This happened in the middle and later thirties. After that we had to wait for quite a while for a new metabolic function to become related to one of these peculiar vitamin molecules. In 1945 it was our good fortune, through a number of fortunate accidents, to uncover the metabolic function of pantothenic acid. During our work on the acetylation of sulfanilamide, we became aware of the existence of a new coenzyme. Together with Tuttle, Kaplan, Novelli, Gregory, and an ever changing and increasing group, this new coenzyme was isolated and found to contain pantothenic acid, adenylic acid, and a sulfhydryl-containing part, thioethanolamine. We called it "coenzyme A" (CoA), indicating that it carries Acetic acid and, more generally, various organic Acids.

Acetic acid, the acid of the common vinegar, has lately attracted considerable attention among biochemists, as it developed to be a major building stone for biochemical structures. Isotope research long had uncovered the amazing role which "active" acetic acid (or, as it frequently is called, the "active 2-carbon fragment"), plays in the building of large carbon structures. The chemical identity of this active acetate remained a mystery for a long time. We now have identified it as Acetyl-coenzyme A. It is the function of CoA to carry acetyl groups in reactive form. It performs this subtle function by picking up the active 2-carbon fragment during the respiration of carbohydrate and of fat. Acetyl-CoA in various ways brings forth the construction of the long straight carbon chains of fatty acids or the branched and ring structures of the steroids. The role of CoA in cholesterol and steroid synthesis and particularly the relationship of CoA to adrenal function has recently attracted considerable attention. Dr. Klein in our laboratory has contributed much to the understanding of this field by correlating the CoA content of the cells with their ability to synthesize steroids and fatty acids.

Aside from these specialized studies, we always continued with our general interest in metabolic energy transformation and in the utilization of this energy for biosynthesis. The "acyl transfer" which we just discussed is only a particular type of group and energy transfer. The general problem of energy metabolism was earliest understood, however, in the case of phosphate bond generation. Phosphoryl groups or "energy-rich phosphate bonds", as we proposed to call them, like active acetate, are generated metabolically in various processes by fixing phosphate in energy-rich bonds and by using phosphate as an energy catalyst. As an extension of this early theory of energy utilization, the interplay between phosphoryl and acyl transfer has now become of paramount interest for the understanding of the energy transformation picture in general. Lately, we have become most interested in aspects of energy transfer in animal cells relating to the function of the thyroid hormone.

Recent studies by Dr. DuToit and Dr. Hoch in this laboratory brought out certain features of the cellular action of thyroxine, characterized by direct effects of the hormone on intracellular processes of energy transfer. We are entering therewith into the field of hormone biochemistry, which has so far proved much more difficult than the understanding of the function of the vitamins. The hormones, as we see it, act on a secondary and regulatory level. Our understanding of this action presupposes the understanding of the primary or catalytic enzyme level. Our recent limited success with the thyroid hormone makes us now hopeful that sooner or later the biochemist may be able to break open the hormone field in a fashion similar to the opening up of the vitamin field.

Then we might hope to bridge the gap which at the present time, we feel, still exists between the biochemist and the clinical investigator. The clinical investigator is working downward from the level of highest complexity. The biochemist is working upward from the levels of isolated enzyme systems. They have to meet eventually somewhere in the middle. It is one of our main functions in this Hospital community to work toward achieving this junction on the broadest possible basis.

Fritz Lipmann, M.D.,
Biochemist

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

Your title should be classified with respect to subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

Dermatology

Lever, W. F.
Pemphigus.
Medicine 32:1-123.

General Medicine

Harwood, R.
Results of a screening program for diabetes mellitus.
Diabetes 2:43-46.

Laboratory Science

Lever, W. F., and Hurley, N. A.
The plasma glycoproteins and lipoproteins.
In Blood cells and plasma proteins, J. L. Tullis, Editor, New York, Academic Press, Inc., pp. 392-403.

Roque, A. L.
Chromotrope aniline blue method of staining Mallory bodies of Laennec's cirrhosis.
Lab. Invest. 2:15-21.

Neurology, Neurosurgery, and Psychiatry

Lorenz, M.
Language behavior in manic patients: A qualitative study.
A.M.A. Arch. Neurol. & Psychiat. 69:14-26.

Pathology

Canada, W. J., Goodale, F., Jr., and Currens, J. H.
Defect of the interatrial septum, with thrombosis of the pulmonary artery: Report of three cases.
New England J. Med. 248:309-316.

Books

Swartz, J. H.
Dermatology in general practice.
Baltimore, The Williams and Wilkins Company.

Having become one of the "old-timers" on the House Staff, I have been invited by our editor to fill up a column or two with whatever ideas or thoughts might come to my mind. This was taken to be a *carte blanche* and, accordingly, my remarks will not be confined to strictly scientific channels. With so many physicians departing for military service or anticipating a future call to duty, I thought it might be well to draw upon my vast military experience in order to explain some of the idiosyncracies and niceties of the soldierly way of life. These sage words are not directed at the bulk of new Army physicians, but rather at that rare exception who finds military life to be somewhat different from the former mufti-clad existence.

After receiving the glad tidings that you have passed the extremely stringent physical requirements as well as the educational qualifications, your glee will know no bounds. With Panglossian optimism, your immediate response will be to run into the street and embrace the first colonel you meet, explaining breathlessly that you have just entered the Army and are ready to straighten things out. A careful survey of this problem has shown the need to curb this impulse.

Probably the most important aspect of military life in any land is "the wearing of the uniform". When your final orders to active duty arrive, you will desire a handsome new uniform in which to appear at your first duty station. Very commendable! However, remember that as a military physician you have a certain tradition and reputation to uphold. The regular "line" officers will expect this and will, I am sure, be quite miffed if you let them down. Thus, one or two buttons on your jacket should remain unfastened at all times. Further, a red carnation is appropriate on this occasion, since it really is "Change Day". Forgetting one's overseas cap once or twice a week at formation is definitely mandatory, but, actually due to oversight, was not mentioned in the most recent edition of the *Officers' Guide*. Also, don't be bluffed by your fellow officers into the error of polishing those four little brass "do-dads" on your jacket, as they are meant to look dull and distinguished. However, one should make a conscious effort to remember to put on at least two or three of those four insignia when one is out in public. Some generals do check on this point every so often.

Official military orders are very interesting documents and, to the novice, might be a subject of some bewilderment. If you keep in mind several important points they will present no obstacle and your equanimity will be restored. First, all words, including those of one letter, are abbreviated. The orders themselves are written in code — a code which the cryptography branch in the Pentagon has almost succeeded in breaking. Finally, the destination on your orders is usually a spurious one in order to keep our troop movements under a veil of secrecy. You will soon become aware of this by actually going to the place mentioned in your orders. There the adjutant will invariably show utter surprise and amazement upon your arrival, and insist that there is no position for another officer in that particular battalion. Actually, this usually turns out to be a rather charming interlude for you — a four- or five-day vacation, while headquarters is frantically wiring about to find out what the devil you are doing there. A thorough knowledge of local beers is often obtained under these circumstances.

Most Army surgeons will agree, I believe, that one of the most beguiling experiences in their careers was the six-weeks' Orientation Course at Fort Sam Houston, Texas. This course was set up several years ago in order that Regular Army officers might become aware of the hazards involved in dealing with medical officers. In addition to becoming cognizant of military customs, tradition, and usage, the embryo officer also learns the art of map reading in a most thorough fashion. It has been said that physicians are better map readers as a group than artillery or infantry officers. One of the jolliest evenings of your stay in Texas will be spent on the so-called "night problem". You will be sent out into some wooded reservation with map, compass, and instructions, to walk by midnight a certain number of miles through enemy lines to a rendezvous area. Some physicians have returned to camp several days later, arriving by Greyhound bus. Despite our protestations, the authorities have been unwilling to admit their errors in the preparation of these maps and continue to keep them in use. I suppose you will face this same military intransigeance when you go through this course.

Prior to departure overseas, you will be allowed to go through an Infiltration Course — a singular event and one which should always be cherished in your memory. The main point in this exercise is to escape with your life. Apparently some sergeants, who are disappointed candidates for O.C.S., man a group of machine guns, with the object of satisfying certain sadistic needs as you crawl several hundred yards before them, beneath barbed wire entanglements. To prevent your drowsing off from the sheer boredom of the situation, charges of TNT are set off in close juxtaposition to your location. Rather than risk injury to body or clothing, it often is wiser to find a small hole in the course and relax there with a good book until the gunners run out of ammunition. Being acquainted with "One-Upmanship", certain infantry officers have been known to release copperheads into the area to mobilize some of the slower moving candidates.

Having satisfactorily completed this introductory period, you will be sent to your first permanent duty station. One of the most magnificent sights in military life is that of the new officer reporting in officially to his commanding officer. This is a very formal scene in which the junior officer very erectly and smartly marches in, snaps to attention, and shouts out, "Lt. Cronkhite reporting for duty, Sir, as directed by the War Department, Sir." Since you are a medical officer, however, the "line" officer will try to confuse you by suddenly proffering his hand while you are involved in one of those snappy cinema-type salutes. Stick to your guns! Remember, you can court-martial the blighter if he does not respond to your salute.

How to address one's colonel has always been somewhat of a ticklish problem. As a rule, when alone with him it is best to call him "Sir" or "Colonel". While talking about him with fellow officers, he is usually referred to in a somewhat more colloquial fashion. In any formal ceremony, particularly when a general is within earshot, you will find that you can make him pleased as punch by addressing him as "Colonel, old chou".

N. Swartz, M.D.] **Anon.**
(Morton) [Still in the Reserve]

⁂

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

There will be two choral concerts, held in the Moseley Rotunda in May, in the series arranged by the MGH Staff Wives Music Committee.

On Thursday afternoon, May 7, at 3 o'clock, the Morning Chorale will present an interesting program. This group of twenty-eight women is composed chiefly of homemakers and busy mothers. Under the competent professional direction of Mary Loud, they sing primarily for their own pleasure. However, they are conscientious and devoted music-makers, as all who heard them in the Rotunda at Christmastime will remember, and they enjoy sharing their accomplishments with others who enjoy good music.

On Wednesday, May 27, at 3 o'clock, the Technology Matrons and Dames Choral Group will present another program in the Rotunda. The wives of faculty members and graduate students from Harvard and M.I.T. sing under the direction of Mrs. George Scatchard, Associate Professor of Music at Smith College. These thirty-five women also sing for fun, but share their fine music by giving five or six concerts each year in the Greater Boston area.

These concerts, which were begun in the fall, will continue through June. While priority in seating in the Rotunda or the Chapel is given to our patients, all others who are interested are cordially invited to attend.

Distaff Club

Minutes of the March meeting of the Distaff Club:

On Thursday, March 19, the Distaff Club had a very successful business meeting with its president, Mrs. Thomas Peebles, officiating and forty enthusiastic members participating.

The following Bylaws to the Constitution were voted upon and approved by the members:

Article I
Section II

Its members shall consist of the wives of our house staff, women physicians, wives of clinical and research fellows, Staff Wives who wish to remain in the Club, and such others as this group shall approve by majority vote.

Article III
Section I

The officers shall consist of a president, vice president, secretary, treasurer, and service representatives; this group as a whole to be referred to as the Executive Committee, and shall meet at the discretion of the president.

The following Amendment to the Constitution was approved:

One service representative shall be appointed to each service by the president to act, together with the officers, as an executive board, to direct such policies and activities as seem reasonable. Also, they shall have authority to vote expenditures whenever they deem it necessary for the benefit of the group.

Service representatives appointed at this meeting are as follows:

Anesthesia	Mrs. James Hepburn
Dentistry	Mrs. Robert Lincoln
Medicine	Mrs. Stephen Krane
Neurology	Mrs. Carl Essig
Neurosurgery	Mrs. Bernard Stone
Orthopedics	Mrs. Harrison O'Connor
Pediatrics	Mrs. Robert Rosen
Psychiatry	Mrs. Peter Sifneos
Radiology	Mrs. Alexander Macmillan, Jr.
Staff	Mrs. E. Wayne Wilkins, Jr.
Surgery	Mrs. Ira Ferguson, Jr.
Urology	Mrs. Thomas Mathieu

The service representatives will act as a group who, at periodic intervals, will contact each member on the respective services and report any information of importance to the officers. This will also aid the file secretary in maintaining an accurate list of members — a most important duty of these representatives. Also, to include additional members in the actual business proceedings of the Club strengthens the foundation of the organization.

Other chairmen appointed to various committees are as follows:

Housing	Mrs. Winfield Morgan
Penthouse	Wilma Canada, M.D.
Hospitality	Mrs. George Nardi
Child Care Service	Mrs. Elbert Tuttle

The housing service was established to give assistance to those who wish to obtain apartments in the vicinity of the Hospital or in the suburbs, particularly those who come from a distance. The housing officer should be notified of a vacant apartment, so that she, in turn, may notify someone in need of quarters. There is also a plan being worked out with the MGH Staff Wives Hospital Committee (Mrs. Richard Sweet, Chairman), toward the exchange or rental of available furniture. The housing officer will keep a list of such furniture as can be utilized.

The Penthouse is now under the care of the Distaff Club. One person is appointed to supervise the general housekeeping and the replenishing of supplies. She will also give permission to any eligible group who wishes to use the Penthouse for a gathering, provided she is notified at an early date.

The hospitality committee is a very important addition to our organization. It will send a note of welcome to each new member of the house staff and his wife and family. This welcome will include information on how help may be obtained in finding an apartment, a plan of Boston if the newcomers are strangers to this part of the country, and an introduction to the activities of the Distaff Club. This committee will be responsible for sending out cards when special occasions arise. A news bulletin, also, will be printed at various intervals and sent to the members. In this way we hope to foster friendliness among our members. If we all get to know each other better, our organization will become more active and vital.

There is a problem involved in finding people to care for the children of our members who would like to attend the meetings of the Distaff Club and also give their services to one of the Volunteer Groups in the Hospital. At the moment, the assistance of the student nurses is available by calling LA 3-8200, Extension 314. Members of the Club would like to install another service to help solve the problems of those who require baby sitters when the existing service fails.

The meetings of the Distaff Club will be held on the first Wednesday of each month, and will include social as well as business meetings. Meetings in prospect are a Spring Picnic for members who are leaving the Hospital and those arriving, and a Spring Fashion Show. During the summer no official business meetings will be held, but we hope to entertain the members at parties.

At this time it is always propitious to remind members that dues of the Distaff Club are two dollars for one year, one dollar for half a year. Our treasurer is Mrs. John Binion, and she would appreciate receiving your contributions.

Ladies' Advisory Committee to the School of Nursing

The Annual Meeting of the Ladies' Advisory Committee to the School of Nursing was held in Miss Sleeper's office on Tuesday, March 24. Miss Dorothy Bartol, Chairman of the Nominating Committee, presented the following report, which was accepted and sent to the Trustees for approval:

Dr. Dean A. Clark, Hospital Administration representative
For a term of 3 years
Mrs. Lloyd D. Brace, Chairman
Dr. Rita M. Kelley, Medical Staff representative
For a term of 5 years
Mrs. Van Courtlandt Elliott, member of the Committee
Mrs. Harris Fahnestock, member of the Committee

The Committee extended a sincere and unanimous vote of thanks to Mrs. W. K. Jordan, retiring Chairman, for her progressive leadership during the past six years. Her previous experience in the field of liberal education and her sound judgment have been of inestimable value to Miss Sleeper. Her enthusiasm for the School itself and her keen grasp of its problems have made her a stimulating Chairman of the Committee.

The Ladies' Advisory Committee has been enlarged to include: "At least 4 representatives from the community at large, and in addition representatives from the field of education and health"

Fabian Bachrach

NO. 40 IN A SERIES OF STAFF PHOTOGRAPHS
MR. FRANCIS S. HILL, DIRECTOR
MASSACHUSETTS EYE & EAR INFIRMARY

together with "3 members of the Alumnae Association of the M.G.H. School of Nursing and one member of the Medical Staff of the Hospital." Besides these elected members of the Committee, there are 3 ex officio members: "One representative of the Ladies' Visiting Committee of the Hospital, the General Director of the Hospital or his representative, and the Director of the School of Nursing."

Mrs. Jordan and the Committee felt that, due to the changes in and the growth of nursing education during the past ten to fifteen years, a new plan of organization should be set up and the purposes of the Committee clearly stated. This was done in 1952 and the plan was sent to the Trustees for approval. As these purposes may be of interest to other groups in the Hospital and will explain the work of the Committee and its plans for future development and program, they are set forth here.

PURPOSES

1. To study the over-all educational program of the Massachusetts General Hospital; to study the needs of the School of Nursing and ways of improving its curriculum, personnel, and program; and to consider problems of Nursing Service in the Hospital as they influence the education of nurses.
2. To interpret the purposes and program of the School of Nursing to the public.
3. To make known community opinions and needs to the Director of the School.
4. To make reports of the progress and the needs of the School of Nursing to the Trustees' Committee on Nursing.

Each year the Committee has studied, along with other current business, one specific problem related directly to nursing education in the M.G.H. This past year a series of doctors and supervisors have spoken to the Committee on their specialties as they related to research at M.G.H. and their effect on nursing and nursing education. These discussions have been both informative and interesting and will be reviewed by the Committee at their May meeting.

New addresses:—

Dr. Edwin L. Cantlon (*E.S.* 1938), 220 South Virginia St., Reno, Nev.

Dr. David W. Compton (r.p. *An.* 1946), 1110 Harvard Ave., Seattle, Wash.

Dr. Jaime Cortázar (gr. stud. a. *M.* 1951), Apt. 101, Carrera 12 #24-66, Bogotá, Colombia.

Dr. Albert G. Engelbach (past a. dir.), 228 Commonwealth Ave., Boston 16, Mass.

Lt. John O. Esslinger, MC, USAR (a.r.s. *Or.* 1952), Tokyo Army Hospital, APO 1052, c/o Postmaster, San Francisco, Calif.

Dr. Freddy H. Frankel (r.p. *Psychiat.* 1953), 15 Friedland Ave., Cyrilbene, Johannesburg, South Africa.

Dr. S. Grant Holmes (*C.M.* 1943), 1606 East La Rua, Pensacola, Fla.

Dr. Theodore F. Hueter (res. fel. *Physics*), 43 Algonquin Rd., Newton, Mass.

Dr. Joseph Lentine (assoc. s. *Otolar.*), 15 Bay State Rd., Boston, Mass.

Dr. Terry E. Lilly, Jr. (*E.S.* 1943), 915 Argyle Bldg., Kansas City, Mo.

Lt. John W. Littlefield, MC, USNR (*M.* 1948), Oak Knoll Naval Hospital, Oakland, Calif.

Dr. Hugh A. MacMillan, Jr. (a.r.s. 1947), 1801 High St., Denver 18, Colo.

Dr. Roger W. Morrison (*E.S.* 1943), 65 Sunset Parkway, Asheville, N. C.

Dr. Edwin H. Mulford, II (a.r.s. *N.S.* 1947), 144 Golden Hill St., Bridgeport, Conn.

Dr. William Parson (c.r.p. 1942), University of Virginia, University, Va.

Lt. Paul S. Russell, Jr., MC, USAFR (*S.* 1949), 1601 Azalea St., Victoria, Tex.

Lt. Walter T. St. Goar, MC, USAFR (*M.* 1950), 21st Med. Group TAC, George Air Force Base, Victorville, Calif.

Dr. Truman G. Schnabel, Jr. (a.r.p. 1947), 209 Woodside Ave., Narberth, Pa.

Dr. James K. Stoddard (*E.M.* 1917), 1311 Delaware Ave., Wilmington 6, Del.

Dr. Marcy L. Sussman (r.p. *R.* 1930), 801 North Second Ave., Phoenix, Ariz.

Dr. Gray H. Twombly (*W.S.* 1932), 842 Park Ave., New York, N. Y.

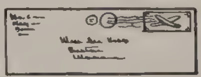
Brief bits:—

The Doctors Benedict sailed for Europe recently aboard the *Queen Mary*. Their schedule includes addresses to be given in France, Belgium, Switzerland, London, Birmingham, and Leeds. They expect to return by June 30.

Dr. Bradford Cannon was the speaker on Cancer Conference Day for the New Hampshire Medical Society, at the Carpenter Hotel, Manchester, N. H., on April 8. His topic was "Plastic operations in treatment of cancer".

Dr. and Mrs. John B. Graham returned in March after spending five months in Europe. Most of their time was spent in Stockholm, Sweden. While there, they conducted investigative work on one hundred cases of cancer of the cervix seen at the Radiumhemmet. After leaving Sweden they visited clinics in Denmark and England. Mrs. Graham spoke on "Cytologic diagnosis of cancer" at the University of Edinburgh and at the Royal College of Obstetrics and Gynaecology in London.

Dr. Robert J. Vitt (a.r.s. *Or.* 1951) announces the opening of his office in the Beebe Building, 210 South K Street, Tulare, California. His practice will be limited to orthopedic surgery.



A short note, giving us a new address for Dr. Joseph H. Boyes (*Path.* 1930), reads:

> Although your records show that I am the only MGH alumnus in the town of San Gabriel, California, this is because the metropolitan Los Angeles area consists of a large number of small communities surrounding the main city. My office address is 1401 South Hope Street, Los Angeles 15, therefore I cannot qualify in your "singleton" class.
>
> I have enjoyed receiving THE NEWS from Massachusetts General Hospital, and at various meetings throughout the country I often see many men whom I first met there. Next year we hope to visit Boston to again renew old acquaintances.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 124 Boston, Mass. June 1953

EDITOR'S NOTE: In our attempt to cover, in THE NEWS, every professional department in the Hospital, we have up to now omitted one very important (in fact, indispensable) individual without whom no department could function — to wit, the patient. That omission is herewith canceled out.

A few days ago Dr. Dean A. Clark sent us a communication which had come to him. In Dr. Clark's opinion the article deserved wide circulation and he suggested that we might like to publish it in THE NEWS. As soon as we had read it we agreed, enthusiastically, and we understand that it will also appear in an early issue of *Hospitals*.

The letter, transcribed below, was written by Dr. J. M. Mackintosh of the London School of Hygiene and Tropical Medicine (University of London), and was addressed to the members of the Hospital Administrators' Correspondence Club. The sketches which accompanied the letter were drawn by Miss B. E. M. C. Stillwell. They are reproduced on page 8 of this issue.

Here is the letter:

ENEMIES OF THE PATIENT

Quite recently I was in a hospital where administrative efficiency had run mad. The patient was described officially as "a unit of sickness." Even in more humane hospitals, however, it is not a good thing to be a patient, unless one is ill. I once knew a man who was convalescent and he was able to move around fairly well in a large, crowded ward. I understand that he was mistaken for a ward attendant for several months! The story is also told of a young surgical intern who was believed to be a patient because of his diffidence in the wards. It is easy to tell when a patient is ill: he is either silent or he bleats like a little ewe lamb. When he becomes difficult and cantankerous, he is convalescent.

The patient in bed has enemies lurking amongst his many real friends in hospital. The first and greatest of these is:

(1) NOISE

He must be able to open and close his ears at will. In consideration of the noise going on by day and by night in many hospitals he will be tempted to keep them permanently closed. The main elements of this more or less constant hubbub are:—

(a) Elevators. These are called "lifts" in England and are so designed as to create the greatest possible noise over the largest possible area. Their gates clang, with a jangle of discord; the machinery, although housed far away in the basement, uses the shaft to trumpet its mechanical faults at all times, and finally the elevator is placed as close as possible to the patient area.

(b) Movable furniture. This consists of quite a number of things on squeaky wheels used to carry food or medical equipment and dressings or even (in the more primitive British hospitals) a pestilent substance called coal. There are many ways of making a noise with these trolleys. Perhaps the most effective and loudest is to bang them against doorposts and beds. Another successful method is to place cups, saucers, etc. on them in such a way that they rattle violently with every movement. [See illustration No. 1] Bed screens on wheels can be designed to give excruciating agony to sensitive patients. Even curtains on rails can be so maintained as to give constant irritation when they are moved on their runners.

(c) Other human beings in the hospital. Some of the noises cannot be altogether avoided: there are, for example, patients who are noisy by nature or illness, and there are those dear souls who carry on a conversation about their children or grandchildren across the ward. Unnecessary noise created by the staff is sometimes a just cause for complaint. [See illustration No. 2] Laughter and cheerfulness on part of nurses and attendants are great assets, but their ministrations can be overdone in the late evening; and then there is the intern who arrives on the ward at 2 a.m. after having had a pleasant evening at the local pub.

(d) Noises outside. In a recent issue of a newspaper I came across this letter from the Administrator and Secretary of one of the largest teaching hospitals in London. I think that you will agree that it is interesting and significant:

> Hospital noise
>
> You carried two letters last week from patients complaining of the noise made by cars and motorcycles starting up in the streets round this hospital. My Board of Governors are greatly concerned about this nuisance as they are well aware that this goes on until the small hours of the morning. Everyone realizes that this must be particularly trying for patients, but unfortunately the authorities who are responsible for controlling our parking places are not influenced by these considerations.
>
> About two years ago the police sited public parking places alongside the hospital and, in reply to our protest, informed us that it would practically take an Act of Parliament to have these parking places moved a short distance away from the hospital.
>
> Our problem would be greatly eased if a short section of the road at the back of the hospital could be turned into a private roadway and thereby closed at night. This is being considered at present by the local authority.
>
> T. F. W. Mackeown,
> Administrator and Secretary,
> University College Hospital,
> St. Pancras
>
> *Evening Standard*, 12.1.52

(2) EXCESSIVE LIGHT

He must be able to dim or black-out his eyes at will. There is nothing more trying for a patient who is sick in bed than a bright light full in his eyes. This may come from a window by day or a ceiling light by night. There is in England a historical reason for our failure to appreciate the importance of design in lighting. Years ago hospitals were stuffy, dangerous and full of smells. The sanitarians of the late nineteenth century were naturally anxious about light and ventilation and in hospital design they went to the extreme worship of cubic space. They provided enormous windows, ceilings of incredible height, and bright, draughty wards. These one can see today in almost any large general hospital. The ceilings are so high in fact that some of the four-bed rooms would be considerably larger if they were laid on their side. These sick rooms may be agreeable to visitors and even nurses and they lend a certain dignity to the view; but they are very annoying to patients, especially the unfortunate people who are fixed in frames or other apparatus. In most of our new or redesigned hospitals the beds are placed sideways to the windows and that is all to the good because it gives much more freedom to the patient and helps him to get away from the light, but how are we to improve the innumerable older hospitals where these changes are hardly possible? Outside blinds and shutters may give some relief but they tend to cover too great a window area. We often provide movable screens for patients out of doors and the principle of the adjustable shade which could be moved by the patient himself would be of value indoors also, especially when the bright light is shining on the bed.

Another method is to grow eyebrows sufficiently large, dark and bushy to act as eyeshades. [See illustration No. 3] This saves the hospital the trouble and expense of doing anything about it.

(3) LACK OF PRIVACY

This enemy appears in several forms, some material and others like malignant ghosts. When a patient lies in an open ward, especially if this has more than four beds, he must, if he is at all sensitive, feel the need at some time of the day to be by himself. A large room means that everything has to be shared by everybody, that every action may be seen by prying eyes. Movable screens, although useful for toilet and dressing purposes, do not meet the patient's real need for a little privacy. Probably the best method is to have curtains with fixed rails above each bed so that the patient can himself draw the curtains, partly or wholly, if only to screen himself from neighboring occupants. This is little protection against noise but it at least cuts off excessive light and the irritating feeling of constant movement.

Another enemy is that abominable anachronism known as the bed-pan. We are learning at last in many hospitals, in the interest of safety, quiet and efficiency, to provide special rooms for dressings and other personal attentions to patients. We have yet to learn in most hospitals that special rooms provided with toilet and lavatory basin are essential for the comfort for all but a few patients. There are, of course, emergencies and exceptional cases which have to be met but in the overwhelming majority, patients are far less exhausted and far more comfortable when they can be taken to an appropriately designed lavatory for washing and toilet.

In a very real sense this is an engineering problem rather than a medical or architectural one and it is high time we invited the engineer to advise us. I have never been able to understand why in hospital design and management, we are so reluctant to put the fundamental problems of *lifting* and *moving* to the engineer and bring him into our counsels. We are in the absurd position that in industry we can easily, almost without effort, lift one or a dozen wooden cases, weight 300 pounds apiece; but we still lack a design for lifting and moving a patient weighing perhaps 150 pounds or less. Modern methods of simple weight-raising apparatus should be studied and applied to the patient in bed. When that has been done the special room will replace the bed-pan for the vast majority of patients, and for mechanical lifting of a sick person a much more efficient apparatus, anatomically and physiologically, will meet the patient's needs at the bedside.

While we are on this subject of engineering facilities, I should like to refer to a simple device which would greatly ease the task of nurses and attendants and at the same time give the patient a sense of mobility — of being able to get about — which is so lacking at the present time. Every morning as I drive into London I see in our streets people delivering supplies of milk in bottles; the truck on which these bottles are stacked is far too heavy to be moved by any individual yet the milkman simply seizes a handle and presses a lever and off he goes happily trailing his milk truck behind him. It would surely be very easy, and in the long run inexpensive, to devise a simple apparatus of this kind to move beds. It is not necessary that it should be permanently attached to every bed but simply in the form of an electrically operated "jack and handle" to move beds from place to place. This would greatly ease the work of staff for both dressings and toilet operations. It would be great fun if we could get the patients to drive their own beds in suitable cases, especially in country hospitals with a large amount of space. [See illustration No. 4]

(4) LONELINESS

So far I have been quoting a few illustrations dealing only with the physical side of a patient's needs but, of course, that is not nearly enough; there are many enemies with much greater subtlety in the psychological field. I think we should speak first perhaps about loneliness. Most people who are no longer acutely ill feel that time goes rather slowly. On the other hand they are often quickly fatigued by conversation and also by frequent interference for one service and another. Even where visitors are most welcome, patients in hospital are easily tired by the effort of talking and of concentrating their minds on matters outside the hospital routine. On the other hand, it is notorious that many patients, adults as well as children, in single rooms are apt to become desperately lonely and miserable. Loneliness is an enemy, but excessive attention, fussiness and interference are almost as vicious. The ideal is to strike a balance between the two according to the patient's needs and wishes. It is sometimes not realized that a patient can be as lonely in a crowded ward as in a separate room.

In many cases patients are worried by lack of a reasonably continuous period for sleep. It has been said bitterly that a patient's working hours in hospital are from 4 a.m. to 10 p.m. and this indictment is true enough where there are innumerable petty services, examinations and consultations to prevent the patient having continuity of rest. This problem deserves close study at regular intervals in every nursing unit. Another serious enemy to the patient's well-being in hospital is a sense of insecurity: this is partly due to doubt about the course of the illness but even more often to the lack of somebody to sit down and answer simple questions from time to time. In one of our leading newspapers not very long ago there was a good deal of correspondence about the anxiety that patients feel before an operation or a confinement and a number of patients complained that if only some kindly person had told them what to expect, it would have made all the difference to their comfort and relieved any apprehension. This is by no means always the fault of the administrative services in the hospital. There is in England, at any rate, a long tradition of silence amounting to secrecy about medical matters. I wish we could give more study to the question of what a patient should be told. The facile attempts to allay fears by telling nothing in soothing words is a greater irritation to most patients than mere silence. Patients do not like to be treated like small children; and incidentally even small children need some words of explanation before anything happens to them in hospital.

In all my enquiries about patient amenities I have been struck again and again by complaints about the conduct of confinements in hospital. One young mother after another has told me plaintively that she was left alone and in fear about the time of the delivery of the child. I am satisfied on enquiry that the overwhelming majority of these complaints are due to a misunderstanding which could easily be cleared up when the mother has recovered from the immediate effects of labour. If I am right what seems to happen is this: that towards the end of the second stage the patient, who is in any case in pain and discomfort, is given an anaesthetic of one kind or another. Even the mildest anaesthesia is sufficient for considerable disorientation; the patient no longer sees clearly the people who are around her and she imagines that she is entirely alone. Very often some kind of explanation is given before the baby is born and the surgeon or nurse says comfortingly, "I will be with you at the time." In spite of this, apprehension quickly turns to resentment when she goes over her experiences after the baby is born. Now if someone were to sit beside her for a few minutes and explain in clear enough language what happened and say "I was there", then her apprehension and resentment would be quickly dissolved and so we should be relieved of many unnecessary complaints.

We have already set out in many volumes the qualities of a good administrator. It might be valuable to study the qualities of a good patient for a change.

(1) A patient's education should conform to the standards established by the American College. He should be conversant with the current trends of medical treatment and thoroughly posted on everything pertaining to the sickroom.

(2) He should have a pleasant personality and so inspire confidence in his medical and nursing attendants.

(3) Sense of importance. He must be mindful of the fact that he is the person about whom the entire institution revolves and that his own comfort comes first. [See illustration No. 5]

(4) Tact and diplomacy. Probably no vocation, other than being a patient, requires more tact and discretion in handling people. There are nurses to be considered and attendants who bring tepid meals, often poorly served; there is the need for affability during the farce of the consultant's weekly round at the head of a column of lesser personages. A colleague of mine, himself recently in hospital, said, "The patient is so overawed that he asks none of the questions he would like to, and even if he did it is doubtful if he would get a reasonable answer." The cultivated air of detachment is not reassuring to the patient who has, after all, some interest in his illness and deserves a little recognition in any discussion round the bedside.

(5) Patience. This is obviously the basic need of the patient. There is little to be gained, and much to be lost, by throwing the bed-pan out of the window. [See illustration No. 6]

(6) A controlled sense of humour. The patient may find considerable scope for entertainment but when the matron,

or principal nurse, slips on a discarded banana skin his laughter should not be too obvious.

(7) A sense of fairness. You cannot be a good patient unless you can see your position in relation to the staff and the other patients.

These are merely light illustrations but you will appreciate that they conceal a good deal of serious thought beneath. The administrator's main duty to patients, I feel, is to make sure that they have a sense of confidence in the hospital and all of its staff. This can be done by careful education and explanation before unusual or frightening events occur, and when a sick person has to undergo an operation it is of vital importance to tell him about it and to say in Browning's words:

"You will wake, and remember, and understand."

* * *

Dr. Edward D. Churchill was made an Honorary Member of the Korean Communications Zone Medical and Dental Society on April 4.

* * *

Research activities, June 30, 1952 — *December* 31, 1952 will be available in the Research Committee office to any subscriber of THE NEWS who is interested in receiving a copy.

This pamphlet contains a listing of research publications, department by department, written by MGH staff members during the period covered, and titles of papers already accepted but not yet published during this period. It also contains a listing of projects for which grants were obtained during 1952.

In addition, there are reprints of articles that have appeared in THE NEWS, which summarize representative departmental programs.

The Board of Trustees, at their meetings on April 17 and May 1, voted:

To promote:

Dr. Howard Rasmussen from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1.

To appoint:

Dr. Ralph C. Darling, Jr. as Intern on the Children's Medical Service, beginning July 1;

Dr. Richard R. Evans as Assistant in Medicine;

Mr. Frederick D. Foster as an Assistant Director, effective as of April 1;

Dr. Charles F. Goodnough as Assistant Resident in Anesthesia for one year, beginning October 1;

Dr. Samuel L. Katz as Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1954;

Dr. Stephen M. Krane as a Dalton Scholar, from July 1 through December 31;

Dr. Jane S. Rasmussen as Intern on the Children's Medical Service, beginning July 1;

Dr. Désiré J. Rebello as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Raymond D. Sphire as Assistant Resident in Anesthesia, beginning July 1;

Dr. Henry F. Zartman as Intern on the Children's Medical Service, beginning July 1.

At their meetings on April 8, 15, and 22, the General Executive Committee voted to appoint:

Dr. Len H. Andrus as Graduate Student Assistant and Clinical Fellow in Dermatology, beginning May 1;

Dr. Alexander S. Macmillan, Jr. as Clinical Fellow in Radiology, on leave of absence at Oak Ridge Research Hospital, for the period July 1 through December 31;

Dr. Maria L. Martinez as Clinical Fellow in Dentistry for one year, beginning April 15;

Dr. Miguel A. Mora as Clinical Fellow in Psychiatry, beginning July 1;

Dr. Edith Simandl as a Fellow in Anesthesia for one year, beginning September 1;

Dr. Warren B. Weil as Clinical Fellow in Medicine, to work with Dr. Harriet L. Hardy, for the period April 20 through October 31.

At meetings held earlier, the General Executive Committee voted to appoint:

Dr. Teruyoshi Hashiba as Clinical and Research Fellow in Neurosurgery for one year, beginning February 1;

Dr. Suzanne Leroy-Wilkin as a Fellow in Anesthesia for one year, beginning September 1;

Dr. Henry Neiditsch as a Fellow in Anesthesia, beginning September 1.

* * *

National Hospital Day was observed as a special visiting day at M.G.H. As the guests entered the White Building they were greeted by Dr. Clark and the Assistant Directors, who spoke briefly on a few outstanding features concerning Massachusetts General. Following this, the visitors were taken in groups on a tour of the Hospital, with MGH Volunteers acting as guides. The route included the Emergency Ward, the Overnight Ward, the Chapel, a solarium on White 7, an Operating Room, the Ether Dome, and the Research Building, ending at Bartlett Hall where refreshments were served.

* * *

THE ROBERT W. LOVETT MEMORIAL LABORATORY

THE BIOLOGY OF CONNECTIVE TISSUE

In 1929 the Arthritis Research Unit was created under the joint aegis of the Harvard Medical School and the Massachusetts General Hospital for the purpose of studying articular disease. This unit was organized and is directed by Dr. Walter Bauer. In the course of 24 years the group has undertaken extensive detailed clinical studies on the natural history of rheumatic disease and has, in addition, made contributions to our knowledge of the anatomy and physiology of articulations and the properties of connective tissue — that tissue which appears to be intimately involved in the rheumatic process.

One very significant feature of the work of this unit is its necessarily broad scope. The large group of disorders involved include rheumatic fever, rheumatoid arthritis, lupus erythematosus disseminatus, scleroderma, dermatomyositis, periarteritis nodosa, degenerative joint disease, and allied disorders, many of which are severely crippling as well as fatal. Not the least of the problems within our province is the aging process itself. Most of these maladies are generalized, constitutional in nature, and are rarely localized to a single organ or tissue.

Despite the concentrated efforts of this and many similar research groups, the nature of rheumatic and allied illnesses is still a mystery. To quote Dr. Bauer from the 1950 report to the MGH NEWS on the Arthritis Unit: "The failure to disclose specific leads as to the etiology or pathogenesis in the clinical studies of rheumatoid arthritis and the related diseases has . . . reoriented us to a more fundamental approach — namely, a characterization of the tissues involved, so that as the normal is defined we can better interpret the alterations produced by the disease. Such an approach necessitates also a study of the reactions of tissues in vivo and in vitro and of the individual as a whole to insults of various types. These studies will be pursued in the years to come."

During the past 5 years Dr. Bauer has brought together a small nucleus of laboratory investigators including an organic chemist, enzyme chemist, physical chemist, biologist, and pathologist for the purpose of studying the nature of connective tissues, their reactivity, their physiological significance, and their derangements.

The connective tissue which fills the space between the cells and organs throughout the body is composed of a variety of proteins, carbohydrates, and lipids, in addition to its own particular cell types. In some instances it is highly differentiated — for example, into bone, cartilage, and basement membranes. It has been rather generally considered to be the excelsior of the body. Until relatively recently little thought has been given to the physiological significance of this ubiquitous tissue other than to its obvious mechanical functions.

Several evident facts indicate that the connective tissue is not just so much inert stuffing, but may play an important role in both fluid transport and embryogenesis. It is obviously involved intimately in wound healing and pathological sclerosis, and plays a significant part in limiting the spread of infection. The fact that in every organ and tissue in the body there is a layer of extracellular substance, often loose and thick, frequently compact and thin, between cells and blood and lymph vessels suggests the possibility of modulation of the flow of fluid nutrients and metabolic products between cells and plasma. There are no free extracellular spaces through which fluid trickles freely. The presence of this extracellular gel composed of highly charged proteins, carbohydrate polymers, and lipids makes very real the possibility that the extracellular substance may function in an ion exchange capacity and as a selective semipermeable barrier, passing some molecules freely, barring others completely, and changing the rate of diffusion of still others. There is a growing body of experimental evidence indicating such activity. It is also known that certain hormones can markedly influence the composition of the extracellular ground substance, also that these materials are profoundly modified with age. It is reasonable to presume that any factors which interfere with the flow of electrolytes, nutrients, or water to the cells, or with the removal of waste products, could exert considerable influence on cellular function.

The importance of embryonic connective tissue in the development of the various organs and other structures has become increasingly evident. Some of the mechanisms have been dramatically demonstrated by Paul Weiss, University of Chicago embryologist, and have led to practical applications in the treatment of severed nerves. Operation of these mechanisms in the general processes of wound healing are yet to be exploited.

The author entered this field via an interest in rheumatic fever, but felt that further advances in unraveling the pathogenesis of the disease required the application of principles and methods which would attack more fundamentally the chemical and structural processes involved. An early introduction to the biophysical and chemical approaches made it evident that an understanding of tissue abnormalities on a molecular or colloidal level required a thorough knowledge of the nature of the normal structures and the range of their reactivities. The first step was a study of the characteristics of the normal purified components of connective tissue. A firm foundation had already been laid by the chemists who had made intensive analytical studies of collagen — that all-pervading fibrous protein (which comprises upwards of 30 percent of the protein of the mammalian body), and of the mucopolysaccharides — the carbohydrate components of the connective tissue ground substances. A good beginning had already been made in the study of the molecular and colloidal organization of collagen by x-ray diffraction and electron microscopy, particularly in the Biology Department of Professor F. O. Schmitt at M.I.T. where the author served his apprenticeship and with which department he is still associated.

The advent of the new Research Building at the Hospital made available to the Arthritis Unit the 2d floor for the study of connective tissues and their diseases. Here it has been possible to provide additional laboratories other than those concerned with clinical investigation. We now have a completely equipped and well staffed organic Chemistry Unit under the direction of Dr. Roger Jeanloz. He is engaged in the successful unraveling of the structure of the acid mucopolysaccharides. Dr. Morris Soodak continues with the study of the enzyme systems and substrates involved in the synthesis of these substances. Dr. Karl Schmid, formerly a member of the University Laboratory of Physical Chemistry, Harvard Medical School, is in charge of the Physical Chemistry Laboratory in the Research Building. He is working on the purification and characterization of the carbohydrate-containing proteins (glycoproteins) of the blood and tissues. Dr. David Kahn, our pathologist, and Dr. Peter Kulka, his predecessor, are attempting to provide a more complete and instructive picture of the pathological processes in the so-called "connective tissue diseases". In addition, there are several research fellows working on individual aspects of these problems: Dr. Allan Dixon, from England, is trying to split off and characterize the carbohydrates of the purified blood glycoproteins isolated by Karl Schmid; Dr. Pierre Stoffyn, from Belgium, is working on the structure of chondroitin sulfate; and Dr. Eino Kulonen, from Finland, is studying the chemistry of "procollagen", an extract of connective tissues. In subsequent publications in this series the purposes, results, and directions of these studies will be discussed in detail by some of the workers mentioned.

The aspects of the problem undertaken in the author's laboratory are concerned with (1) the physical and chemical characterization of collagen from various members of the animal kingdom, ranging from the sponge to man; (2) an intensive study of the mechanism of fibrogenesis, or the formation of collagen, undertaken in collaboration with Professor F. O. Schmitt of M.I.T. and Dr. J. H. Highberger of the United Shoe Machinery Corporation; and (3) an attempt to define the range of reactivity of purified and native collagen by studying the influence of a variety of known reagents including acids, alkalis, swelling agents, and enzymes, such as collagenase, proteinase, hyaluronidase, etc. The laboratory is equipped to do electron microscopy, several forms of light microscopy, analytical chemistry, histochemistry, and tissue culture. We are not committed to any one technique and will develop any procedure within reason which is required for the solution of the problem. The electron microscope happened to be admirably suited for the study of certain aspects of the above mentioned problems because collagen fibrils have a unique fingerprint in the colloidal range of dimensions, namely, a periodic striation with distinctive intraperiod banding which repeats itself with remarkable regularity about every 640 angstrom units or .000064 millimeters. This pattern is well below the resolving power of the light microscope. It appears to be characteristic of collagen throughout the animal kingdom with few known exceptions. By studying the effect of chemical, physical, and physiological agencies on this characteristic pattern we are able to learn a great deal concerning the structure and reactivity of this protein.

Our most exciting problem is the study of the fibrogenesis of collagen. Following the lead of some simple brilliant experiments of Nageotte in France in the early part of the century, wherein he showed that certain forms of collagen could be dissolved in dilute acid and reprecipitated as fibers by salt, we were able to demonstrate with the electron microscope that such reprecipitated fibers had the same distinctive axial periodicity in all its detail as did the original native collagen. This result suggested that the building blocks of collagen, the large molecules in solution, could be polymerized to form a highly organized fibril structurally identical to native collagen solely through the alteration of the ionic environment — in the absence of cells or enzyme systems. This in vitro phenomenon serves as a working model, probably highly oversimplified, of the process whereby collagen may be organized into fibers in the extra cellular spaces of the connective tissue. We have learned how to control within limits the type of fibril precipitated from solution in terms of the type of axial periodicity obtained, through the intervention of the acid glycoprotein of the blood, mentioned previously, and of adenosine triphosphoric acid (ATP) in such a way as to shed significant light on the characteristics of the collagen molecule and mechanisms of their polymerization. We have extracted certain soluble collagen fractions from connective tissue with mildly alkaline buffers from which can be reconstituted fibers and "crystals" having the same structure as those produced by addition of acid glycoprotein in one case or ATP in the other to simple acid solutions of rat tail tendon collagen. It would seem, at this time, that the collagen molecule itself contains all the essential qualities needed to form the several types of periodically banded fibrils; materials like glycoproteins and ATP act as polymerizing agents. Chemical analyses are in progress to determine the carbohydrate moiety and possible nucleotide content of the native collagen and that precipitated from its extracts. There exists the possibility that these or similar fibril-inducing agents may play a role in the genesis of collagen. Also under study are the dimensions and properties of the extracted collagen with the now classical physical chemical tools, such as the ultra centrifuge. It is worthy of note here that the electron microscope is being used as one important tool among many in the study of a dynamic process.

There is little need to point out the general importance of fibrogenesis in the fundamental process of structure formation in cells and tissues, and of the genesis of collagen fibers in particular in wound healing and pathological sclerosis. The present studies on fibrogenesis in the test tube are to be followed up by investigation of this process in tissues in which it can be experimentally controlled, as in healing wounds in normal and scorbutic animals (already begun), in the coxcomb of the rooster under the influence of the sex hormones, in tissue culture, and in certain tumors. Other members of our group are interested in the nature and synthesis of the mucopolysaccharides and glycoproteins in these tissues, and a joint effort is being planned for an over-all attack on one of these biologically reactive systems.

It is hoped that the establishment of a basic body of knowledge concerning the nature and behavior of the connective tissues will provide a broad base from which to logically attack the problems of their function and malfunction, thereby contributing to our understanding and treatment of these mysterious maladies.

Jerome Gross, M.D.,
Associate Biologist

Bartlett Hall, our new 9-floor, apartment-type nurses' residence was opened for inspection on April 29 — only a few days over the time schedule of one year set for its completion.

We intended to give you a description of the building, its furnishings, and equipment for this issue of THE NEWS; but, as we take our typewriter in hand, we find ourselves utterly stumped. Where to begin? Where to end? In an entire page of print we could not begin to give even a hint of its charm.

So — instead of making a futile effort (and it *would* be futile, at best) — we simply say, if you haven't yet been inside Bartlett Hall, avail yourself of the first opportunity to see it.

Congratulations again to the MGH family! A highly successful food sale was held on May 7 in the Brick Corridor. Nominally under the auspices of the Nursing Department, it actually encompassed all the departments in the Hospital and even included the surrounding community.

It is impossible to list all who gave so generously of time, labor, supplies, food, or money. The goal was far surpassed. At the last tally the sale realized $483.75. We thank you all for your splendid cooperation and support. The occupants of Bartlett Hall can now enjoy good listening with the FM radios in the sitting rooms.

The "Homecoming" celebration of the Massachusetts General Hospital Nurses' Alumnae Association will take place this year on June 5-7. A program of the many exciting and interesting events scheduled for each of the three days is posted on the bulletin board near the foot of Treadwell stairs.

* * *

New addresses:—

Dr. Albert G. Engelbach (past a. dir.), 1801 Calvert St., N. W., Washington 9, D. C.
Dr. Nathan O. Kaplan (past a. res. chem.), McCollum-Pratt Institute, Johns Hopkins University, Baltimore 18, Md.
Dr. Louis Kunian (clin. a. *M.*), 8 Broad St., Lynn, Mass.
Dr. John R. Mote (*W.M.* 1937), Chemical Specialties Co., Inc., 22 E. 40th St., New York, N. Y.
Dr. John S. Robey (*C.M.* 1953), Crowe Agency, Mont.
Dr. David A. Sampson (a.r.p. *R.* 1937), 203 Suburban Square Bldg., Ardmore, Pa.

MASSACHUSETTS EYE & EAR INFIRMARY

Members of the Infirmary staff traveled to New Orleans to attend Otolaryngological Meetings and Board examinations held during the third and fourth weeks in April. Dr. LeRoy A. Schall, Dr. Harris P. Mosher, Dr. Philip E. Meltzer, and Dr. Werner Mueller attended sessions of the American Board of Otolaryngology for the examinations given from April 19 to 22.

Dr. Schall, Chief of our Ear, Nose and Throat Service, retired as President of the Board and was succeeded by Dr. Frederick T. Hill (*Aural* 1916). Dr. Gordon D. Hoople (*Otolar.* 1926) was elected Vice President and Dr. George F. Reed (a. *Otolar.*) was elected as an Assistant to the Board.

Since so many of his former students and residents were in New Orleans for the conference and Board meetings, it was a fitting opportunity to pay a tribute to Dr. Harris P. Mosher, former Chief of the Otolaryngology Department and now a member of the consulting staff. Thirty persons attended the breakfast held in his honor at the Roosevelt Hotel on April 27.

Some fourteen members of the Otolaryngological staff participated in the various meetings that took place from April 24 through May 2.

Dr. Schall presented a paper before the American Laryngological Association on the subject "The laminagraph as an aid in the diagnosis of diseases of the larynx". The co-authors of the paper were Dr. Alexander S. Macmillan, Infirmary Roentgenologist, and Dr. Paul M. G. St. Aubin, Resident in Radiology at Massachusetts General Hospital.

Dr. Werner Mueller, Director of the Mosher Laboratory, gave a paper before the American Laryngological, Rhinological and Otological Society. The topic was "Selection of hearing aids as an office procedure".

Dr. Moses H. Lurie, Surgeon in Otolaryngology, and Dr. Philip E. Meltzer, Surgeon in Charge of the Winthrop Foundation, read papers before the American Otological Society. Dr. Lurie's work was entitled "The ototoxicity of dihydrostreptomycin and neomycin". His co-author was Joseph E. Hawkins, Jr., Ph.D. Dr. Meltzer's subject was "Unrecognized cholesteatosis in children".

At the election of officers of the Triological Society, Dr. Schall was elected President for the coming year and Dr. Kenneth Day (*Otolar.* 1924) was chosen President-Elect.

Mr. Alan Feldman, Audiologist for the Winthrop Foundation for the Deaf, spoke before the Worcester Hearing League on May 8. Mr. Feldman discussed "Rehabilitation of hearing-impaired children and adults".

Dr. Edwin B. Dunphy, Chief of the Ophthalmic Service, traveled in Italy during the month of April. Dr. Dunphy visited several eye clinics. At the University of Parma he presented a paper on "The use of radioactive phosphorus (P^{32}) in the diagnosis of ocular neoplasms".

BIOGLET

Dr. Robert B. Rosen, Intern on the Children's Medical Service—born in Brooklyn, N. Y., August 13, 1921; military service: served with the 8th and 9th Air Forces in the ETO as Intelligence Officer, 1942-45; A.B., Brooklyn College, 1947; M.D., University of Rochester School of Medicine and Dentistry, 1952; home: Brooklyn, N. Y.

With some misgivings I have decided to make my contribution to THE NEWS an account of my own tour of duty in the Army, which in all honesty I must admit did me a lot of good. Since I was never stationed in this country, I was never exposed to the problems of dealing with difficult colonels, parades, dress uniforms, etc. which seem to have plagued our friend "Anon." whose article appeared in the May issue of THE NEWS. I can say that in the somewhat more relaxed atmosphere of overseas theatres, especially in the combat zones, these are not major problems and anyone schooled in the art of outwitting the administrative staff at the M.G.H. should have no trouble with a little Army brass.

All I can say about my brief stay at Fort Sam Houston is that they really do try to give credit for your residency training and to assign you according to your specialty. Certainly no one with whom I'm acquainted was grossly misassigned. Naturally, the more training you have the better chance you have to land the good jobs; but I saw several fast talkers, who were subsequently able to back up their claims, land very good jobs with only one year's training. In my own case, I got an assignment to a large hospital in Japan, albeit not one of the major surgical centers, where I was in charge of the general surgical patients.

Actually, our main task in that hospital was plastic reconstruction of Korean casualties. Fortunately, our Chief of Surgery was Lt. Col. Dave Fisher, whom some will remember from his year here with Dr. Cannon. He is a capable plastic surgeon and ran a very good service, where I certainly learned a lot of surgery. Moreover, I soon realized that most Army medical men of any worth are still primarily doctors and they treat you as much like what you have been used to in civilian life as possible. Aside from the surgical experience I was getting in Kobe, Japan, I was exposed to many other unusual and valuable situations and problems which are never encountered in this country. One of the clinical situations of note was the great prevalence of narcotic addiction in the troops, since Kobe is the narcotic center of the Far East now that Shanghai is out of the picture. During eight months there I saw at least half a dozen cases of acute intoxication from intravenous overdoses of heroin — the prevalent drug. A recent article in the *New England Journal of Medicine* gives an account of one of these cases in our hospital at that time. Heroin was so easily available that practically every rickshaw driver had it for sale, and we frequently had as many as thirty patients in the hospital who had become addicted from outside sources while being treated for other problems.

Of not inconsiderable interest was the opportunity to get to know the Japanese people, who ultimately must be our strongest allies if we are to succeed in Asia. Like all Asians, the Japanese are faced with the day-to-day problem of finding enough to eat, and one can't begin to understand how they look at political problems until he understands this more fundamental problem of the battle for survival which the Japanese must continuously wage. Our training leaves too little time for the consideration of this issue, and perhaps one of the most important things that the Army can do for us is to expose us to this problem and afford us a little time to think it through.

Finally, in Japan I had a chance to do a good deal of sight-seeing in what was to me one of the most beautiful countries in the world. At the time I was there the Army was running most of the large Japanese resorts as rest hotels, and you could travel anywhere in Japan and stay in a beautiful hotel for a dollar a day and eat steak and sea food for fifty cents a meal. At present most of these hotels have been turned back again to the Japanese, I understand, but a good many are still open to service personnel.

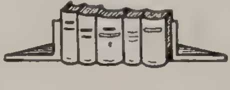
After eight months in Japan I was sent to Korea, where again I was on duty in a hospital — the first being the 121st Evacuation Hospital, outside Seoul. I hit there just at the time of the Heartbreak Ridge and Punchbowl battles of the fall of 1951. Nothing else that has ever happened to me approaches the emotional impact of landing in that Evacuation Hospital which handled 10,000 in that six-weeks' period. The forward units were completely swamped, and we were able to keep only the most serious cases that they passed on. Despite the strain, it was an experience I shall never forget. Needless to say, I had all the work any surgeon could want, although the rush of cases during that particular period prevented careful follow-up and some of the more complicated technical procedures which we were able to carry out when things became quieter later on.

In January of 1952 I was sent up to a Mobile Army Surgical Hospital on the eastern end of the front, about 15 miles from the line. While there we were able to get acquainted with most of the units we were caring for, which enabled us to identify ourselves more closely with the troops doing the fighting, and consequently made our work much more interesting, as we were able to follow the action. Our MASH had about 200 beds. We had four helicopters attached to our unit, which evacuated men right from the line in about twenty minutes. As a result, we were getting our casualties much sooner than was the usual case in World War II and were able to save a good many limbs by artery repair which would have been lost with longer delay. This vascular surgery was only one of the many clinical problems we handled, all of which will be of great value in civilian practice. Another lucky break for me was that the Surgical Research Team from Walter Reed Hospital happened to be stationed with us and we learned a great deal from their studies of shock and lower nephron nephrosis.

Certainly, the Army is willing to provide almost any aid in the way of equipment or consultant advice you might want. Moreover, the theatre surgeons interfered very little in what we did as long as our work was going well. Incidentally, it is of interest that Dr. Churchill's TBMED [Technical Bulletin Medical] on the management of battle casualties is still pretty much the standard text in this war, as it was in the last.

Korea is a miserable place and unbelievably oppressive during times of inactivity, but in the main I was occupied and doing interesting and worth-while work. I look back upon my year there as time well spent, even if time I definitely do not want to put in again. In fact, this is a good summary of my whole tour of Army duty, and I don't see why others expecting to be called can't do as well.

James M. Shannon, M.D.,
Assistant Resident in Surgery



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, *please,* remember to include that information. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Allergy

Burrage, W. S., and Irwin, J. W.
Microscopic observations of the intrahepatic circulation of living guinea pigs before and during anaphylaxis.
Ann. Allergy 11:137-142.

Burrage, W. S., and Irwin, J. W.
The role of cortisone in the treatment of severe bronchial asthma.
New England J. Med. 248:679-682.

Anesthesia

Beecher, H. K.
Rejoinder to Dr. James D. Hardy, Dr. Harold G. Wolff, and Miss Helen Goodell (Pain — Controlled and uncontrolled, Science 117:164-165).
Science 117:166-167.

Katzman, R., Villee, C. A., and Beecher, H. K.
Effect of increased carbon dioxide concentrations in fixed acid production *in vitro.*
Am. J. Physiol. 172:317-323.

Biochemistry

Ryan, K. J., and Engel, L. L.
The interconversion of estrone and estradiol by human tissue slices.
Endocrinology 52:287-291.

Ryan, K. J., and Engel, L. L.
The interconversion of estrone and estradiol-17B by rat liver slices.
Endocrinology 52:277-286.

General Medicine

Farnsworth, D. L.
Medical progress: Health in colleges.
New England J. Med. 248:543-552.

Jones, C. M., Benson, J. A., Jr., and Roque, A. L.
Whipple's disease: Report of a case with special reference to histochemical studies of biopsy material and therapeutic results of corticosteroid therapy.
New England J. Med. 248:665-670.

Stare, F. J., Waddell, W. R., and Geyer, R. P.
Current therapeutics, LXIV. — Clinical uses of fat emulsions.
Practitioner 170:413-418.

Stare, F. J., Waddell, W. R., Mann, G. V., and Van Itallie, T. B.
Nutrition.
In Medical progress, Philadelphia, The Blackiston Company, chap. 6.

Neurology, Neurosurgery, and Psychiatry

Brown, M. R.
Biographic sketch of Arnold Pick.
In Founders of neurology, Springfield, Ohio, Charles C. Thomas, pp. 202-204.

Brown, M. R. (with Tauber, L. N.)
Biographic sketch of Karoly Schaffer.
In Founders of neurology, Springfield, Ohio, Charles C. Thomas, pp. 207-211.

Brown, M. R.
Headache.
In Current therapy—1953, Philadelphia, W. B. Saunders Company, p. 625.

Pathology

Burt, A. S., and Castleman, B.
Some histological effects of estrogens and castration on the anterior pituitary in women with carcinoma of the breast.
Cancer 6: 236-247.

Physical Medicine

Watkins, A. L.
Betaine and glycocyamine in treatment of poliomyelitis.
New England J. Med. 248:621-623.
Watkins, A. L.
Serum neuritis: Analysis of sixteen cases.
Arch. Phys. Med. 34:231-234.
Watkins, A. L.
Team training for upper-extremity prosthetic service. (Editorial)
Arch. Phys. Med. 34:249-250.

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

On Wednesday, May 6, the MGH Staff Wives Hospital Committee held its annual meeting in the living room of the Walcott House. Coffee was served at 10:00 A.M., followed by the business meeting at 10:30. Mrs. Joseph C. Aub addressed the group briefly, announcing that a summary of this past year's activities would be mailed to each member within a few days. Mrs. Robert S. Palmer, Chairman of the Nominating Committee, then presented the slate for the coming year. The following officers were elected:

Chairman	Mrs. Edward D. Churchill
Vice Chairman	Mrs. Howard Ulfelder
Recording and Corresponding Secretary	Mrs. E. Peirson Richardson, Jr.
Secretary of the Executive Committee	Mrs. Grant V. Rodkey
Treasurer	Mrs. Bradford Cannon
Publicity	Mrs. John W. Raker
Hospital Projects	Mrs. Richard H. Sweet
Hospitality	Mrs. Joseph C. Aub
Volunteer Service	Mrs. Charles B. Burbank

Following the election of officers, Dr. Henry K. Beecher gave a very interesting talk on "Stress".

On Saturday, May 23, a picnic was held at the home of Dr. and Mrs. Bradford Cannon in Lincoln. Members of the House Staff and their families, as well as doctors who are with us from abroad and their families, were invited. The hospitality of the Cannons and the charm of their lovely country place make this one of the outstanding parties of the year.

Under the auspices of the Music Committee, the M.I.T.-Harvard Choral Group graciously presented a program for patients in the Moseley Rotunda at 3 P.M. on Wednesday, May 27. Staff Wives assisted in the moving of patients who wished to attend the concert.

Mrs. Richard H. Sweet, who has been in charge of the collection of used furniture to be placed at the disposal of doctors from other lands who are here at M.G.H., reports she now has a limited amount to offer. Included in the furniture and other household necessities are a number of refrigerators. She may be reached at Longwood 6-5671 if you have any furniture, curtains, china, or other items you can contribute that would add to the comfort or attractiveness of a temporary home. If you are a visiting physician and have need of furnishings, your problem may be solved by telephoning Mrs. Sweet.

Mrs. William H. Sweet and Mrs. Charles W. Cheney will arrange and place flowers in different parts of the Hospital on Monday and Friday of each week. Anyone who may wish to donate flowers for this purpose may get in touch with Mrs. Sweet at Aspinwall 7-3717, or Mrs. Cheney at Kirkland 7-2977. Contributions will be deeply appreciated.

Distaff Club

On Wednesday, April 29, the members of the Distaff Club attended a travelogue on "Japan, Korea, and points beyond" presented by Dr. Edward D. Churchill. During the months of January and February, 1953, Dr. Churchill and Dr. Paul W. Sanger of Charlotte, North Carolina, visited hospitals at various points round the world. At the same time they took advantage of the excellent subject material available for the use of Kodachrome film. Dr. Churchill showed the group some beautiful sections of Japan, Korea, Thailand, India, and Greece, plus photographs taken from the airplane. With each picture there was a story concerning either the people or the country. Our group was taken on a most enjoyable trip by Dr. Churchill.

Brief bits:—

Dr. Louis Bakay took part in the 5th South American Congress of Neurosurgery, as guest of the Peruvian Government. The Congress was held in Lima, April 12-18.

Dr. Walter S. Burrage presented a motion picture before the American College of Allergists in Chicago on April 27. The film was prepared in the MGH Allergy Laboratory. Its title was "Microscopic observations of the intrahepatic circulation of living guinea pigs before and during anaphylaxis".

Dr. Edwin F. Cave lectured in New Haven on April 29 before the Connecticut State Medical Society. His subject was "Knee disability due to derangement of the patella".

Dr. Earle M. Chapman went to the American Goiter Association meeting, held in Chicago May 7-9, to give a paper on "Ten years' experience with radioactive iodine treatment".

Dr. John W. Irwin spoke before the American Academy of Pediatrics at the Statler Hotel in Boston on April 20. His subject was "ACTH and cortisone in pediatrics: Effects on allergic reactions".

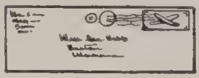
Dr. George D. Parker (*Dn.* 1939) announces the opening of his office for the practice of Dentistry and Dental Surgery at 138 Adams Street, Monte Vista, Colorado.

Dr. Judson A. Smith left the first of April for a five-weeks' vacation in Europe. He visited Italy, Sicily, the Isle of Capri, and France, and toured southern England by automobile. He flew the Atlantic both ways.

Dr. David Stafford-Clark, a Fellow in our Psychiatry Department in 1950 and now a member of the staff at Guy's Hospital in London, has sent us a copy of his new book, *Psychiatry to-day.* It is a 300-page volume, published by Pelican Books, and is available in this country.

Dr. William R. Waddell attended the third Middle East Medical Symposium at the American University of Beirut, Lebanon, April 17-19, and spoke on the subject "The role of intravenous fats". After staying there in Beirut with Dr. William D. Shorey (*E.S.* 1946) for a week after the meeting, he then enjoyed a short sight-seeing tour.

Dr. James C. White was invited to give the Hughlings Jackson Lecture at the Montreal Neurological Institute on May 13. His subject was "Conduction of pain in man: Observations on its afferent pathways within the spinal cord and visceral nerves".



Here is news of the interesting work being done in Guatemala by Dr. Rodolfo E. Herrera (*E.S.* 1943) — our "singleton" past resident down there:

Five years have gone by since I started practising in Guatemala City. They have gone by fast, although the pace here is slow if judged on the basis of West Surgical standards.

My activities have been divided between ward and private practice. Our public health system is so set up that it is easy to be connected with it. As a result, I have been president of the Guatemalan Antituberculosis League, and am now president of the National Counsel for the Control of Tuberculosis. The charity work has consisted of organizing the surgical service of the Chest Hospital — a 300-bed institution — where I am Chief of Surgery and work there three times a week. Private practice has consisted of organizing a group and building a small private hospital. Our group is made up of men all trained in the U. S. We have recently enlarged from six to ten members and we have just finished the construction of our hospital. It should be ready to open in about three months, and will allow us to take care of our patients under close to ideal conditions, which has not been the case up to now.

My work has been about equally divided between thoracic and abdominal surgery, without much contact with isotopes and positrons. We have done some work in the dog lab and we have, of course, organized medical meetings to present it. I also happen to be on the editorial board of the *Journal of the Guatemalan Medical College,* to make sure the work gets published. This is, as you see, a chain roughly comparable to growing corn and manufacturing corn flakes.

Ben Castleman, your Acting Chief of Pathology, visited us recently and gave a series of lectures and CPC's. He attracted larger audiences than any previous medical lecturer, and we hope he is the first in a long line of MGH visitors we will have the pleasure of seeing in Guatemala. The country is quite beautiful and there are ample opportunities for fishing, hunting, and water-skiing — the latter our favorite pastime on Lake Atitlan — all of which deserves a detour when a Bostonian travels south of Dedham. Edward Shannon (r.s. *N.S.* 1944) has liked it enough to come down three times in two years.

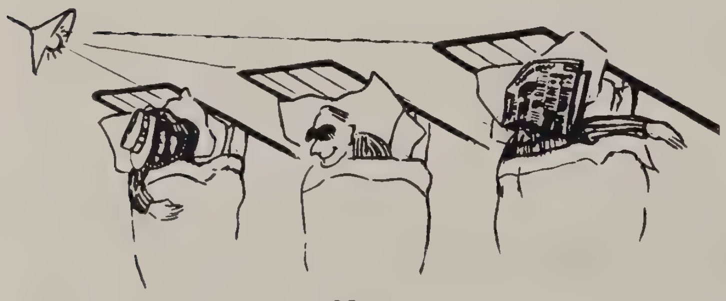
I have been delighted to see that we have six Guatemalans getting training at the M.G.H. This represents an important statistical percentage of our population. If the same proportion of the Chinese were at the M.G.H., all of the staff and non-professional personnel of the Hospital (including Mike, the elevator man) would have already been replaced by Formosans.

I certainly hope that all my fellow countrymen at the M.G.H. will return to work with us. I am ready to change the name of our group from "El Centro Medico" to "The MGH Associates of Guatemala"!

Best wishes to all at the Massachusetts General.

No. 1

No. 2



No. 3

No. 4

No. 5

No. 6

Our decision to send out "singleton" letters is paying off handsomely. Already, several delightful responses have arrived — this one no less so. It comes from Dr. Paul W. Harrison (*E.S.* 1909), from the American Mission Hospitals, Bahrain, Persian Gulf.

It gave me quite a thrill to get a letter from you and be invited to make a report as of the only center of MGH light and leading in this part of the world.

We reckon ourselves as part of Arabia, though Bahrain, as a matter of fact, is a small island about twenty-five miles from the coast of the actual peninsula.

In the old days this was a pearl-diving community, and while there was not so much to eat and wear then, the community was more of a homogeneous unit. The evil eye is still reckoned as the major cause of disease. Right now the evil eye has the edge on the rest of us for a bad case of tetanus died in the Hospital this morning, with no scratch on her skin, no history of recent delivery, and no other cause. I think it must be very convenient to be able to fall back on the evil eye.

We used to have malaria for breakfast, dinner, and supper, but that is a thing of the past, fortunately. One of the good things the oil money has done for us is to make possible some very effective health measures, and from this island, at least, that disease is due to really disappear.

We have lots of malignant disease here, especially cancer of the stomach, and here the eye is especially evil for the patients never get to us until all chance of complete cure is entirely gone. I used to do palliative gastroenterostomies, but the patients seem to get a longer period of relief, before they go under, with a subtotal resection.

We do a good many hernias here, too, and at the moment we are experimenting with an injection method, making use of a different solution from those which were used before. It really is not a solution at all, but rather a suspension of asbestos particles, and so far as four years' experience goes the fibrosis they induce is permanent. We will probably be making a report on this eventually, if the late results seem to be good.

We have a good deal of tuberculosis, also — a hold-over from the days of pearl-diving. In those days all the divers spat blood the first two weeks of the season on account of the cold water. Their diet was poor and everybody was thin and undernourished. Now, with the oil companies here, the income of the people has gone up and their work is less of a tax on the lungs. It is only a question of time, we hope, till tuberculosis disappears.

Politically, we are off at one side of the heavy currents and controversies elsewhere in the Middle East, and we hope we can remain that way.

And, finally, your name makes me remember that when I was senior on the East Surgical, my pup (house pupil, for long) was Charlie Holbrook. He was a good pup.

Very warm appreciation of your writing and sincere regards.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 125 Boston, Mass. July and August 1953

INSIDE EUROPE — 1953

Invitations to speak in Berlin and Vienna, and possibly to operate at the famous Allgemeinen Krankenhaus in Professor Denk's clinic in Vienna, were sufficient impetus to investigate the air routes to Europe this past February. As I needed an interpreter because my German is chiefly of high school vintage, and whereas Mrs. Linton's is good, that selection was not difficult to make.

Our Pan-American Super D-6, the fastest American commercial plane, roared down the runway at East Boston on February 18 at 3 P.M., nonstop to Iceland. The luxury of cocktails before dinner was missed, as we were traveling air tourist instead of first class, at a saving of $200 each, which seemed more than a few drinks were worth. Our first stop was at Keflavik, Iceland, where we were greeted by one of my patients, Miss Kolbrun Olafsdottir, a former member of the 1946 Icelandic Olympic swimming team, and her parents. Despite the fact that it was 3 A.M. in Iceland, we had a very pleasant visit. Few postoperative check-ups in my experience have given me so much pleasure, because the patient and her parents were so enthusiastic with the result we had accomplished at the Baker Memorial in reducing her huge right leg (due to elephantitis) to the size of the left normal one. The captain of our stratoliner kindly held up our departure for a short time, since we were ahead of schedule, so that I could do a careful examination of the patient. We left Iceland at 4 A.M. The next stop was made at Prestwick, Scotland, for fuel, and then on to Frankfort, Germany, our jumping off place for the little island in a big Red sea—Berlin.

A short tour of Frankfort showed it well on the way to recovery, what with much help from the U.S.A., as all the other places outside the Soviet sphere showed—even to the complete restoration of the old Goethe home, which had been badly bombed.

At 8:30 P.M. we left in an overcrowded DC-4, but fortunately still a Pan-American plane, for Berlin. Despite fog, a routine landing was made at 10 P.M. at the huge Templehof Airfield in the center of Berlin—the former parade ground for the Kaiser's armies—about twenty-four hours after leaving Boston. A welcoming committee of Berliners greeted us. They were so pleased and thrilled to meet the lady, Mrs. Linton, who had packed and sent much clothing and many CARE packages to them and also to less fortunate ones in the Soviet Sector of Berlin. Excellent hotel accommodations were arranged at the Flughafen Hotel at the airport.

The following day was a busy one, including a visit to the Templehof refugee camp in some of the old military barracks. The conditions were crowded, but on the whole it seemed quite sanitary. However, as one entered the building there was the typical odor of a stable, even though there were no livestock other than humans within miles. Doctors and nurses were in attendance, but the medical care was of the simplest. In one room a volunteer woman in charge of the young children—about 40 or 50 of them—was teaching them to sing and dance. The majority, although quite well nourished, seemed never to have known what it was to smile or laugh. The matron in charge was doing an excellent job in getting them to do so. Many of the men were in the bunk rooms, either reading or wrapped up in their thoughts. It seemed too bad, with so much that should be done in cleaning up the premises—and even Berlin itself, where there is still much rubble about—that these able-bodied ones could not be put to some kind of work.

In the afternoon I toured parts of the Western Sector of Berlin with a very competent guide—a former artillery officer of World War I—who finally left the military service when Hitler came into power in 1933, and became a newspaper correspondent. We traveled to the edge of the East Sector, but did not venture across because of the danger of never returning. Unknown to me, Mrs. Linton had done what men do not dare to do: she had gone into the Russian Sector with her nurse friend to attend the World Day of Prayer Service in Marienkirche, the oldest church in Germany. The church, as are all homes in the Russian Sector, was without heat. Two days later the minister of Marienkirche was abducted after the evening service. Fortunately, Mrs. Linton and her friend were unmolested; but while there, they did not dare converse for fear that Mrs. Linton might be detected as an American. She was also protected, probably, because of a bright red hat she was wearing!

The Russians seemed to be playing up the Rosenberg affair. Large posters were seen showing their pictures, with "AMERICA" above them, and beneath a large caption, "PARADIES!!", telling how they were martyrs to the cause of freedom. Even standing in the West Sector and looking across to the East, the difference between the freedom of the inhabitants was apparent. On the side of the street that was Western, one could see hundreds of people walking along the sidewalk or going into the innumerable little shops; whereas, on the Eastern side, one could see, at most, perhaps half a dozen people looking straight ahead, not across at the more fortunate. No shops were to be seen on that side.

My tour continued on to the Brandenburg Tor which still stands, but instead of the famous statue of horses on top, one now sees the Red flag of the Communists which flies day and night. The remains of the old Reichstag are still standing amid all the other ruins of recent bombings. I supposed it had suffered the same fate as the other buildings, but was told that Hitler himself had caused its destruction. Unter den Linden was "verboten", since it is in the East Sector, but from all I could see little remained of this famous street except that it was repaved. The Swiss Legation building was the only one in this whole area which had escaped serious damage. Hitler's chancellery was a mass of rubble near the Brandenburg Tor and, according to my guide, he was absolutely sure Hitler had perished in it. From what could be salvaged of it, the Russians built a war memorial which stands on the Charlottenburger Drive about a quarter of a mile within the British Sector. It was constantly guarded by a Communist soldier with his automatic rifle. Nevertheless, he permitted his photograph to be taken. Across the street the famous Tiergarten has disappeared, since its trees were cut down for fuel for cooking in the homes of Berlin immediately after the war.

The remainder of the afternoon was spent seeing some of the famous old Berlin landmarks, some badly bombed and others not. The most optimistic note shown by these people was the fact that they were tearing down the bunkers—that is, the bomb shelters—or attempting to, at least. They had been very strongly built. It seemed to me, with the war clouds so ominous, that they would have kept them for future use, but instead they were slowly being pulverized to be used for new building material and perhaps to help erase the memories of the siege of Berlin.

A pleasant evening was spent with a medical doctor and his family. Both he and his wife work long hours but receive little pay. When the door was opened by a very beautiful young girl, the oldest daughter in the family, something about her seemed familiar—as if I had seen her before. I soon discovered why. She was wearing one of Mrs. Linton's dresses that I had helped her choose some years ago. Mrs. Linton also recognized the dresses on the other children and the wife of the doctor, since she had packed them and sent them over from headquarters at our church in West Newton. It was surprising how well the dresses looked and, needless to say, how grateful the wearers were to have them. Our dinner was plentiful but simple—frankforts (long ones) and potato salad. It is difficult to comprehend what would have been the fate of these people without the good old Irish tubers. Starvation, undoubtedly, worse than it was. Butter also seemed very plentiful so, as a result, the people were well nourished on the whole.

Next day I performed my official duty in Berlin, giving a lecture at the 279th Station Hospital and making rounds with Colonel Churney. While this was going on Mrs. Linton was on a china shopping tour with the Colonel's wife, and what Mrs. Churney doesn't know about German china probably isn't worth knowing.

The following day we toured the Western Sector of Berlin, mostly on its perimeter, with our doctor friend, in his little volkswagen automobile. One of the most memorable events on this trip was seeing the new Government Building and hearing the Freedom Bell toll out its message. I believe the bell effects an important tie between free people and, as I told them over there, we hope it long may ring. It was on this trip that I almost became famous, because later that evening I discovered my passport was nowhere to be found! All the police stations in West Berlin were alerted in case it was turned in; and the next morning I notified the American consul, but nothing could be done that day to furnish me with a new passport because Washington's birthday had fallen on Sunday, and Monday was a holiday even in far-off Berlin. Perhaps that was fortunate because, much to my relief and to confirm the consul's opinion that the passport was not really lost, my doctor friend found it under the seat of his volkwagen. This called for a celebration, so we all went to Berlin's new and famous French restaurant for dinner that night. It has an excellent cuisine and I'm sure our German friends enjoyed the food even though it was French, which did not occur to me until we were on our way home.

The next day we left the little island in the big Red sea for Vienna via Air France, by way of Munich. An hour's tour showed what a difference in restoration had taken place in a city well outside the Russian influence. Despite 65 percent destruction by bombing, the business section had been built up to a surprising degree and the rubble carted away. Hitler's house and Eva Braun's house, strangely, showed no damage. The famous beer hall where Hitler was almost killed late in the war is now an American snack bar.

The next stop was Vienna, where we first saw the sunshine—actually and figuratively. Here in this jewel of a city the people seemed more lighthearted and friendly than in Berlin, even though everyone was constantly reminded of the Communists because their soldiers were always in evidence and the big Red star with hammer and sickle was hanging on a building on the Ringstrasse. But it was encouraging to see the flags of the United States, Great Britain, and France flying beside that of Russia on a nearby building. Not only did one move around freely in the International Sector, but we were not aware most of the time of which sector we were in. Unlike Berlin, where only three flagpoles have flags flying at the Four-Powers Building, in Vienna one sees all four side by side—the French, the Russian, the American, and the British, in this order on top of the building.

Two lectures, one before the Society of Surgeons of Vienna on the treatment of aneurysms by the intrasaccular wiring method, and the other on the surgical treatment of bleeding esophageal varices before the Society of Internists of Vienna—both at the Allgemeinen Krankenhaus, and the wiring of two thoracic aneurysms in Professor Denk's clinic constituted my official duties.

Excellent medicine and surgery are still practised at the Allgemeinen Krankenhaus, although the buildings are somewhat antiquated. In spite of crowded wards, the patients receive good care. All the beds are supplied with trapezes, which certainly should be copied at the good old M.G.H. The operating rooms, as elsewhere in Europe, double up frequently like the old East Surgical room at the M.G.H., with two operations going on at the same time. Although my lectures were in English, except for my slides which I had made up with the help of Dr. Schmidt of our Anesthesia Department, I had to resurrect some of my high school German to get the correct instrument at the operating table. Fortunately, the wiring of an aneurysm is pretty much a one-man job except for opening and closing the chest, so on the whole everything went very well—and why shouldn't it have done so with Professor Denk as my assistant!!

The Allgemeinen Krankenhaus is a tremendous hospital, with about 3,000 beds and covering approximately a space the size of Boston Common. It is subdivided into many clinics. Fortunately, within the grounds are many green lawns and trees. The concrete bunkers for protection against bombs still stand, since it is almost impossible to demolish them without demolishing the hospital at the same time. Because of the somewhat antiquated buildings, the Vienna doctors told me they had hoped much of it would be destroyed during the war instead of the business section of town so that new hospital buildings could be erected. Strangely, little if any damage by bombing resulted to this sprawling institution, which to me seemed fortunate, as it was with a sense of deep respect and homage that I visited these surgical shrines of Billroth, Semmelweis, Eiselberg, Wertheim, and others.

Mrs. Linton had an enjoyable visit and tour of the Rathaus with the Vice Burgomaster of Vienna, and later I joined them to visit Klosterneuburg Monastery—a site few foreigners are privileged to see. This pleasant interlude in Vienna was made possible by our introduction to the Vice Burgomaster through his daughter, Traudel, who is attending Mount Holyoke College with our oldest daughter, on a Fulbright scholarship. An enjoyable evening was spent at the opera, hearing Aida. The star was Karla Martinis, who played the part of Aida and sang beautifully. Unfortunately, the opera house had been bombed during the war and is not yet completely restored.

It was possible to motor through a great deal of Vienna, the Vienna woods, and to enjoy the view from Leopoldberg, looking down on the blue Danube. The pine boughs hanging outside the wine shops, telling us that the new wine was ready to drink, were enticing, but unfortunately we were always in too much of a rush to stop. A visit was made to a sport shop, however, where I purchased a pair of Norwegian skis made from American hickory! These were obtained at a reasonable price and proved to be excellent ones.

On our way to the railroad station Saturday morning, I informed our taxi driver that I still wanted to take some photographs, especially of Russian things, and most of all I wanted to take a picture of the building with the huge Red star with the hammer and sickle in the middle of it. He disapproved strongly of this suggestion, finally agreed to drive by the various sights I wanted to photograph, but said that under no circumstances would he stop, and that if I wanted photographs I would have to take them from the taxi window. Fortunately, all the assignments were obtained and, I believe, without inciting any international incidents.

Our train ride to Bad Gastein for skiing was pleasant, even though by third class. At the river Enns, where the Russians boarded our train and asked for passports and gray cards, we bade goodbye to them. Without the proper papers we would not have been allowed to travel further, but would have been taken off the train and put in charge of the soldier standing guard with his automatic rifle outside our train. The Russian official seemed very young—hardly twenty years of age. He said the one word, "Passport" in Russian, looked at our papers, then left the compartment without a glance at any of us.

At Bad Gastein excellent skiing was found on the Stubnerkogel at an altitude of 2,245 meters. The chair lift was of the latest variety, each holding four people and the skiis, and all enclosed with windows so the view could be enjoyed and the passengers still protected from the wind. The run was about 10 kilometers—the upper half alpine skiing on open slopes, the lower through the forest trails, like those in New England, and finally through the pastures and barnyards to the railroad station of Angertal. The return to Bad Gastein was by train or bus, for the sum of ten cents. Chair lifts to other runs were available up the opposite side of the mountain from the Stubnerkogel, but with less open running. Another one was reached from Hofgastein, a neighboring village.

The town of Bad Gastein has been for centuries a health resort where Europeans have gone for mineral water baths and rest cures. With the coming of the atomic age and the Geiger counter, the naturally heated waters have been found to be slightly radioactive. By some it is now claimed that this property explains the beneficial response that many ailing executives and neurotics derive, forgetting perhaps that the baths can be taken only by a doctor's prescription and that no benefit can be derived unless the period of treatment lasts at least a period of three weeks. As a result of this business, the town consists practically entirely of hotels. Some are small, but many are huge, with hundreds of beds. In the town museum it was of interest to see that the peak years for visitors were 1940 and 1944, just before the crumbling of the Nazi empire—probably not surprising. Though undoubtedly visited by Hitler, his hotel and bedroom were fortunately not advertised, I presume, because we were in Austria. The number of visitors is again beginning to rise since the end of the war, due in part to the new skiing facilities that have been installed. With so many hotels idle in the winter, it naturally became an excellent resort for the skier as soon as the ski lifts were installed. Most of the hotels are arranged one above the other on the precipitous sides of the valley, so in addition to the exercise of skiing one obtains even more of it by climbing up and down the streets, none of which are on the level.

Our ski guests and companions were three Austrians—Dr. E. von Hueber, Mr. R. von Hueber, his brother, and Dr. Tauler, a native of Bad Gastein. We were also joined by Mr. and Mrs. Selden of Andover, Massachusetts, and Mr. Horace Bright of Cambridge, Massachusetts. After five days of skiing and relaxation we decided to move on, so we bade farewell to our Austrian friends and headed for Switzerland. We were tempted to get off at Innsbruck and also at Zurich, but we were anxious to reach the bigger and better ski region of Wengen, Switzerland. After a good night's rest at the Hotel Bauer au Lac, we hired a taxi the next morning for a very nominal fee and drove to Lauterbrunnen. This proved to be a very interesting trip, with a young university student as our chauffeur. In addition to being a good driver, he also was an excellent guide—taking us to interesting places on the route, including the city of Lucerne. This means of travel saved four changes of trains that would have been necessary, with the trouble of moving our luggage and skis each time—an inconvenience of railroad travel in Europe that can be appreciated only by those who have experienced it.

Wengen was reached by a cog railway from Lauterbrunnen. It is a cozy little village tucked onto the side of the foothills, looking up to the Jungfrau. The accommodations at the Silber Horn Hotel were pleasant though not overly sumptuous; but the skiing, the ski lifts, and the cog railways we found hard to beat. The ski runs, to name a few, were wonderful from Kleine Scheiddig down to Grindelwald, a T-bar lift from Kleine Scheiddig up to Lauberhorn, then down to Wengen Alp or Wengen itself through new powder snow. The glacier tours on the Eismeer and the Aletsch glacier, reached by cog railway which has been drilled out of the center of the Jungfrau, offered some wonderful skiing—especially the former, as the slopes are steeper and the snow was virgin powder where other skiers had not marred the surface. After five days of this skiing, with the longest run of twenty miles, it was hard to leave, but we did—to see Paris in a day!

This was accomplished, but left much for another visit. Most of the sights seen on the morning and afternoon tours were chosen to show us the glory of France's past military history and conquests—very similar to what we were shown in Berlin, Vienna, and Munich. It was depressing to learn from our guide in Paris that if he showed us Pasteur's monument, which can be seen in the distance from Napoleon's tomb, he would lose his job. Pasteur—one of the greatest benefactors to mankind.

Much can be learned from history, but much should be forgotten. Even in Ireland the next day, on a tour of Limerick while waiting for our plane to be repaired, our genial Irish driver showed us the Stone Monument commemorating a treaty between the Irish and the English in the 13th century, and told us the treaty had been broken before the ink with which it was signed had dried. It is unfortunate that the peoples of the European countries continue to live so much in the past instead of looking forward to the future. They still glory in the victorious military regimes of previous years, apparently not taking into consideration that about all that was accomplished by these wars was to kill off the cream of the youth of many nations; and, furthermore, because of this worship of the past they seem to continue to embitter each succeeding generation, thus laying the seeds for future wars.

Robert R. Linton, M.D.,
Visiting Surgeon

* * *

Dr. Fritz Lipmann received the following letter from Dr. Lawrence A. Kimpton, Chancellor of the University of Chicago:

> I have the honor to inform you that the Board of Trustees of the University of Chicago, upon the recommendation of the Faculties, proposes to confer upon you the honorary degree of Doctor of Science at the Convocation to be held on Friday, June 12, 1953.
>
> It is my hope, both personally and on behalf of the University, that you will permit us to have the privilege of recognizing your achievements on this occasion. Will you let me know if the proposal to confer the degree is acceptable to you and whether it is possible for you to attend the Convocation at three o'clock in the afternoon of June 12. . . .

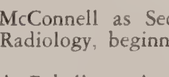
On June 8, President Harold C. Case of Boston University, in presenting degrees at the June Commencement Exercises, conferred the honorary degree of Doctor of Humanities upon Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service.

In making the award President Case said, "Ruth Sleeper, Director of the School of Nursing and Nursing Service, Massachusetts General Hospital, since 1946; Past President of the National League of Nursing Education; First President of the new National League for Nursing; distinguished leader in the improvement of education and the use of the services of nurses; exponent and friend of international good will: You have given nursing graciousness, and by improving its standards you have enhanced the health for many people. On the recommendation of the University Council, and by the authority of the Trustees of Boston University acting under the Statutes of the Commonwealth of Massachusetts, I confer upon you the degree of Doctor of Humanities, and admit you to all the honors, privileges, and responsibilities thereto appertaining."

* * *

Miss Ida M. Cannon, a pioneer in the field of medical social work and head of our Social Service Department from 1907 until her retirement in 1945, celebrated her 50th anniversary as a member of the National Conference of Social Work when she attended the 80th annual meeting of the NCSW in Cleveland last month.

Among many other activities, Miss Cannon is a trustee and corporation member of the Bay State Society for the Crippled and Handicapped, Inc., and a member of the advisory board of the Massachusetts State Department of Public Welfare. She is the author of many articles on social work. The title of her latest book—*On the social frontier of medicine*—was included in the list of staff publications in our February issue.



The Board of Trustees, at their meetings during May, voted:

To accept with regret the resignation of Dr. Harley C. Shands, Assistant in Psychiatry, effective May 14.

To appoint:

Dr. Charles F. Goodnough as Assistant Resident in Anesthesia for one year, beginning October 1;

Dr. Fleming McConnell as Second Assistant Resident in Radiology, beginning January 1, 1954;

Dr. Désiré J. A. Rebello as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Paul S. Russell as Second Assistant Resident on the Surgical Service, beginning July 1;

Dr. Robb H. Rutledge as Third Assistant Resident on the Surgical Service, beginning July 1;

Dr. Albert Van Eerde as Assistant Resident in Anesthesia, beginning March 1, 1954;

Dr. Edward W. Webster as Physicist in the Department of Radiology, beginning October 1;

Dr. Ruth S. Weiss as Assistant in Psychiatry

at the McLean Hospital, beginning July 1, 1954;
Dr. Roger E. Wilcox as Second Assistant Resident on the Surgical Service, beginning July 1.

At their meetings on April 29, May 13, 20, and 27, and June 3, the General Executive Committee voted:

To promote the following, on the Surgical Service, beginning July 1:

Dr. John D. Constable to the position of Third Assistant Resident;
Dr. Richard R. Curtin to the position of Third Assistant Resident;
Dr. Ira A. Ferguson, Jr. to the position of Third Assistant Resident;
Dr. Donald J. Glotzer to the position of Third Assistant Resident;
Dr. Sigurd B. Gundersen, Jr. to the position of First Assistant Resident;
Dr. William H. Hendren, III, to the position of Third Assistant Resident;
Dr. Charles E. Huggins to the position of Third Assistant Resident;
Dr. Benjamin B. Jackson to the position of Third Assistant Resident;
Dr. John A. Malcolm to the position of Third Assistant Resident.

To continue the appointment of:

Dr. Thorkild Wainφ-Andersen as Clinical Fellow in Anesthesia for one year, starting May 18.

To appoint:

Dr. John S. Barlow as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Jean G. Cadilhac as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, retroactive to April 1 and continuing through July 31;
Dr. Robert A. Cleghorn as Clinical Fellow in Psychiatry, beginning September 1;
Dr. Eino I. Kulonen as Research Fellow in Medicine, for the period April 15 through June 13;
Dr. John F. McGinty as Clinical Fellow in Medicine, assigned to Cardiology, effective as of May 27;
Dr. Guillermo C. Sanchez as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. William Sharpe, Jr. as Clinical Fellow in Psychiatry, beginning July 1;
Dr. Rhett Talbert as Clinical and Research Fellow in Neurology, for a period of six months, beginning July 1;
Dr. Heribert L. Thaler as Research Fellow in Medicine, effective when he arrives in this country from Austria;
Dr. Albert Van Eerde as Clinical and Research Fellow in Anesthesia, for the period July 1, 1953 through February 28, 1954.

On May 4, Dr. Virginia B. Calkins was appointed Clinical Assistant on the McLean Hospital Staff.

* * *

THE CLINIC FOR ALCOHOLISM

The Clinic for Alcoholism was established in the Out-Patient Department of the Hospital in the spring of 1951. It operates with funds provided through the Department of Preventive Medicine, Division of Alcoholism, of the Commonwealth of Massachusetts. In the fall of 1952 it was decided by the State to designate this Clinic as a center for study and research on the problems of alcoholism.

Since this time, the Clinic has been operating five afternoons weekly with the services of one psychiatrist who works half time, two other psychiatrists who work one afternoon each week, a full-time social worker, and a secretary. Since January of 1953, the Clinic has been able to utilize the part-time services of a clinical psychologist. Conferences of the Clinic staff are held each Wednesday afternoon at 4:00 P.M. Anyone interested in the problem of alcoholism is cordially invited to attend.

Progress in the therapy of alcoholism has been greatly hampered by the generally prevalent attitude of hopelessness and futility among the medical profession in regard to the problem. In this respect, it is significant that over half of the sixty-three patients followed during the year 1952 have been benefited by treatment. It must be emphasized, however, that while "benefit" denotes cessation or diminution of the severity of pathological drinking and while this contributes a very useful social result, it does not constitute a cure. These individuals continue to be in danger of resorting to alcohol as a means of dealing with conflicts or stress.

No substantial progress in the management of the problem of alcoholism may be hoped for unless an intensive study of all phases of the problem are carried out. It is the aim of the Clinic to undertake such a study, covering the psychiatric, medical, neurological, and social aspects of alcoholism. Only when sufficient valid data regarding the dynamic etiologic factors have been accumulated, can one hope to evolve practical and successful therapeutic methods. In order that extensive individual psychiatric study of each patient can be carried out, it will be necessary to add to the psychiatric personnel of the Clinic staff. It is planned, also, to utilize the services of an internist in order to study and treat the medical complications secondary to alcoholism. Dr. Raymond D. Adams and Dr. Maurice Victor have already carried out extensive studies on the neurological complications of alcoholism, and it is planned to enlist their closer cooperation in the work of the Clinic.

The rehabilitation of the alcoholic patient demands certain special considerations. The present attitude of moralistic judgment, hostility, and hopelessness toward these patients, which stems largely from a lack of understanding of the problem, must be replaced by an objective approach, as with any other illness. Only such an attitude, coupled with patience and the willingness and ability to provide much support, can hope to hold these extremely disturbed, insecure, and suspicious patients in treatment. An extensive educational program will be necessary in order to achieve this end—not only with the public, but with the medical and nursing professions as well.

In addition to a shortage of trained medical personnel on the staff of the Clinic, one of the most pressing needs is adequate facilities for hospitalization of the patients. The nature of their illness necessitates hospitalization for short periods following episodes of prolonged intoxication with or without the complication of delirium tremors, psychosis, or neuropathy. However, there is an even more urgent need for facilities for interim hospitalization at times of stress, for purposes of support or to forestall renewed drinking, as well as for longer periods of "partial hospitalization" during convalescence for such patients who may need the support of a protective environment at night even though they may be able to work during the day.

Our limited experience has already demonstrated that individuals with alcoholism can be treated with some hope of success. Much further study and understanding will be required before we can evolve treatment methods which are adequate to cope with the enormous magnitude of the problem of alcoholism.

Alfred O. Ludwig, M.D.,
Associate Psychiatrist
and *Director of the Clinic for Alcoholism*

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in many instances. It would save your editor considerable time and trouble if you would, PLEASE, REMEMBER TO INCLUDE THAT INFORMATION. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Cardiology

Cohen, M. E., Robins, E., Purtell, J. J., Altmann, M. W., and Reid, D. E.
Excessive surgery in hysteria: Study of surgical procedures in 50 women with hysteria and 190 controls.
J.A.M.A. 151:977-986.

Currens, J. H., Thompson, W. B., Rappaport, M. B., and Sprague, H. B.
Clinical and phonocardiographic observations on the Flint murmur.
New England J. Med. 248:583-587.

Rappaport, M. B., Sprague, H. B., and Thompson, W. B.
Ballistocardiography. I. Physical considerations.
Circulation 7:229-246.

Thompson, W. B., Rappaport, M. B., and

Sprague, H. B.
Ballistocardiography. II. The normal ballistocardiogram.
Circulation 7:321-328.

White, P. D.
Alteration of the pulse — Still a common and important clinical condition.
Mod. Concepts Cardiovas. Dis. 22:174-176.

White, P. D., King, R. L., and Jenks, J., Jr.
Medical intelligence: The relation of heart size to the time intervals of the heart beat, with particular reference to the elephant and the whale.
New England J. Med. 248:69-70.

General Medicine

Dobyns, B. M., Vickery, A. L., Maloof, F., and Chapman, E. M.
Functional and histologic effects of therapeutic doses of radioactive iodine on the thyroid of man.
J. Clin. Endocrinol. & Metab. 13:548-567.

General Surgery

Bartlett, M. K., and McDermott, W. V.
Surgical treatment of diverticulitis of the colon.
New England J. Med. 248:497-499.

Laboratory Science

Baddiley, J., Thain, E. M., Novelli, G. D., and Lipmann, F.
Structure of coenzyme A.
Nature 171:76-77.

Bucher, N. L. R.
The formation of radioactive cholesterol and fatty acids from C^{14}-labeled acetate by rat liver homogenates.
J. Am. Chem. Soc. 75:498.

Crane, R. K., and Lipmann, F.
The effect of arsenate on aerobic phosphorylation.
J. Biol. Chem. 201:235-243.

Crane, R. K., and Lipmann, F.
The relationship of mitochondrial phosphate to aerobic phosphate bond generation.
J. Biol. Chem. 201:245-246.

DuToit, C. H.
The effects of thyroxine on phosphate metabolism.
In Phosphorus metabolism, vol. 2, McElroy, W. D., and Glass, B. (Editors), Baltimore, The Johns Hopkins Press, pp. 597-617.

Elliott, W. H.
Isolation of glutamine synthetase and glutamotransferase from green peas.
J. Biol. Chem. 201:661-672.

Hall, T. C., McCracken, B. H., and Thorn, G. W.
Skin pigmentation in relation to adrenal cortical function.
J. Clin. Endocrinol. & Metab. 13:243-257.

Hoch, F. L., and Lipmann, F.
Inhibition of mitochondria phosphorylation by thyroxin.
Federation Proc. 12:218.

Lipmann, F.
On chemistry and function of coenzyme A.
Bact. Rev. 17:1-16.

Maas, W. K.
Synthesis of pantothenic acid by a pyrophosphate-liberating cleavage of ATP.
Federation Proc. 12:241.

Maas, W. K., and Novelli, G. D.
Synthesis of pantothenic acid by depyrophosphorylation of adenosine triphosphate.
Arch. Biochem. & Biophys. 43:236-237.

Novelli, G. D., and Hoagland, M. B.
The enzymatic degradation and resynthesis of coenzyme A. (Abstract)
In Abstracts of papers, 123rd Meeting, American Chemical Society, March 16-20, pp. 26C-27C.

Schmid, K.
Isolation and characterization of glycoproteins from human plasma.
J. Am. Chem. Soc. 75:2532.

Neurology, Neurosurgery, and Psychiatry

Abrams, R. D., and Finesinger, J. E.
Guilt reactions in patients with cancer.
Cancer 6:474-482.

Books

Rounds, F. W., and Rounds, C. E.
The principles and technique of exodontia.
St. Louis, The C. V. Mosby Company.

MASSACHUSETTS EYE & EAR INFIRMARY

On June 9, Dr. Frederick H. Verhoeff, our Consulting Chief of Ophthalmology, was awarded a Doctor of Laws degree by Johns Hopkins University, where he had attended medical school. The degree was given in recognition of his outstanding work in ophthalmology. Dr. Verhoeff has been associated with the Infirmary since 1900, and is on the staff at Harvard Medical School, where he is now a Professor *Emeritus*.

Dr. Andrew A. Eggston of New York was the guest speaker at the regular Spring Meeting of the New England Oto-Laryngological Society, held on June 17 in the Upper Amphitheatre of the Infirmary. Dr. Eggston spoke on "Malignancies of the ear". Other speakers were Mr. Alan S. Feldman, Audiologist of the Winthrop Foundation, whose subject was "Hearing aids: Their indications and contraindications"; Dr. Jarrett H. Folley, a guest from Hanover, New Hampshire, who spoke on "The effects of atomic radiation on humans"; Dr. Otis F. Jillson, also of Hanover, whose subject was "Histoplasmosis of the larynx"; and Dr. Eugene G. Boss of Springfield, who presented a paper entitled "New tonsil instruments".

At a meeting of the American Ophthalmological Society, held May 28-30 at Hot Springs, Virginia, Dr. Parker Heath, Director of our Pathology Laboratory, gave a paper entitled "Essential atrophy of the iris: An histopathologic study". A paper on the subject "Ocular signs of Wernicke's disease" was delivered by Dr. David G. Cogan, Associate Surgeon in Ophthalmology. His co-author was Dr. Maurice Victor, an assistant neurologist at the Massachusetts General Hospital. Dr. Edwin B. Dunphy, Chief of Ophthalmology, presented a paper concerning the topic "The uptake of radioactive phosphorus by intraocular neoplasma".

In the Section on Ophthalmology of the American Medical Association meeting, held in New York on June 1-5, Dr. Cogan and Dr. Charles L. Schepens presented papers, while Dr. Dunphy and Dr. Heath led discussions on papers delivered by other members. Dr. Cogan's subject was "Ocular dysmetria: "Flutter-like oscillations of the eyes and opsoclonus", and Dr. Schepens spoke on "Clinical aspects of pathology in the vitreous body".

Dr. Philip E. Meltzer, Surgeon in Otolaryngology, presented a paper on "The technique of removal of adenoid tissue of the nasal pharynx in children" at the Ear, Nose and Throat Section of the A.M.A. meeting.

Dr. David D. Donaldson, Resident in Ophthalmology, had an exhibit of steriophotographs of diseases of the anterior segment of the eye at the May meeting of the Massachusetts Medical Society, held at the Statler Hotel.

Dr. George Kelemen has been appointed Pathologist to the Winthrop Foundation.

Dr. Herman J. Sternstein has been promoted from Assistant Surgeon to Associate Surgeon in Otolaryngology.

A pastel by Dr. Edgar M. Holmes, Surgeon for Plastic Operations, was reproduced in the May 14 issue of the *New England Medical Journal*. The picture is of sand dunes in the late afternoon and is called "Lengthening shadows". As a member of the Massachusetts Physicians Art Society, Dr. Holmes exhibited the same pastel last year at the Massachusetts Medical Society meeting.

Brief bits:—

Dr. Edward F. Bland was elected President of the New England Cardiovascular Society at its annual meeting on May 11. Two past presidents, Drs. Paul D. White and Howard B. Sprague, were elected to the Executive Committee.

Dr. Walter S. Burrage was a guest speaker on May 11 and 12 in a Continuation Course in Arthritis and Allergy at the University of Minnesota Center for Continuation Study. His topics were "Fundamentals of allergy" and "Cortisone in allergic disease".

Dr. Fletcher H. Colby was elected Vice-President of the American Association of Genito-Urinary Surgeons at the 64th annual meeting of the Association, held in Hot Springs, Virginia, May 6-8.

Dr. Bernard M. Jacobson delivered a lecture on May 20, at the annual meeting of the Massachusetts Medical Society. His subject was "Why the patient bleeds and what to do about it". Also, in the capacity of Consultant in Medicine, Dr. Jacobson went to the Veterans Administration Hospital in Togus, Maine, to make his annual visit. While there, he made rounds and delivered a lecture.

Dr. Varaztad H. Kazanjian has recently returned from New Orleans, where he read a paper on "The repair of partial losses of the scalp" at the annual meeting of the American Association of Plastic Surgeons.

Dr. Laurence L. Robbins was elected President of the New England Roentgen Ray Society at its recent annual meeting. Dr. Stanley M. Wyman was re-elected Secretary for a second term. Dr. Robbins had previously served two years as Secretary.

The annual Postgraduate Course in Electrocardiography, held under the direction of Dr. Conger Williams during the week of May 11-16, was attended by twenty-five members of the American College of Physicians.

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New addresses:—

Dr. John S. Bray (clin. fel. *M.* 1953), 713 Chestnut St., Latrobe, Pa.

Dr. Charles H. Burnett (c.r.p. 1946), North Carolina Memorial Hospital, Chapel Hill, N. C.

Lt. Richard H. Eppright, MC, USAFR (a.r.s. *Or.*), 328 Fairchild St., Lackland Village, San Antonio, Tex.

Dr. Donald M. Glover (*W.S.* 1922), St. Luke's Hospital, 11311 Shaker Blvd., Cleveland 4, Ohio.

Dr. Arthur S. Keats (a.r.p. *An.* 1951), Mary Imogene Bassett Hospital, Cooperstown, N. Y.

Dr. Harold P. Klein (res. fel. *Biochem.* 1951), Dept. of Microbiology, School of Medicine, University of Washington, Seattle 5, Wash.

Dr. Louis W. Lewis (a.r.p. *An.* 1953), Veterans Administration Hospital, McKinney, Tex.

Dr. William R. Owen (*M.* 1950), National Heart Institute, National Institutes of Health, Bethesda 14, Md.

Dr. John H. Peters (*W.M.* 1943), U. S. Veterans Hospital, Atlanta, Ga.

Lt. Charles E. Rounds, DC, USNR (*Dn.* 1947), Hq. & Hq. Co., 115th Med. Bn., 40th Infantry Division, APO 6, c/o Postmaster, San Francisco, Calif.

Dr. Harley C. Shands (a. *Psychiat.* 1953), University of North Carolina, Chapel Hill, N. C.

Dr. Jacob Stovner (a.r.p. *An.* 1953), Fethlitzgt 1, Oslo, Norway.

Lt. Giles D. Toll, MC, USNR (*S.* 1952), Naval M CB 6, c/o Fleet Post Office, New York, N. Y.

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VOLUNTEER GROUPS

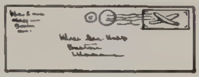
DISTAFF CLUB

At the May meeting of the Distaff Club, held in the Penthouse, the members continued their perusal of the countries of the world with a discussion on China, presented by Dr. Yang Wang of the MGH Medical Service.

Dr. Wang gave a very interesting and complete description of this vast and important country in the Far East. Beginning with the earliest known date of its existence, about 2500 B.C., Dr. Wang took us through the centuries of its development, up to the present-day culture. He correlated these historical facts with events in other major empires of the world, thus including China as a leading nation in the world progress. Also presented were references to the Chinese family life, its language, and religions. Dr. Wang pointed out that the cohesive family unit is responsible for the continued strength of the Chinese through the ages.

Each member of the club was grateful for the valuable knowledge gained and is eager to learn more about China and other countries of the Far East.

Hostess for the evening was Mrs. Richard N. Kleaveland. Refreshments were served following the discussion.



Our appeals to MGH "singletons" in various parts of the world continue to bear fruit. This absorbing letter has arrived from Dr. William D. Shorey (*E.S.* 1946) written from the American University of Beirut in Lebanon.

I was very pleased to get your letter asking me to write about my experiences and impressions here in the Middle East. I could not decide quite what to write until Dr. Waddell came here for the Symposium in the middle of April and began asking questions. The following is a summary of several nights' conversations.

First of all, Beirut is a modern city on the shore of the Mediterranean, running up to the foothills of the Lebanon Mountains. Its population is approximately half a million. The mountains rise to an elevation of some 10,000 feet within 20 miles of the shore, making one of the most attractive settings for any city one can imagine. Beirut is the entry-port for travelers for the entire Middle East. As such, it is extremely cosmopolitan and modern. Almost everyone lives in an apartment which is equipped with wide balconies — very necessary because of the heat in the summertime.

The life here is extremely pleasant in many ways. Service is cheap and easy to come by, and the living and social conditions are quite good. Many of the conveniences we knew at home are not found here, but one does not miss them. It is possible to ski within an hour of Beirut from the middle of December until the middle of March. In the high mountains snow lasts till the first of June. When not skiing, the Mediterranean is at hand for swimming. The countryside is very beautiful, and there are excellent roads to places of historic and natural beauty. The climate is warm but healthful. There is a large American community of about 3,000 people who seem to enjoy themselves very much here.

Beirut is not typical of the Middle East, however, which is much more undeveloped and is primarily agricultural. The financial lines are more strictly drawn and while there are many very rich Lebanese, there is practically no middle class and the greater majority of the people are extremely poor. On top of that, there are in Lebanon some 150,000 refugees from Palestine who are being supported by the UNRWA. Because of this large poor group, the supply of teaching cases is practically unlimited and permits the selection of the most interesting cases for admission for teaching.

The Medical School course consists of 5 years, the last year of which is essentially a rotating internship on a junior level. The classes start off with about 40 students and graduate between 25 and 30. The Medical School is only a small part of the University, which has a total enrollment of about 3,000. There is a great desire for further education in hospitals and postgraduate schools in Britain and the United States. We send each year about 1/3 of the graduating class to the U. S. for their internships and take about 1/3 of the class here. In addition, 3 or 4 of our teaching staff are usually in the U. S. every year, taking advanced courses. The staff is small and in general is overworked. The patients cannot afford to stay in the hospital, so our major cases usually go home in 7 to 8 days and the minor cases in 3 to 4, resulting in a very high turnover of cases. On the surgical service we do between 40 and 50 operations a week, with some 50 beds.

Due to the fact that until recently there have been no roads or transportation facilities, the villagers in the mountains and on the Syrian plains have tended to inbreed to a considerable extent. This has resulted in a large number of congenital abnormalities, which have been most interesting to handle. Meningomyeloceles and meningoencephaloceles are almost always represented in the hospital, and other congenital abnormalities are frequently seen. I have just operated on two cases of diastematomyelia which will make the 43d and 44th reported in the literature. Other surgical problems which are common are those related to parasites endemic in the area. Primary among these are hydatid disease of the abdomen and chest.

In addition to running the surgical service, I have also had the opportunity to design a 70-bed central unit of our future hospital of 400 beds, containing the operating rooms, etc. This has been most interesting. The building will be ready for occupancy this summer.

In April we held a Medical Symposium here, at which representatives of all the Middle East from Athens to Cairo to Karachi were present. To this we brought some 28 speakers from England and America, and were fortunate enough to persuade Dr. Waddell to come and tell us about the development of I.V. fats. This Symposium was the third in the series which we started for the practising physicians of the Middle East, to bring to their attention some of the recent advances in Western medicine. It was most enthusiastically received, and we had over 700 physicians attending. These physicians have done a great deal in this area to bring medicine up to date, for so many of its practices were essentially medieval. There is a great deal left to be done, however, and the opportunities for research and teaching are practically unlimited. Problems to be studied are more numerous than can be handled in the time available.

Since one of our reasons for coming here was to travel, we have been around in the Middle East a good deal. We drove from here to Istanbul through Turkey and found it one of the most stimulating of countries. Turkey is trying to pull itself into the 20th century as rapidly as possible. There is an intense nationalism, and the Turks have a great deal to be proud of in what they have accomplished. While we were in Istanbul the first boat-load of returning veterans from Korea arrived and were met by practically the entire city in a most tremendous demonstration. All of the returning Turkish soldiers have been greatly impressed by our troops in Korea and were marvelous ambassadors of good will for the U. S. in Turkey. This is in happy contrast to most other Arab countries, where reaction to Americans is far from favorable. All of us here are endeavoring to improve these conditions, which have deteriorated so much in the recent years.

We were in Iran when the British were being evacuated from Abadan and before Mossadegh became as violently anti-American as he now is. Great masses of the people were apathetic at that time, but recent events have caused them to treat Americans, as well as the British, with some cruelty. We were fortunate to travel through the entire central and southern portions of Iran before that time, and we saw the tremendous ruins left behind by the kings of the Meads and the Persians. Persepolis, their capital, is now a most impressive ruin, perched on the side of a mountain overlooking a bare and desolate countryside.

Last year we spent a month in Florence and the surrounding areas which George Nardi used to tell us so much about. We found it to be even more interesting than he had described.

Our future plans are as yet indefinite, but we shall leave here this September and probably return to the States at that time. I shall be very sorry to leave Beirut, as I have enjoyed my work here very much. However, I know that the Surgical Service will be in good hands when John Wilson arrives this August to take over. I shall be looking forward to seeing everyone at the General again this fall.

Another letter from one of our "singletons"—this one from Dr. Hastings Mewburn (*Or.* 1923), from Edmonton, Alberta, Canada. Everyone who lives in or has visited Canada will find this letter particularly engaging.

Probably the first thing I should do, in writing you from Edmonton, is to give you a simple method of finding its geographical location. If you will find Salt Lake City on a map and follow its meridian northward until you are 400 miles north of the International Boundary you will be at a spot a few miles west of Edmonton. It was first established in 1795 as a trading post for the Hudson's Bay Company, and was named after the borough of Edmonton in North London, England. It is a city of some 185,000, situated on both banks of the North Saskatchewan River and is known as the fastest growing city in Canada. It is about 250 miles east of the Continental Divide and, of course, is so far away from it that one cannot see the blue silhouette of the Rockies on the western horizon as one can in Calgary. The surrounding country is gently rolling prairie, covered with scattered clumps of bush and trees of various sizes. The trees are mostly poplar or willow, with evergreens interspersed in varying proportions. It is essentially a farming community, though in the past six years agriculture has been given quite a race for first place by the petroleum industry. However, in the past year the value of the agricultural products was four times that of the petroleum industry. In this latitude we have a great seasonal variation in the amount of daylight and dark. In the short days in December the workmen go to their jobs by electric light and come home using the same artificial light. In the summer time the opposite takes place, and in June the sun never seems to set at all. We do not have to legislate for daylight saving because Mother Nature has already seen to that.

My service at the M.G.H. terminated at the end of June 1923 and I immediately returned to Edmonton to get established in practice. Orthopaedic surgery in Edmonton was in its infancy. It would be more correct to say that it had not been born because, at that time, nobody was limiting his practice to that branch of surgery. In Calgary, some 200 miles to the south of us, one man was trying to make a go of it as an orthopaedic surgeon, but it was awfully hard work. In fact, the only specialty recognized at that time was eye, ear, nose and throat. In such a situation, the orthopaedic equipment in the Edmonton hospitals amounted to nothing. There were no fracture or plaster tables and, to apply a hip spica, an overturned basin or bowl on the operating table did duty as a pelvic rest. I mention spica tables particularly, because the first one used in the University Hospital was made by the Hospital carpenter and a blacksmith from the University of Alberta. It was a replica of the plaster table we had in the basement of old Ward I. A few nights before I left the M.G.H. I went down to that basement and made a working drawing of it. I may say that our table is still doing duty in one of the plaster rooms in the University Hospital. There are several copies of this table in some of our municipal hospitals round the Province that have duplicated the design. In 1923 money was rather short, and most of the original equipment was built locally by the artisans of the University Hospital and the University staffs. When we had our bit of apparatus finished, the other city hospitals sent their carpenters and engineers over to copy our equipment and in this way everybody gradually acquired some orthopaedic equipment. It was well made, did excellent work, and, above all else, was not expensive.

Another bit of interesting work was being carried out during the summer of 1923. That was the organization of clinical teaching in the Medical Faculty of the University, so that the whole course in medicine could be given in Edmonton. When the Province of Alberta was formed in 1905, arrangements were made to start the Provincial University. Teaching in the Faculty of Arts and Sciences started early, but it took a little more time to get medicine under way. A start was made in the preclinical subjects and, in 1914, the faculty was almost ready to give the full course. However, World War I broke out in August of that year, and with so many of the staff, undergraduates, and prospective students on active military service, this project had to be abandoned for the time being. The preclinical subjects were taught, as before, and the students went to Toronto or McGill for their clinical work and degrees. In the postwar reorganization, the time appeared ripe to start the clinical teaching when the session opened in the fall of 1923. The class of 1925 was the first to take the full course at Alberta, and two years later they graduated with eleven members.

As I was the only one in Edmonton who had had any recent training in orthopaedic surgery and the only one limiting his practice to that particular specialty, I was put in charge of the department, with the rank of lecturer. The plan of teaching orthopaedic surgery was very much the same as that used by Harvard Medical School and associated hospitals in Boston. In 1927 the heads of neurosurgery, urology, and orthopaedic surgery were given the rank of assistant professor. In that way my University status was described as Assistant Professor of Orthopaedics. Four years later, in 1931, we were all advanced to be clinical professors and I became the Clinical Professor of Orthopaedic Surgery in the Faculty of Medicine and Senior Orthopaedic Surgeon to the University Hospital. In 1948, after having been head of the department for twenty-five years and having reached the age of three score years, the retiring age for part-time staff, I resigned from the teaching and administrative duties and became Honorary Clinical Professor of Orthopaedic Surgery. At the present time I am still practising orthopaedic surgery and am a member of the orthopaedic staff of the University Hospital.

There has always been the closest cooperation between the Veterans Administration and the University Hospital. This Department of the Dominion Government was formed at the end of World War I to look after and give the necessary medical and surgical treatment to the returned military men. In that period of time it has had many different names, and at the present time is known as the Department of Veterans Affairs, or D.V.A. for short. Prior to 1923 the D.V.A. operated its own hospital and, as this institution was to be taken over by the University as the University Hospital, an agreement was entered into by which all hospitalization of the veteran, in the Edmonton District, would be carried out by the University Hospital. All members of the Hospital staff doing D.V.A. work have appointments to the Department and all medical officers have appointments to the Hospital staff. In this way the staff has the proper authority to handle these patients and the proper responsibility in the chain of Hospital administration is maintained. This arrangement has worked exceedingly well in Edmonton ever since it went into effect thirty years ago.

As far as possible, the men have always been grouped together in special wards or wings of the Hospital. The veterans prefer being together and it makes for easier administration, as the D.V.A. patients are hospitalized in a somewhat different manner from that of the ordinary civilian patient. The men are used as clinical material for teaching and as subjects on final clinical examinations. It is no uncommon sight, during examination times, to see the students going back to the ward to find out how they have done on the examination. Often the information is surprisingly accurate, as many of the veterans have been examination subjects a number of times. Thus it was in the summer of 1923 that I rejoined the D.V.A. as a part-time orthopaedic surgeon. I say rejoined, because my first civilian job was with the Department on demobilization in 1919.

In the fall of 1927 a severe outbreak of poliomyelitis occurred in the Province and the existing hospitals were in danger of being swamped by these convalescent patients who needed physiotherapy and rehabilitation. The Provincial Government was approached for aid in handling the situation. The upshot was that the Department of Health built a temporary 60-bed hospital to care for these convalescent patients. It was built close to and eventually connected with the University Hospital and was opened for the reception of patients in January 1928. As the aftertreatment of polio is orthopaedic in character, the administration and treatment were turned over to the Department of Orthopaedic Surgery. As a result, I became a part-time employee of the Provincial Government and a hospital superintendent as well. Two years later the administration of this convalescent unit was taken over by the University Hospital. In the early days of this scheme, the patient was supposed to contribute what he could to the cost of his treatment. Very little was actually collected. In 1938 the Provincial Government brought in a new Act and announced that they would be responsible for all costs of the aftercare of poliomyelitis. The patient is responsible for his hospital and medical care during the quarantine period and for his transportation to and from the hospital or clinic.

The next outstanding event that comes to mind was in the fall of 1942, when there was a tremendous influx of American civilians, soldiers, and machinery to take part in the building of the Alaska Highway. This was known to the natives of Edmonton as the "American Invasion", and it lasted till the end of the war. I don't know how many troops and civilians were involved, but there were a lot. Just before the war Edmonton had put on a spurt of growth and was fairly "busting out all over". That alone made living accommodations and office space hard to find, and when the "invasion" came along it seemed doubtful if all could be accommodated. It took considerable adjusting, but things gradually settled down and everyone really got along very well. As American construction progressed, the situation became much easier. During this period there were lots of uniforms on the streets of Edmonton, but with the "invasion" present the majority were American.

Until the American Medical Corps got established, the hospitalization of all U. S. service personnel was carried out at the University Hospital under the supervision of the D.V.A. Irrespective of what army it is, Medical Corps seem to operate by the same set of unwritten rules. It is interesting to note that the first two American medical officers to look after the U. S. troops were two pediatricians from Texas. However, it wasn't so very long before a U. S. Army hospital was built and equipped and staffed. This eased a great load on the University Hospital. Weekly staff rounds were held, alternating between the U. S. Station Hospital and the University Hospital. These resembled very closely the various hospital visits held in Boston. A very active medical society was formed, called the United Services Medical Society, and the membership was drawn from the armed forces of the United States and Canada and members of the Department of Veterans Affairs. Monthly meetings were held in turn at the U. S. Station Hospital, the Royal Canadian Air Force Hospital, and the University Hospital. The fourth meeting was always a dinner meeting at the MacDonald Hotel, and then the rotation was carried out as before. Many interesting meetings were held and many firm friendships made. At this time the medical faculty began to be very short-staffed and, as the staff of the U. S. Station Hospital was not overworked, a number of medical officers received temporary teaching appointments to the Faculty of Medicine. On one particular occasion we had a very excellent example of "lend lease", cooperation, or whatever you might call it. The University Hospital was notified that a convoy of 150 Canadian battle casualties would arrive in Edmonton in the wee small hours. At that particular moment there was just one empty bed in the University Hospital. However, as the U. S. Station Hospital had more than enough empty beds to handle the situation, it was a very simple matter to have the ambulances take the patients there.

Since the end of World War II the most interesting event has been the development of the Alberta oil field. The search for oil developed seriously in 1914 and was carried on sporadically all over the Province. It was interrupted by two wars and held up frequently for lack of funds. However, in 1947 a really good producer was brought in about twenty miles to the southwest of Edmonton. This is the famous Leduc field. The bringing in of one or two active wells soon after proved the field. This stimulated activity in no uncertain way and in no time oil men, oil companies, and oil rigs appeared in countless numbers. Needless to say, a large proportion of these men came from oil areas in the Southwestern States, and though American car licenses were quite common before, they are numerous now. Oil wells are being brought in continuously and the field seems to be getting larger. In April of this year, the Provincial Government announced that there were now 3,800 oil wells in production. Refineries have been built, industries are locating here on account of the oil and natural gas, and a pipe line has been completed to Superior, Wisconsin, and another one is being built to the Pacific Coast.

I suppose this is the time to present some figures to substantiate my statements and to give you some idea of the size of the panorama. There are now 7 orthopods in Edmonton. The community has grown from a city of some 60,000 in 1923 to one of 185,000 in 1952. Since 1923 the University has been giving the complete course in medicine here in Edmonton. It is a Grade A medical school, with an undergraduate strength of about 250 men and women. It is a 4-year course, with the entrance class limited to 65. The first class to take the complete course at Alberta graduated in 1925, with 11 members, and at the present time the graduating classes average about 60 men and

DR. ROBERT R. LINTON, VISITING SURGEON—PERFORMING AN OPERATION IN PROFESSOR DENK'S CLINIC IN VIENNA
Left to right: DR. WOLFGANG DENK, DR. LINTON, DR. OSKAR STEINHARDT

women. There are approximately 1,000 graduates, and they may be found in the four corners of the globe. It is a recognized centre for postgraduate training in both the United States and Canada. In Edmonton there are 4 large standardized general hospitals, with a combined bed capacity of 1,900 to 2,000. The University Hospital is the largest of these, with about 900 beds, of which the D.V.A. has a priority on 265. During this 30-year period we have successfully weathered World War II and are now going through further development, including a first-class oil boom.

Before bringing this letter to a close, I should like to say that I am very proud to have been a house officer at the M.G.H. I enjoyed the service, the surroundings, the people with whom I worked, and particularly the way the work was carried out. Many firm friendships were made in all parts of the United States. The one regret is that on account of distances, local activities, and possibly a touch of old age, one does not return very frequently and tends to get out of touch with things at the M.G.H.

I have read this effort over several times and am not so sure it fills the bill. At times it seems more like a brochure of the Board of Trade of some young and enthusiastic western town, trying to be put on the map. If it does not come up to scratch, do not hesitate to use the wastebasket, which I know every editor has in close proximity to his desk.

Dr. Milford D. Schulz (r.) has sent us this interesting letter from Sweden:

On the first of February, the Schulz family (including Mary Catherine aged six, two teddy bears, and five dolls of assorted sizes) landed in Göteborg, Sweden, from the steamship *Gripsholm*. The twelve-day crossing was millpond-smooth, but on its return trip to New York I understand the *Gripsholm* was pretty badly buffeted by the now-famous Atlantic storm of early February. Recently we had dinner with the ship's doctor, who told us about the return voyage through the storm. Apparently it was a really exciting one — unsuccessful attempted rescue at sea and everything. Fortunately, that we missed.

Our first week in Sweden was spent in Göteborg with Dr. Strandqvist and Dr. Leisner at the Radiotherapeutic Center. Dr. Leisner, by the way, spent the month of March visiting at M.G.H. We then came to Stockholm where, unexpectedly, we were met at the train by Bob Loftfield of the Huntington Laboratories. The next day we found Jack and Ruth Graham, who had been at the Radiumhemmet for some months and who returned to the M.G.H. in March. Since reaching Stockholm I have spent my time at the Radiumhemmet observing the way malignant disease in general, and more particularly malignancy of the uterine cervix, is managed in Sweden, especially by radiotherapy.

As an interlude in the Stockholm program, the month of April was spent visiting the principal radiotherapeutic centers in England. On our way we stopped at Lund and Upsala which lie to the north of Stockholm and are the two principal university towns in Sweden. Their schools were founded about the time America was discovered. In Malmö, which is just a few miles from Lund and across the strait from Copenhagen, we saw Bengt Skanse and spent a pleasant afternoon with him and his wife. They wished to be remembered to their good friends at the M.G.H. (Skanse worked with Dr. Means in the Thyroid Laboratories five years ago.)

Our first stop in England was London. Unfortunately, our arrival coincided with the beginning of a bank holiday. This meant that from Thursday till Tuesday everything was closed tight. London — and all of England, for that matter — was in quite a bustle and turmoil getting ready for the coronation, but the crowds had not yet arrived while we were there. In London and in Cambridge we met Mr. and Mrs. Raymond Quick, who had just returned to England in order to secure re-entry visas into the United States under the immigration quota. Raymond Quick will be remembered as fellow in the X-ray Department during the year 1951. In London and in Manchester we also met John and Barbara Reeves and had a good time reviewing old MGH affairs. John finished his residency in Radiology at M.G.H. in 1951.

On our return trip to Stockholm we stopped for a few days in Oslo to visit the Norwegian Radium Hospital. This is the principal center for the management of malignant diseases in Norway.

Next week our stay in Stockholm comes to an end, and we move on to Copenhagen where I shall be at the Radium Center till we return to Boston and the M.G.H. The International Congress of Radiology has its quadrennial session in Copenhagen this year, and I plan to attend the meetings. A number of Boston radiologists, including Dr. Robbins, will also be there.

It might be interesting to mention something about the radiotherapy institutions on this side of the water. In all Scandinavia, radiotherapy is carried out exclusively in special centers. These centers practically amount to the cancer centers for each country. There are three in Sweden — one in Göteborg, one in Lund, and the largest and principal one here in Stockholm. This Radiumhemmet is really a very remarkable place. It is part of the Caroline Hospital, which is the teaching hospital for the Caroline Institute — the medical research Institute.

In Norway there is one center — the Norwegian Radium Hospital in Oslo. In Denmark there are three principal centers. The largest of these is in Copenhagen; it grew up in association with the famous Finsen Institute. Each of these centers is a complete hospital in itself, quite separate from the general hospital, but is almost always associated with a large medical center. This arrangement is peculiar to Scandinavia.

In England there are a few radiotherapy centers separate and distinct from the general hospitals — the Hold Radium Institute in Manchester, for example. More often the radiotherapy unit, though separate and distinct as a department, is associated with and a part of a large general or teaching hospital. This is the case in the Royal Cancer Hospital in London, which deals with the treatment of malignant disease in all its phases. This is quite different from what is generally done in the United States, and it has been most interesting to observe these differences in organization. Apart from the organization aspects, however, the actual manner in which people who are sick with cancer are cared for — at least, in those places I have visited — is pretty much the same as at home.

These have been wonderful and instructive months that we have spent in Europe, but we are all counting the days until we can get back to Belmont, Boston, and the M.G.H.

It was very gratifying to find that Dr. Walter Pick (r.p. *C.M.* 1947) had not forgotten us entirely. This nice letter from him arrived recently:

It has been over five years since I started the practice of pediatrics here in Fitchburg, Massachusetts, and also since I last wrote to your delightful publication.

The practice here is very stimulating. Fitchburg is only forty-nine miles from Boston. This makes it easy to attend medical meetings there and to keep up to date. The local hospital has a fine staff of physicians with almost every specialty represented, including pathology and anesthesiology. The only specialties which are not represented in town are dermatology and neuropsychiatry. If a resident in either of these two specialties would consider practising here, I am sure he would be busy in no time and would get the encouragement of a fine group of fellow physicians. By the way, another pediatrician would do well here, too.

George Walker, assistant resident in surgery at the M.G.H. in 1951, is one of the surgeons here. The Medical Service is run by James G. Simmons, HMS 1923, and the Surgical Service is run by Frederick Ross, HMS 1939.

This short note, attached to his subscription card, has come from Dr. Marc Anthony (*Oph.* 1929) of Spokane, Washington.

I fly to Boston every two years now, using as an excuse either a class reunion or the graduation of my sons from Harvard.

This very cordial note arrived not long ago from Dr. Kenneth P. Nash (a.r.p. *Psychiat.* 1949).

Every issue of THE NEWS brightens the flame of friendliness and academic interest and enthusiasm gained at M.G.H. We enjoy it thoroughly.

We appreciate the good intentions evinced by Clayton H. Hale (sr. r.p. *R.* 1943), even though lack of time at the moment of writing made a longer letter impossible. He penned this message at the foot of our subscription expiration notice:

I still read THE NEWS with great interest. Keep up the good work.

I have no real news except to report that I am very happy in Syracuse. Mrs. Hale and I took the four children on a cruise to South America this winter, which was most enjoyable as well as a good rest. Not even one kid fell overboard.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 126 Boston, Mass. September 1953

A CONCEPT OF COMPLETE OBSTETRICAL CARE

When Miss Holbrook asked me if I had something I would like to say in THE NEWS, I said "Yes" with an alacrity that may have startled her, for I had recently been thinking at some length of the problems and extent of maternal care, and out of it all had come a conviction that a broad view and a concept of a lifelong service to the woman and her husband and her child is necessary to the proper alignment of any one phase of maternal care. This concept I developed in a paper given at the annual meeting of the American Association of Nurse-Midwives at the Frontier Nursing Service, Wendover, Kentucky, in October 1952. Although it is directed toward the work of the nurse-midwife, I believe the discussion has enough of general interest, perhaps, to warrant space in THE NEWS and so I present it here:

I have chosen as a title "A concept of complete obstetrical care". I shall present to you nothing new; in fact, I was careful to say "A concept", not "The concept" or even "A new concept of complete obstetrical care". But with brash courage in facing a group already well informed on the subject and already doing something about it, I shall presume to collect some unoriginal ideas and to develop in a short space of time an obvious thesis. This is not always an unprofitable pursuit, and possibly therein may lie any small distinction this paper has.

A concept of the problems of maternal health is not new. In some form, however simple, some sense of the need of the pregnant mother for outside assistance must have existed from earliest time. Protection of the female against the hazards of reproduction is a basic law of life as natural as reproduction itself. In actual fact, it is not at all even a human prerogative, but a fundamental attitude of nature, instinctive throughout the animal kingdom. No matter how willingly a mother risks her health and her life for her unborn child, for her to die in childbirth is perhaps life's greatest paradox and its greatest tragedy. So the woman who first "stood by" the parturient mother long before history's record was, in the truest sense, the first obstetrician. I have said "woman" advisedly, for I am sure that the pattern you have seen here in these mountains is inherent and must have come down from the deep roots of the past to be as instinctive as it is. There must have been some Piltdown or Neanderthal granny woman. A concept, therefore, of the necessity for providing care for the pregnant mother is not new. It is quite possible, too, that these early mothers, assisted by their midwives, experienced all the thrills of "natural childbirth" as they heard their babies' first cries! Hence, even in the broadest sense, I am discussing nothing new. But the full appreciation of what the hazards to the pregnant woman are, how they operate, what preventive measures can be taken have come only slowly. Much less clearly has there evolved either a concept of the individual emotional and social problems involved in pregnancy care or of methods of meeting them. Today I propose for your consideration what I wish to believe is the present-day evolution of the dim, inarticulate groping of the first midwife so long ago—that pregnancy is not an isolated incident in the woman's life to be cared for at the moment, but that training her as a mother and protecting her through her reproductive life span is a lifetime work.

Out of this attitude has come this modern threefold concept of maternal health:

1. That maternal health care starts with the baby girl at birth, watches her through her preadolescent growth, prepares her for puberty, carries her through the development of her reproductive stature, trains her for her pregnancies, conducts them safely, checks her between babies, and leads her through the trials of the menopause to a happy and comfortable old age.
2. That specific but varying hazards—physical, emotional, economic — exist at all stages of this cycle.
3. That these varying problems must be met by varying means at each stage.

The practical application of this concept of total maternal care can be reduced rather simply to a careful analysis of the problems to be met at each period of pregnancy and to the development of techniques for resolving them; to find, in short, at each phase of pregnancy what can be done, what should be done, and how best to do it.

The obstetrician rarely sees his prospective patient in her preadolescent years. Here, however, the doctor in the smaller community, seeing the family as a unit, has a distinct advantage. It is possible for him to see his patient grow up. Thus he can correct nutritional deficiencies; can do his part in preventing debilitating diseases such as tuberculosis, rheumatic fever, nephritis; and perhaps most important of all, he can help to provide, through her parents, the proper emotional, social, and economic environment for her advancing development.

With the onset of puberty, physical growth and development bring all of the problems of menstruation and sexual maturity. The emotional problems that accompany this physical change may be severe, for the young girl must now psychologically realign herself to a new position in her family and the community. What she learns and does at this point in her life condition her whole approach to her own part in marriage, family, and community. Perhaps at no other time in her reproductive life is there more need for proper preparation, counseling, and training to establish proper attitudes toward her sexual and social development, and to protect her from physical disease and moral trauma. This support must be the straightforward, authoritative, factual teaching that can come only from the combination of parents, the nurse, and the doctor. Needless to say, this training must antedate and coincide with her physical development.

As the adolescent girl grows and marries, she approaches the preconceptional period. It is in this phase that she falls into one of four distinct groups:

1. The normal. Here, reassurance is the treatment.
2. Those in whom pregnancy becomes a suicidal risk. Here, the facts must be tactfully, gently, but plainly presented and all possible help given in changing the young woman's focus toward other proper substitute activities.
3. Those in whom pregnancy is temporarily contraindicated because of untreated or uncontrolled disease, such as active tuberculosis, uncontrolled diabetes, acute rheumatic fever. Here the obvious therapy is to the complicating disease, with postponement of pregnancy until after its elimination.
4. A very small group in which a very few serious deficiency diseases occur. Here, again, the situation must be carefully explained to the woman and efforts made to help her into other channels. The doctor, quite naturally, is the only one qualified to be of service.

In the actual prenatal period for the first time, maternal care comes to an acute focus. At this time certain clear-cut steps must be taken:

1. The mother must have a thorough check of past illness and health, with particular reference to her ability to bear children.
2. She must have a thorough physical examination, both general and pelvic, and with mensuration of her pelvis. This must include weight, blood pressure, hemoglobin, blood grouping and Rh,

urinary check for albumin and sugar, Wassermann, and preferably a chest x-ray.

3. Her nutritional status must be evaluated.

4. She must be seen at sufficiently frequent intervals to be sure that no complications arise. At each visit her urine should be checked for albumin and sugar, her blood pressure and weight checked. She should be quizzed for any symptoms of complications. The development of the fetus should be watched. Her eating habits should be checked.

5. She should be given information throughout her pregnancy as to the development of her baby, the changes taking place in her own body. General and specific hygiene and nutrition teaching must be given. Cognizance must be taken of the emotional, social, and economic factors which may have direct or indirect bearing on her health in her pregnancy. In short, she, along with her husband and family, should be coached and prepared for the climax of delivery and the return home with the new baby.

Undoubtedly the most immediately dangerous time to the mother's health and life is the period of labor and delivery. Although all of her past condition and preparation will have much to do with her ability to withstand the trauma of delivery, her safety and the baby's lie for the most part in the hands of the doctor, nurse, or midwife who delivers her. Thus, there is no substitute at this time for:

1. Properly trained personnel.

2. Adequate facilities, especially for dealing with complications.

The postpartum period is one of readjustment, care being directed to:

1. Aiding in the normal processes of involution, and checking by proper physical examination to be sure they have taken place.

2. Providing full protection against infection to which the mother is particularly susceptible at this time.

3. Enhancing a normal relationship to the baby in feeding, physical care, and emotional response.

4. Protecting the mother's physical and emotional health against the dangers and difficulties of an altered family and community environment.

One of the most neglected phases of the care of the mother's health is the pregnancy interim period. At no other time can previously discovered abnormalities be so readily and leisurely treated in expectation of a better pregnancy in the future. These corrections apply just as well to deficiencies of family relationships and social and economic conditions.

Finally, maternal health care can in no way be considered complete unless steps are taken to mitigate the dangers and discomforts of the menopause and advancing years. Many of these, in fact, stem directly from experiences of childbirth. Nor should those interested in training each succeeding generation overlook the influence of the older upon the younger.

Here, then, is the outline. How can this be put into effect? There are two great fallacies, I believe, that in the past have hampered the full and proper growth of maternal care services. As I have pointed out thus far, the problems are different at each phase of pregnancy. Too common an error in the past has been a neglect of this point, so that one phase of the service was developed out of proportion to others. Thus, at the beginning of prenatal care in this country it was assumed that in a complete and early examination of all pregnant women, followed by continuing observation throughout their pregnancies, all problems of childbirth could be anticipated, all dangers met, and maternal morbidity and mortality thereby reduced to the irreducible minimum. This, sadly, was not so to be, and we have found it out. We now realize full well that a sound prenatal service can be defeated by bungling accouchement, and, equally, good delivery care will come to naught if inept postpartum nursing leads to infection. The second fallacy is equally destructive to a progressive over-all maternal health service, and that is the feeling that one type of organization can be made to cover within its own setup all regions and all types of communities. This, I am sure, is an oversimplification of the problems and a turn to the American tendency to pigeonhole in the smallest number of pigeonholes. In a country as broad as ours this cannot be done. And since in other countries the organization of medical services has progressed usually from mental care to State treatment of the tuberculosis patient to maternity benefits, both financial and through actual service, it behooves us in this country to observe other areas carefully and not be misled by inapplicable patterns. Therefore, in the light of our mistakes in the past and of a concept of complete obstetrical care for the future, let us examine the possible variations of organizations for such a service.

In general it is clear that there are several basic elements:

1. The Obstetrician. This term I use in the broadest sense. Perhaps a better word would be accoucheur, for I mean the specialist, the general practitioner, the nurse-midwife, the untrained midwife—whoever stands in control of the care of the pregnant mother. Someone must be in charge.

2. The Nurse. The service of the nurse lies in two categories. She is the doctor's assistant in all that he may direct her to do in the actual care of the mother, in helping him in the office or the clinic, and assisting in the delivery room, on the wards, and in the home. The second field of service is an extension of the first, in what might be termed the public health approach. More and more it is clear that what actually counts is the way in which the pregnant mother applies to her own daily living the principles she is taught. This we have too often assumed, and it has been a revelation to learn from a home nursing visit what lack and what misapplications of training have existed in actual fact. The public health nurse is the only one who can serve in this way.

3. The Nutritionist. It has become obvious through many studies that the mother's nutritional state both before and after pregnancy is one of the major factors in the maintenance of her health and that of her child. It is, however, a highly specialized subject and in many cases needs expert guidance.

4. The Social Worker. No one who has long dealt with pregnant women can be unmindful of the great prominence of social, economic, and community factors which play upon the emotions and health of the mother and the whole family. One must be equally mindful of the fact that special training here is indispensable, and so the social worker in her field becomes another link between the doctor and the proper application of his directives.

5. The Psychologist. I have avoided the term psychiatrist, for I am afraid of the connotation of a pathological state. But there is a need for someone with special training or ability in dealing with the more purely emotional and psychological problems of pregnancy.

6. The Health Educator. One of the recent advances in medical technique has been the development of methods of health teaching, and this has not been a problem simply solved. But there are methods brought out by this specialist which have been applied with great profit to the peculiar difficulties of teaching maternal hygiene.

7. The Pediatrician. This specialist has been added to the team to permit him to observe the prospective mother at intervals throughout her prenatal course. He then comes to know the mother of the child whose care he will later take over. He is forewarned of problems; he can help in meeting them before they become serious. Even more, the mother herself can turn to him for the answers to her early questions of baby care. Her confidence in the man who is to care for her baby is established and one more of the sudden shocks of childbirth is softened.

I have purposely personalized these different elements for emphasis. I have no thought that all seven must be represented in each organization by seven individuals, nor is it at all desirable in every case that they should be. But it must be clear that whether the responsibility for maternal care lies in one individual or in a clinic, these are the elements that must be covered if we are to give the kind of service we propose.

To be more specific, these principles may be profitably applied in one or more of the following ways, singly or in combination:

1. The Specialist. This man is trained to be the leader in his field, and as such his patients have a right to demand the

best of care. When he assumes this responsibility upon his own shoulders he must be sure he discharges it well and completely. His purely technical care should never be in question, but he must be sure that he does not neglect the other phases outlined above. He must develop within his patients the confidence that leads to a willingness on their part to bring to him all problems, and he must then treat them all with the seriousness with which they were presented. He must have resources with which to meet them. He must know all of the community organizations which can offer help. He must be able to give nutritional advice. He must teach hygiene—whether to groups of his patients with their husbands or individually—and he must know that his instructions are being followed. Of course, he has the assistance of his nurse, his secretary (a worker of no small responsibility), books and pamphlets, and the community organizations—but his is the responsibility. And above and beyond this, this man, this specialist, has the duty of leading his profession forward into the future.

2. The General Practitioner. This man delivers most of the babies of the country. His is a great field—perhaps the most difficult position to fill and fill well. Yet he must do it if he accepts the care of pregnancy. He must be all that the specialist is to the degree of his time and ability. Herein lies the distinction of the good, safe local doctor. He knows his limitations and he knows where he can receive the help he needs—and he is willing to use it.

3. The Nurse-Midwife. This woman, highly trained in her special field, may assume total responsibility for maternal health care and must discharge it as fully as I have described above. If she is working alone, as she must do in some areas, she has a big job. If she works as she should, in such an organization as the Frontier Nursing Service, she is able to bring practically and economically to large areas of this country and the world a type of care that would be impossible in any other way.

4. The Untrained Midwife. I mention her because I believe that for some time she will still form an important link in our world-wide programs. She must have meticulous supervision, but under such watchfulness she can do a good job. Obviously, the supervision can best be done by the nurse-midwife who is herself working under the over-all supervision of the doctor. This is a method exceedingly economical, of both personnel and finances.

5. A combination of the doctor and the public health nurse or the nurse-midwife. It must be seen that there are all possible combinations of this type of service. It is a method that admits of almost infinite tailoring to the individual situation, being of special value in rural areas in combining private and State services.

6. The Clinic. This I mean as the large clinic run in connection with a delivery service in a hospital. If this is a teaching center, the organization is extensive and offers in many individual persons the elements I have listed. Herein, however, lies one of its great disadvantages. The personal touch is lost. The mother becomes a patient with a unit number, who "runs through" the service in a sort of production-line fashion. Undoubtedly it has contributed greatly to the advance of maternal care, and is to a great degree responsible for the reduction in both maternal mortality and morbidity; but, as I see it, one of the real unsolved problems of the future is the reintroduction of personality—the personality of the mother, her husband, and her child—the family personality—into the clinic.

7. The State. The State must function throughout our maternal care programs in a variety of ways. There will be areas, perhaps even whole countries, in which the State must take complete charge. Reasons for this are beyond the discussion today, but the possibility must be recognized. If the State assumes complete responsibility it must offer the best possible type of service for the given area. It is our duty to see that it does. In other respects the State must offer a variety of services—consultants, consultation clinics, nursing supervision, nutrition supervision, social service, educational aids, perhaps financial benefits, and so on—in aid to practitioners and other established services. The State must be trained to do this, for it must play an important role in our concept of complete care.

Now, finally, I should like to venture some comments on the place of the nurse-midwife in complete obstetrical care.

In the first place, it must be understood that you are specialists, that you are trained as specialists, and that you should be used as specialists. This means that your numbers will always be limited and that you must make the most of your abilities. Do not be led into channels of work that can be handled as well by someone else. There will always be too few of you, and your special talent should not be wasted. Axiomatic to this is the fact that your training must be of the best. There can be no compromise here. On the basis of this training, it seems to me you have several areas in which your service is unique.

In actual operations you are, first of all, the best suited individual practitioner in the economically marginal areas. I am not at all sure that you are not the best practitioners for the normal cases in some of the more financially fortunate areas which nevertheless have inadequate professional care. This, of course, is your traditional place in European practice. In all of the types of service I have listed above you are the doctor's assistant par excellence. And in all of your practice you have access to the home and perhaps even to the innermost thoughts of your mothers and their families in a way no one else has. This is an association that can grow with the years and in the fullest degree lead to the carrying out of the principles of complete obstetrical care of which we have been talking.

But your abilities should call you beyond practice alone. You must assume the task—along with others, of course—of training. This must be teaching with a vision, as you see the vision—teaching of your own group, of the community, of the mothers and families themselves, of the State—even of the doctors themselves! And I would like to stress this latter, though I must admit that this phase of your professional activities will call for a good deal of tact. Our present day training of obstetrical specialists, I believe, runs too heavily to the super-hospital type of service and leaves a great blank in the area in which most of world-wide obstetrics lies. Furthermore, all doctors in the privacy of their own thoughts will admit to being greatly in debt to nurses for the many practical methods they have learned from them, and for the inspiration of their service.

I should like to note also the peculiar advantages you have in doing research. I do not mean necessarily large, grant-type research — although your training would fit you eminently into this type of group research—but in the opportunity to observe at close hand in carefully studied groups factors which add up to real significance. Many of the great advances in medicine have come not from the large laboratories but from the inspired thinking of men working in humble and often extremely simple ways.

Yours is a magnificent opportunity and a great responsibility. I wish you well.

Samuel B. Kirkwood, M.D.,
Associate Obstetrician

MARIUS N. SMITH-PETERSEN

News of the death of Doctor Smith-Petersen came as a shock to every member of the MGH family. In his case the inevitable summons seemed to come far too soon to a leader in our midst who was at the height of his intellectual powers. But sober thought leads us beyond the first emotional reactions to our bereavement, to a consideration of the impact which his life has had on medicine and of the great debt which the Massachusetts General Hospital owes to him.

He chose to devote his energies to that branch of clinical medicine known as Orthopedics. Devotion to his patients was an outstanding feature of his personality. When he sat down to study a clinical problem, whether in the ward or with a private patient, he concentrated all of his intellectual powers upon it. In his lexicon there was no such thing as a "routine case" and he never adopted "routine methods". When he had completed his careful study of the problem he outlined with equal care the treatment which seemed best suited to the case. But methods of treatment which fell short of giving ideal results were always suspect and many hours of thought were devoted to devising better methods than had previously existed.

He established with every one of his patients an intensely personal relationship, the essential ingredients of which seemed on the part of the patient to be trust in his skill, and knowledge that he was wholeheartedly devoting himself to the solution of their problems. On Doctor Smith-Petersen's part there was an air of confidence and courage based on careful study, wise decision, and technical skill. He had also an unflagging optimism and a will to win which weigh heavily in the successful solution of apparently hopeless problems.

His powers of observation and analysis, his devotion to clinical orthopedics, and his persuasive, logical presentations made Doctor Smith-Petersen a teacher of great ability. An untold number of medical students, interns, residents, and graduate students have had their intellectual horizons broadened as they listened to his lectures or heard him discuss clinical problems on ward rounds. He loved to exercise his technical skill in the operating room. Here, as elsewhere, he was a perfectionist. Every operation was carefully planned and executed with all the skill he could muster. This technical skill and his careful handling of delicate body structures must have developed in no small degree from the influence of Harvey Cushing while he was a surgical house officer at the Peter Bent Brigham Hospital. He took great pride in his tools and was ingenious in developing special new ones to suit his particular needs. It is probably safe to say that no other orthopedic surgeon has developed as many new, useful instruments for use in the operating room.

Doctor Smith-Petersen studied for many years with unflagging enthusiasm the problems of the hip joint. Early in his career he developed a surgical approach to the hip which permitted excellent exposure without damage to the deep-seated structures. The Smith-Petersen approach has become a most useful avenue of access to the hip joint.

Another product of his fertile mind was the invention of the three-flanged nail (known universally as the Smith-Petersen pin) which revolutionized the treatment of intracapsular fractures of the hip. Before its use, the unfortunate, elderly patient who broke her hip faced months of painful immobilization and if she survived that ordeal there was little prospect that satisfactory function of the hip would ever be completely restored. The development of a safe, accurate method of reduction of intracapsular fractures of the hip and their fixation by the three-flanged nail has almost abolished this accident as a cause of death and has reduced the occurrence of non-union to a mere fraction of its former rate. This invention can truly be called a boon to humanity.

The problem of how to abolish pain and restore motion in mechanically deranged hip joints engaged Doctor Smith-Petersen's attention for over twenty-five years of his professional life. His early studies convinced him that the use of an interposed mold was sound mechanically and physiologically. Improvements in the design of the mold, in the operative technique, and in postoperative care were the inevitable results of his constant efforts to perfect this operation. He proved that arthroplasty of the hip could be successfully performed, and in the later years patients came to him in ever-increasing numbers from all over the world to exchange old hips for new ones. Undoubtedly there will be many further advances in the field of hip arthroplasty, but it was Doctor Smith-Petersen who blazed the trail.

For his colleagues and for the Massachusetts General Hospital Smith-Pete had an enduring affection. Many there are in the MGH family who count it a privilege to have been among his patients, his pupils, and his friends.

J. S. B.

THE SMITH-PETERSEN FOUNDATION

The Smith-Petersen Foundation is a fund established by a group of Doctor Smith-Petersen's patients. The income (or, under special conditions, the principal) is to be used for furthering orthopedic knowledge.

At the discretion of its medical committee (Dr. Otto E. Aufranc, Dr. Joseph S. Barr, and Dr. Morten Smith-Petersen) the funds can be used to care for certain types of hip conditions or indigent patients who have special problems. The funds can also be used to publish results of research in connection with orthopedics.

Grateful patients have added to this fund from time to time, so that it has reached a very useful amount. Many of Doctor Smith-Petersen's old students, medical associates, and other friends have also contributed; and a large number of patients, instead of sending flowers to his Memorial Service, contributed to this fund.

It is hoped that by additional gifts to the Smith-Petersen Foundation the Orthopedic Service will eventually have a very useful research fund. It was the wish of the original donor that others join in adding to the fund. At the present time research on hip surgery is being carried out with the income furnished by these contributions. If any of the readers of THE NEWS are interested, they may send their checks or securities to the Smith-Petersen Foundation, care of Charles Collins, 10 Post Office Square, Boston. All contributions made to the Foundation are deductible from Income Tax returns in the manner and to the extent provided by law.

* * *

By decree of the President of the French Republic dated February 17, Dr. Edward D. Churchill was granted the Cross of Knight of the Legion of Honor "as a token of appreciation for his remarkable achievements in the field of surgery, and of gratitude for his outstanding contribution in fostering closer co-operation between the scientists of the two countries".

The decoration was bestowed on July 14 by Monsieur Francois Charles-Roux, Consul General of France in Boston.

* * *

The General Surgical Services had the great pleasure of welcoming Dr. Michael E. De Bakey, Professor of Surgery, Baylor University College of Medicine, as Acting Chief from June 16 to July 1. The Daniel Fiske Jones Memorial Fund "to extend and improve the education of surgical residents and interns" has made it possible from time to time to invite distinguished surgeons from other cities and countries for periods of temporary service. Residence is provided at the Hospital and the visitor is in every way the guest of the House Staff.

Dr. De Bakey was an especially happy selection. Known personally and greatly esteemed by older staff members, he is not only an accomplished master of operative techniques but an outstanding scholar and writer. His dynamic personality and leadership made a lasting impression on all who worked with him during his residence with us.

The Board of Trustees, at their meetings on June 12 and 26, and July 17, voted:

To accept the resignation of Dr. James P. Ryan from the position of Dental Intern, effective June 1;

To promote to the position of Associate Anesthetist:
  Dr. Bernard D. Briggs
  Dr. John P. Bunker
  Dr. George E. Donaghy
  Dr. Donald P. Todd

To extend Dr. Fletcher H. Colby's appointment as Chief of Urology Service pro tempore;

To reappoint Dr. David Littmann as Clinical Associate in Medicine, effective July 1;

To change Dr. William H. Baker's title from Clinical and Research Fellow in Medicine to that of Assistant in Medicine, effective July 1.

To appoint:

Dr. Leland C. Brannon as Second Assistant Resident in Neurosurgery, for the period July 1 through December 31;

Dr. Benjamin Castleman as Chief of the Department of Pathology and, concurrently, to the permanent staff position for a Pathologist, established by vote of the Board of Trustees of March 20, both appointments to be effective immediately;

Dr. Joseph F. Cianciolo as Dental Intern, beginning July 1;

Dr. Maurice Fremont-Smith to the Board of Consultation, effective as of July 1, 1952;

Mr. L. Joseph LeBritton as Administrative Resident, beginning July 1;

Dr. Joseph J. M. McGovern as Out-Patient Resident on the Children's Medical Service, for the period July 1, 1953 through March 31, 1954;

Dr. Vernon H. Mark as Senior Resident in Neurosurgery, for the period July 1 through December 31;

Dr. Federico Mora as Second Assistant Resident in Neurosurgery, for the period July 1 through December 31;

Dr. William Pfeffer, Jr. as Assistant Physician to the Children's Medical Service;

Dr. Robb H. Rutledge as Second Assistant

Resident rather than Third Assistant Resident in Surgery, beginning August 1;
Dr. Robert T. Sceery as Assistant to the Children's Medical Service, beginning July 1;
Dr. Ernest A. Sneddon as Clinical Fellow in Anesthesia, with the duties of an Assistant Resident, effective August 15;
Dr. William K. Stephan as Assistant Resident in Anesthesia, beginning July 1, 1954;
Dr. Bernard B. Stone as First Assistant Resident in Neurosurgery, for the period July 1 through December 31;
Dr. Julio Toriello as First Assistant Resident in Radiology, beginning July 1;
Dr. Peter M. Tow as Assistant Resident in Psychiatry for six months, beginning January 1, 1954;
Dr. Jerome K. Walker as Dental Intern, beginning July 1.

At their meetings on June 10, 17, and 24, and July 15, the General Executive Committee voted:

To accept the resignation of Dr. Frederic L. Hoch from the position of Research Fellow in Biochemical Research, effective as of June 30;
To accept the resignation of Dr. Samuel R. Schuster from the position of Clinical Fellow in Pathology, effective as of July 1.

To promote:

Dr. John F. Burke from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Richard A. Currie from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;
Dr. Edward Dunn from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Walter M. Haynes, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Clement A. Hiebert from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Richard N. Kleaveland from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Martin B. Levene from the position of First Assistant Resident to that of Resident in Radiology, beginning July 1;
Dr. Paul S. Russell, Jr. from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 15;
Dr. Frederick G. Shaffer from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Jack E. Tetirick from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1.

To continue the appointments of:

Dr. Roy L. Byrnes as Third Assistant Resident in Pathology, for the year beginning July 1;
Ernst Simon, Ph.D. as Research Fellow in Biochemistry, through January 31, 1954.

To reappoint:

Dr. Chester C. d'Autremont as Clinical Fellow in Psychiatry, to work under the direction of Dr. Jessner in Child Psychiatry;
Dr. Robert Kagan as Clinical Fellow in Psychiatry, beginning July 1, to work in Child Psychiatry;
Dr. Louis C. Lasagna as Clinical and Research Fellow in Anesthesia, through May 15, 1954;
Dr. Nils Normann as Clinical and Research Fellow in Anesthesia, through January 31, 1954;
Dr. Albert Schilling as Clinical and Research Fellow in Medicine for one year, beginning July 1.

To appoint:

Dr. George S. Bascom as Clinical and Research Fellow in Surgery, effective when he receives his temporary license to practise medicine in this State;
Dr. Geoffrey N. Chandler as Clinical and Research Fellow in Medicine, effective September 1;
Dr. Richard B. Cohen as Clinical and Research Fellow in Pathology for one year, beginning July 1;
Dr. Jean H. Darche as Graduate Student Assistant in Surgery, effective July 1;
Dr. Hector M. del Castillo as Graduate Student Assistant in Surgery, effective July 1;
Dr. William S. Dingledine as Clinical and Research Fellow in Medicine, effective July 1;
Dr. William E. Fitzgerald, Jr. as Research Fellow in Psychology for one year, beginning September 15;
Dr. Nathaniel Gould as Clinical Assistant in Orthopedic Surgery, to assist Dr. Paul L. Norton, effective July 1;
Dr. Thomas H. Green, Jr. as Clinical Assistant in Surgery, effective July 1. He also has been granted the privilege of caring for the private patients of Dr. Meigs in the Baker Memorial and Phillips House;
Dr. Ottheinrich A. M. J. Hase as Clinical and Research Fellow in Surgery, effective when he receives his temporary license to practise medicine in this State;
Dr. Franz S. M. Herbst as Clinical and Research Fellow in Dermatology, effective when he receives his temporary license to practise medicine in this State;
Dr. John W. Keller as Clinical Assistant in Medicine, beginning July 1;
Dr. Gordon D. LaZerte as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Alfred J. Luessenhop as Clinical and Research Fellow in Neurosurgery, effective when he receives his temporary license to practise medicine in this State;
Dr. Angel A. Monti as Graduate Student Assistant in Neurology, assigned to the Electroencephalographic Laboratory, for the months of June, July, and August;
Dr. Andrew M. Park as Graduate Student Assistant in Neurology, assigned to the Electroencephalographic Laboratory, for the months of June and July;
Dr. Sholem Postel as Clinical and Research Fellow in Medicine, effective July 30;
Dr. William P. Rogers, Jr. as Clinical Assistant in Surgery, to work in the Tumor Clinic and Surgical Out-Patient Department effective July 1;
Dr. Nancy Rollins as Clinical Fellow in Psychiatry, for six months, beginning July 1;
Dr. Howard M. Spiro as Clinical and Research Fellow in Medicine, effective September 1;
Dr. Kyle Y. Swisher, Jr. as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. John N. Walton as Clinical and Research Fellow in Neurology for one year, beginning November 1;
Dr. Vaughn Westermeyer as Clinical Fellow in Medicine, effective July 1.

On July 20 the Hospital opened a day nursery to care for pre-school children whose mothers are employed as part-time nurses in the Hospital. There is no charge for this service. Miss Jean Campbell, a qualified, friendly teacher, is in charge and is assisted by volunteers. The former Medical Laboratory room on the first floor of the Bulfinch Building has been painted and furnished with appropriate chairs, tables, play equipment, and a sand box. The children enjoy the freedom of the Bulfinch yard, including the Lezers' jungle-gym.

In setting up a day nursery the Hospital hopes to find a measure of relief in the shortage of nurses and a means of attracting married nurses back to their chosen profession.

MASSACHUSETTS EYE & EAR INFIRMARY

Two of the Infirmary staff are now on vacation in Europe.

Miss Isabel Whiting, Director of Social Service, sailed on July 1 for a nine-weeks' tour of the Scandinavian countries. Since then she has kept the Social Service Department entertained and informed about her trip with a series of post cards from Norway, Sweden, and Denmark. Her return is expected on September 9.

Dr. Charles L. Schepens, Assistant in Ophthalmology and Director of the Retina Foundation, is spending his vacation this summer in Belgium. Dr. Schepens is a native of Belgium, so his journey is actually a trip to his home.

Dr. David D. Donaldson, who has recently left the Retina Service, has received an appointment as Instructor in Ophthalmic Research from the Harvard Medical School. On completing his residency, Dr. Donaldson will resume full-time research activities at the Howe Laboratory.

Dr. Paul M. Runge, Assistant in Ophthalmology, has taken over the practice of Dr. Harry K. Messenger (*Oph.* 1934) at 313 Commonwealth Avenue. Dr. and Mrs. Messenger are traveling to New Zealand for an extended visit.

Miss Marilyn Myers, Executive Secretary of the Eye Bank, reports that a successful publicity campaign has resulted in 103 inquiries about donor forms for the Bank in the month of July, as compared with 25 in June.

This note arrived from Dr. Mourad Arnoux, from 606 Second Street, Brooklyn 15, N. Y.:

> I finished my special ENT residency in the Infirmary in June and left for New York City. I would appreciate very much your publishing the following in THE NEWS:
>
> "Doctor Arnoux is sincerely grateful for the nice treatment and wonderful teaching he received in the Infirmary, and sends his thanks and best regards to the director, staff, attending staff, and nurses. His special thanks go to his chief, Dr. LeRoy Schall, whose spirit of truth, equity, tolerance, sincerity, and devotion represents the real American ideals. Men gifted with this kind of spirit will keep to America its ever-growing greatness and its ever-human nobleness."

* * *

On August 9 Storrow House celebrated

its fifth birthday as our convalescent unit. There was a birthday cake with candles and gay table decorations in honor of the occasion.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in a few instances. It would save your editor considerable time and trouble if you would, PLEASE, REMEMBER TO INCLUDE THAT INFORMATION. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Cardiology

Scannell, J. G.
Recent advances in cardiac surgery. (Editorial)
Virginia M. Monthly 80:251-252.

General Medicine

Dobyns, B. M., Vickery, A. L., Maloof, F., and Chapman, E. M.
Functional and histologic effects of therapeutic doses of radioactive iodine on the thyroid of man.
J. Clin. Endocrinol. & Metab. 13:548-567.

Harwood, R.
Management of diabetes in the office and at home.
Geriatrics 8:311-323.

General Surgery

Waddell, W. R.
Parenteral nutrition.
Maryland State Med. J. 2:244-248.

Waddell, W. R., and Wang, C. C.
Effect of vagotomy on gastric evacuation of high-fat meals.
J. Appl. Physiol. 5:705-711.

Immunology

Waksman, B. H.
Specific white cell lysis produced by combination of rabbit antiserum to purified protein (ovalbumin, bovine gamma globulin) with homologous antigen. The role of non-precipitating antibody.
J. Immunol. 70:331-344.

Waksman, B. H., and Bocking, D.
Study with fluorescent antibodv of fate of intradermally injected proteins in rabbits.
Proc. Soc. Exper. Biol. & Med. 82:738-742.

Laboratory Science

Bucher, N. L. R., McGovern, N. H., Kingston, R., and Kennedy, M. H.
Factors affecting biosynthesis of cholesterol from acetate by rat liver homogenates. (Abstract)
Federation Proc. 12:184.

Taymor, M. L., McArthur, J. W., and Ingersoll, F. M.
The effect of interstitial cell stimulating hormone upon the uptake of P32 in the rat prostate.
In Surgical forum—Proceedings of the forum sessions, Thirty-eighth Clinical Congress of the American College of Surgeons, New York City, September 1952, Philadelphia, W. B. Saunders Company, pp. 317-321.

Zamecnik, P. C.
Incorporation of radioactivity from DL-leucine-1-C^{14} into proteins of rat liver homogenates. (Abstract)
Federation Proc. 12:295.

Neurology, Neurosurgery, and Psychiatry

Bakay, L., and White, J. C.
Pneumoencephalography in chromophobe adenomas of the hypophysis.
J. Neurosurg. 10:284-296.

Benda, C. E.
Research in congenital acromicria (Mongolism) and its treatment.
Quart. Rev. Pediat. 8:79-96.

Cobb, S.
For a generic classification of certain psychoses.
Am. J. Psychiat. 109:869-870.

Finesinger, J. E., Shands, H. C., and Abrams, R. D.
Managing the emotional problems of the cancer patient.
CA — Bull. Cancer Prog. 3:19-21; 24-31.

Otolaryngology

Kelemen, G.
La cavitá nasale della cavia negli esperimenti di farmacologia e esperimenti analoghi.
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Kelemen, G.
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Morgan, W. S., and Castleman, B.
A clinicopathologic study of "Mikulicz's disease".
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Scully, R. E.
Gonadoblastoma: A gonadal tumor related to the dysgerminoma (seminoma) and capable of sex-hormone production.
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Surgery — Reconstructive

Cannon, B., and Murray, J. E.
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Urology

Smith, G. G.
Three unusual cases of prostatic malignancy: adenocarcinoma with mucus cells; malignant lymphoma; leiomyosarcoma.
Tr. Am. A. Genito-Urin. Surgeons 44:10-17.

Miscellaneous

Farnsworth, D. L.
Doctors afield – Mark Hopkins: Physician, educator.
New England J. Med. 248:821-822.

Brief bits:—

Dr. Joseph S. Barr has returned from a three-months' leave of absence to serve as a member of a medical team in Indonesia, sponsored by WHO. He came back by way of Australia, New Zealand, and Honolulu. Dr. Barr has been appointed a member of the Medical Advisory Board of the Alfred I. duPont Institute of the Nemours Foundation.

Dr. Clemens E. Benda was elected President and Dr. Raymond D. Adams Vice-President of the American Association of Neuropathologists, at the last meeting of the Association, held on June 14.

Mr. Raymond Quick, Research Fellow in Physics, 1952, is returning to Strong Memorial Hospital, Rochester, N. Y., this fall. He went back to his native England this summer.

Dr. Laurence L. Robbins visited hospitals in England and Stockholm during the month of July, while he was en route to the Seventh International Congress of Radiology, held in Copenhagen. By special invitation he read a paper on "The roentgenologic diagnosis of benign tumors of the bronchus and lung".

Dr. J. Gordon Scannell has delivered two lectures at meetings outside the Hospital. On April 15 he talked on "The surgical reconstruction of the superior vena cava" before the New England Surgical Society; and on June 4 he spoke on "Emergencies of the lung and esophagus" at the American Medical Association Meeting.

Dr. Robert T. Sceery announces the opening of his office for the practice of Pediatrics at 109 North Main Street, Cohasset, Massachusetts.

Dr. Somers H. Sturgis was promoted to Associate Clinical Professor of Gynecology at Harvard Medical School in June, and also to the position of Surgeon (Gynecology) at the Peter Bent Brigham Hospital. Dr. Sturgis is a Director of the American Society Study of Sterility, and this spring was appointed Associate Editor of *Fertility and Sterility,* their bimonthly publication.

Drs. Jacob H. Swartz and Earl A. Glicklich announce the removal of their offices to Suite 125, Hotel Braemore, 464 Commonwealth Avenue, Boston.

* * *

Dr. Edward B. Benedict has sent us this interesting account of the Benedicts' trip to Europe:

Dr. Patricia H. Benedict and I left for Europe April 15 and returned June 30. During the early part of our stay in France we had a pleasant visit with Dr. Maurice Donat in Nice and visited the hospital where he does his thoracic surgery. Dr. Donat was a visitor to our Surgical Clinic here about a year ago. He is physician to the Prince of Monaco.

While in Italy we enjoyed a visit with Dr. Carlo A. Montagnani in Florence. It will be recalled by some of you that Dr. Montagnani worked here in our Surgical Research Laboratory several years ago.

In Switzerland we were entertained by Dr. Ernst Hafter, a gastroenterologist of Zurich, who visited our Endoscopy Clinic in 1950. We were also entertained in Braunwald by Dr. Erwin Sommer. Dr. Sommer was here several years ago as a patient on Ward 4 and a visitor to Dr. Albright's group. He is in charge of a sanatorium for chest diseases in a gorgeous location high up in the Alps, about a two-hours' ride from Zurich.

In London Dr. Patricia Benedict gave a talk at the invitation of Dr. Russell Fraser (res. fel. *M.* 1938-40) at the Hammersmith Hospital, Postgraduate Medical School, reporting some studies of amenorrhea in groups of patients from the Ovarian Dysfunction Clinic. She also spoke on "Idiopathic hypercalcuria" at the Royal Society of Medicine, Section of Endocrinology. This was a report on patients from the MGH Stone Clinic. While she visited the Metabolic Ward of the University College Hospital with Dr. Chester Dent, I was spending my time with two prominent London surgeons – Mr. Norman R. Barrett at St. Thomas's Hospital and Mr. Ronald W. Raven.

In Leeds we were house guests of Mr. and Mrs. Philip R. Allison. Mr. Allison is well known for his esophageal surgery, and was a visitor here a few years ago. During my stay in Leeds I gave a lecture on "Endoscopy".

In Birmingham we were house guests of Mr. and Mrs. A. L. d'Abreu. At the Queen

Elizabeth Hospital we were shown every courtesy, and at Mr. d'Abrau's private hospital for thoracic surgery I took part in a discussion on bronchoscopy. It will be recalled that Mr. d'Abreu was a visiting surgeon here in 1951 and that Mrs. d'Abreu, S.R.N. St. Thomas's Hospital, London, did volunteer nursing here at this hospital and recently wrote of her MGH experiences in a British nursing journal. Dr. Patricia Benedict spent some time with Dr. A. C. Crook at his Department of Clinical Endocrinology of the United Birmingham Hospitals.

In Cambridge Dr. Paul Fourman (res. fel. *M.* 1948-49) delighted his visitors by taking them punting past the Backs, affording an excellent view of the colleges. Dr. Victor Coxon (res. fel. *M.* 1950-51) introduced us to Oxford.

Our next medical adventure took us to Knokke, Belgium, to a meeting of the International Bronchoesophagological Society, where I presented a paper by Dr. Richard H. Sweet and me on "Achalasia: A study of bouginage and surgical therapy".

In Paris Dr. Patricia Benedict gave a talk before the laboratory group at the Henri Rousselle Hospital, and also talked after Dr. André Lichtwitz's Saturday A.M. clinic at the Lariboisiere Hospital at the invitation of Dr. Jeannine Crepeaux (clin. & res. fel. *C.M.* 1951-52). During my stay in Paris I visited Professor Moutier's Clinic on Gastroscopy. Dr. Moutier is a delightful elderly Frenchman with a white beard. He was kind enough to entertain us at dinner. When some remarks were made about the richness of the food and alcoholic beverages and their association with gastritis, Dr. Moutier remarked, "To live is to have gastritis!"

Having become one of the old men in white at the M.G.H. and one who at last should soon be finishing up by one process or a combination of the usual processes, i.e., retirement (so far, the M.G.H. has no house officer pension program), death from old age, or graduation, I have been extended an invitation to submit a blurb to THE NEWS—a sort of valediction, I suppose, or maybe just any old thing. As this sad tale unfolds, you can see that more of the latter has been submitted.

My first encounter with this grand old institution was in the fall of 1943 as a 3rd year medical student in the Medical OPD. The patient at hand was a taxi driver who was suffering with indigestion. He volunteered the information that each day he consumed 2 to 3 bottles of "tonic". Having transferred only a few days before from the South—where tonic means Beef, Iron, and Strychnine or Swamp Root or SSS (Doses: 1 tablespoonful 4 times a day)—I felt that even though these were very good agents, this man's trouble was too much tonic. My instructor insisted and proved by roentgenograms that the diagnosis was duodenal ulcer. Thus, I learned the true nature of a Boston tonic. I still believe he drank too much.

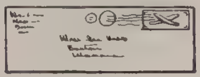
My most difficult case was a problem in the management of the family of a patient in urology. An old gentleman was afflicted with an enlarged prostate causing obstruction to urine flow, an elevated NPN, and cloudy cerebration. We were especially sympathetic because he and his wife were alone in this world. The necessity of his operation had been realized some months prior to admission but had been deferred so that the patient and his wife could become reconciled to it. Both were pessimistic. She did not want to be left behind alone, and he did not exactly want to leave. He was finally admitted after realizing that the operation was the best assurance of maintaining their social *status quo* and after convincing the wife that we would take extra special care of her loved one. (We always do that at the M.G.H.) She seemed pleased with her decision on admission, but was very upset on her first visiting day to find her husband sporting a black eye. (He had received this in a fall when he got out of bed, against our very definite orders, during the night.) He was very confused and could not explain the condition to his wife. She felt that someone had struck him and that he was being abused. Therefore, home he was to go! With difficulty, however, she was convinced of the truth and the patient remained under our care.

As if this wasn't more than enough, on the second hospital day, while receiving an infusion, the patient caused the glass connecting tube to get broken, whereby 1500 cc. of 5% D/W drained directly upon the floor. Into this large puddle of sugar water a small amount of blood drained from the patient's end of the tube and fairly well stained the puddle. At this very moment the wife arrived for her second visit and saw what she thought was the result of a bleeding procedure. The writer had never before, nor has he ever since, done a quicker soft shoe dance! To our great relief, the patient finally had a successful operation and all were very happy.

Undoubtedly, my only contribution here was made in the department of neurosurgical anesthesia. I discovered that by taking a box of crackers and a quart of milk from the operating room canteen and one of those containers found only on a male ward—by taking these in under the drapes with me (the neurosurgical anesthetist usually sits buried in under the drapes), I could almost outstay the neurosurgeon (14 hours on one gloomy occasion).

In a more serious vein, I would like to echo Dr. George Richardson's remarks made in an earlier issue of this paper (THE NEWS, March 1953). I am extremely grateful to this institution for the best surgical training in the world, for the financial assistance (House Officers' Loan Fund) which made it possible for me to meet emergencies for my family and me without seeking aid elsewhere, and for the very good *medical* care I received during a recent illness (January 29-July 1) that might otherwise have been serious for me.

Ernest S. Crawford, M.D.,
Resident in Surgery



New addresses:—

Dr. James H. Averill (*M.* 1947), 249 Crescent St., Northampton, Mass.
Dr. Lawrence J. Barrows (r.p. *N.* 1952; r.p. *N.P.* 1953), Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia, Pa.
Dr. Samuel P. Bessman (res. fel. *Biochem.* 1953), Children's Hospital, Washington, D. C.
Dr. Samuel Brendler (sr.r.s. *N.S.* 1953), New England Center Hospital, 171 Harrison Ave., Boston, Mass.
Dr. George R. Burland (a.r.s. 1953), Olds, Alberta, Canada.
Dr. Garth R. Drewry (*M.* 1953), 994 Sumner Ave., Springfield, Mass.
Dr. Harold E. Elrick (*M.* 1944), Radioisotope Unit, Veterans Administration Hospital, Denver, Colo.
Dr. Mary S. Fisher (*M.* 1949), 7716-A Lucretia Mott Way, Elkins Park, Pa.
Dr. Gerald S. Foster (*M.* 1952), 11-16 160th St., Beachhurst, Long Island, N. Y.
Dr. Thomas Frank (a.r.p. *C.M.* 1953), Metropolitan State Hospital, Waltham, Mass.
Dr. Pablo Fuchs (*W.S.* 1942), 3a. Ave. 7-34, Guatemala City, Guatemala.
Dr. Melvin J. Glimcher (a.r.s. 1953), Children's Medical Center, Boston, Mass.
Dr. Thomas R. Goethals (*E.S.* 1917), 319 Longwood Ave., Boston, Mass.
Dr. Carl W. Gottschalk (*M.* 1946), North Carolina Memorial Hospital, Chapel Hill, N. C.
Dr. W. Robert Harris (a.r.s. *Or.* 1952), 609 Medical Arts Bldg., 170 Saint George St., Toronto, Canada.
Dr. Arthur Haut (*M.* 1950), Salt Lake County General Hospital, Salt Lake City, Utah.
Dr. Kurt J. Isselbacher (*M.* 1950), National Institutes of Health, Bethesda 14, Md.
Dr. Walter S. Kerr, Jr. (*W.S.* 1943), 264 Beacon St., Boston 16, Mass.
Dr. Gale H. Keyes (*M.* 1947), Ogden Clinic, 2955 Harrison Ave., Ogden, Utah.
Dr. Hanna Klaus (a.r.p. *Path.* 1953), Barnes Hospital, 600 South Kingshighway, St. Louis 10, Mo.
Dr. Leonard Laster (*M.* 1950), Clinical Center, National Institute of Arthritis and Metabolic Disease, National Institutes of Health, Bethesda 14, Md.
Dr. John E. LeDonne (r.p. *D.* 1952), 286A Cabot St., Beverly, Mass.
Dr. Roy W. Leeper (r.p. *D.* 1950), Kaiser Foundation Hospital, Oakland, Calif.
Dr. Sergio A. Leiseca (gr. stud. a. *S.* 1953), Ave. Central 19, Rep. Kolhy, Havana, Cuba.
Dr. Werner K. Maas (res. fel. *Biochem.* 1953), Tuberculosis Research Laboratory, New York, N. Y.
Dr. Patricia A. McIntyre (*M.* 1953), 124 South Eastern Ave., Joliet, Ill.
Miss Lucy G. Morse (past head *O.T.*) Heart Association of Maryland, 221 East 25th St., Baltimore 18, Md.
Dr. John F. Muxworthy, Jr. (clin. & res. fel. *An.* 1953), Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia, Pa.
Dr. Talmage W. Nielsen (*S.* 1949), 1302 Haupt Ave., Richland, Wash.
Dr. G. David Novelli (assoc. biochem. *Res. Chem.* 1953), Department of Microbiology, Western Reserve University School of Medicine, Cleveland, Ohio.
Dr. Harrison O'Connor (a.r.s. *Or.* 1953), Veterans Administration Hospital, 150 South Huntington Ave., Jamaica Plain, Mass.
Dr. Avrum B. Organick (*M.* 1952), New York Hospital, New York, N. Y.
Dr. John C. Rowe (*M.* 1952), 619 Washington Ave., Dunkirk, N. Y.
Dr. James P. Ryan (*Dn.* 1953), 211 6th St., Mechanicville, N. Y.
Dr. James M. Shannon (*S.* 1948), New Haven Hospital, New Haven, Conn.

No. 41 in a series of Staff photographs
Mr. Frederick D. Foster, Assistant Director

Dr. Alfred L. Skinner, Jr. (*C.M.* 1953), Children's Orthopedic Hospital, Seattle, Wash.

Dr. Robert B. Sloane (r.p. *Psychiat.* 1953), 24 Shawville Gardens, Ilford, Essex, England.

Dr. Lloyd H. Smith, Jr. (*M.* 1949), Public Health Research Institute, Foot of East 15th St., New York, N. Y.

Dr. Marion L. Smith (a.r.p. *An.* 1951), Vanderbilt University Hospital, Nashville, Tenn.

Dr. Philip Solomon (a. psychiat. 1937), 1093 Beacon St., Brookline 46, Mass.

Dr. Paul A. Srere (a. biochem. *Res. Chem.*), Department of Physiological Chemistry, Yale University, New Haven, Conn.

Dr. Clifford J. Straehley, Jr. (*W.S.* 1947), Veterans Administration Hospital, Syracuse, N. Y.

Dr. Fritz B. Talbot (*E.M.* 1907), 24 Cottage Farm Road, Brookline 46, Mass.

Dr. John B. Tallon (a.r.p. *R.* 1953), Herbert Reddy Memorial Hospital, Montreal, Canada.

Dr. Wilbur A. Thomas (a.r.p. *Path.* 1951), Barnes Hospital, 600 Kingshighway, St. Louis 10, Mo.

Col. Milton S. Thompson, MC, USA (*Or.* 1934), 320th General Hospital, APO 180, c/o Postmaster, New York, N. Y.

Dr. William A. Tisdale (*M.* 1952), Box 69, Route 5, Gainsville, Fla.

Dr. Robert H. Walker (a.r.p. *Path.* 1951; a.r.s. 1953), Raymond, Alberta, Canada.

Dr. Richard H. Watson (*C.M.* 1952), Strong Memorial Hospital, Rochester, N. Y.

Another response from an MGH "singleton"—this one from Dr. Robert P. Keiser (*Or.* 1942), from Coral Gables Clinic, Coral Gables, Florida.

Most of us are rather reticent to talk about ourselves. However, in answer to your request for a little "activities news", here goes.

I have been associated in the practice of Orthopedic Surgery with two other partners since my discharge from military service late in 1945. In general, we "Crackers" feel that this particular area has no equal as a place to live and practise medicine. Contrary to general opinion, the Miami area is not purely a resort area where millionaires loll in the sun for three months and then scamper back north. Actually, the community is very stable and is growing by leaps and bounds in its stable population.

Hospital facilities, grossly inadequate immediately after the war, have been enlarged with the increase in population to the point where they more than satisfy all our needs. A children's hospital has come into existence, where we handle all of our crippled children's work and all of our poliomyelitis cases.

A new medical school, started by the University of Miami in this area, will become an integral part of the Jackson Memorial Hospital units, which have expanded considerably in the past six to seven years.

All of these facilities form an integral part of our orthopedic practice; and while we do not have the background, prestige, and well-earned reputation of the M.G.H. and its unexcelled facilities and staff, we are attempting to climb the ladder.

Year-round access to the outside without developing chilblains gives us unlimited recreational facilities in fishing, golfing, boating, etc.

Dr. William McK. Jefferies (*E.M.* 1942) sends us this account of his many activities out there in Cleveland:

I am still attached to the staff at Western Reserve University School of Medicine, having been here since I left M.G.H. in the summer of 1949. Since I am the only clinical endocrinologist at University Hospitals, I am kept quite busy with the adult endocrine clinic, children's endocrine clinic, fertility clinic, and tumor clinic, in addition to teaching and research. During the past two years, the planning of a revised curriculum in our medical school has also taken a great deal of time, but it has been extremely fascinating.

The new program was initiated last fall and the first year has been a great success, judging by reactions of students and faculty alike. Its outstanding feature has been a complete breakdown of departmental barriers in an attempt to present medical education in a better correlated and more stimulating fashion. Other transplanted MGH-ers who are actively participating in this program are "Simmy" Simeone, Brown Dobyns, and Bill Clark.

Our two boys are now aged five and two. We look forward to our return visits to New England when we can see our friends in Boston.

This letter has come from Col. Milton S. Thompson (*Or.* 1934), with notice of his transfer to Europe:

After seven years plus, here at Brooke Army Hospital, I am being transferred to Germany. Moving has its merits, like cleaning out your bureau drawers, only more so. It has drawbacks, too, not the least of which is severing teaching connections with Baylor. Four of our orthopedic residents are presently candidates for their Master degrees through an affiliation with the Graduate School.

We have grown to like Texas very much, particularly San Antonio, its climate, and its people, and will miss it. Furthermore, the family cannot come over for perhaps six months, but we are looking forward to our new assignment and will leave our latchstring out for any wandering MGH-ers (as soon as we get a latch and a house behind it).

I am enclosing a check to ensure my continuing to receive The News.

A short note has come from Dr. Frank R. L. Egloff (r.p. *Psychiat.* 1951). He writes:

I am to be released from the Air Force in September, following which I'm going to open an office in Hartford for the practice of General Psychiatry. Of equal importance is the arrival of our fourth dependent some time late in August.

Our new home address is 69 Meadow Lane, West Hartford, Connecticut.

This letter has come from Dr. Robert H. Detwiler (*C.M.* 1940), in response to our appeal for news about him. From Arlington, Virginia, he writes:

So little has happened outside my office routine, I hardly know what to say. This last year, however, I did get into politics on a local level and now find myself one of the commissioners in a town of over 150,000 people. It is quite an education, but leaves me little free time. I do not believe I shall run again, but I would very much like to see some other professional man take my place. I feel that a doctor has much to offer in the running of a community of this size — particularly in health and school policies.

Needless to say, I enjoy receiving The News, and will always remember my stay at the Massachusetts General as one of the most instructive and pleasant in my career.

THE NEWS

No. 127 Boston, Mass. October 1953

OUR TEN YEAR PLAN

Anyone visiting the M.G.H. today for the first time in many years is bound to notice the great changes that have taken place in the physical plant of the Hospital. All for the better, we believe, and more changes of the same kind are in the books for the immediate future. Sometimes members of the staff or older graduates of the Hospital ask, "Isn't the new building ever going to stop?", or "Don't you plan ever to leave the Bulfinch lawn alone?", or "What are the plans, if any, for the future development of the Hospital?"

The answer to this last question is also the answer to the other two, as well. There *is* a plan for the future development of the Hospital, and in order to set some target date for the accomplishment of this plan it is always referred to as the "Ten Year Plan".

The Ten Year Plan evolved from a simultaneous study made, at the request of President Conant, in all the teaching hospitals connected with the Harvard Medical School. It was accepted in 1951 by the Trustees of this Hospital and the Corporation of the University; and so, if all goes according to schedule, it will be completed in 1961—the 150th anniversary of the incorporation of the Hospital.

An outline of the Ten Year Plan and the financial requirements necessary to complete it have been announced twice—once at the dedication of the Research Building in May 1951, and again in December of the same year in the local press. The Plan explains briefly what has happened to the purchase value of the Hospital's endowments during the postwar inflation. In order to furnish the same number of patient days of charitable service as were provided by the Hospital in 1941, at least $6,600,000 more in endowment is needed. Furthermore, the full-time medical and surgical staff must be increased if we are to provide adequately for the patient care, teaching, and research activities of the Hospital in the future. Over the next ten year period, in collaboration with the Medical School, the Hospital hopes to increase the full-time staff by nine additional professors and associate professors. The minimum endowment required by the Hospital and the Medical School together for this alone, including a small budget for each, will be at least $7,500,000. Also, a minimum endowment of $1,000,000 for the new Research Building is needed to pay for light, heat, and other indirect costs not covered by overhead items on research grants.

In 1951, at the same time that these minimal endowment needs were announced, the Ten Year Plan sketched out the new building plans for the M.G.H. during the next ten years. These will require a total of more than $7,000,000.

Surveys made in Greater Boston indicate that there is now an adequate number of hospital beds to meet the community's requirements in the foreseeable future, so the emphasis in the building program will be on improvement and modernization of the MGH plant. As everyone who walks the corridors of the Hospital knows, there are still many buildings that might be considered relics of our distinguished past. Some of them have been adapted to new uses—such as Ward E, the old stables, and the power house; others will be evacuated by the present occupants and then adapted to new uses—such as the old Pathology Building, which will be the new home for the maintenance shops. But to effect all the changes new buildings must be built in order that some of the old ones can be demolished. So the Ten Year Plan spells out the new building needs as it was seen through the trustees' crystal ball of A.D. 1951. At the head of the list was the new Nurses' Home and a Nurses' Training School; next, a new Pathology Building; followed immediately by a new Ambulatory Clinic to incorporate the present program of the O.P.D. with modern concepts for handling patients of all income brackets on a clinic basis; attached to this building will be a Doctors' Office Building, long visualized as an important addition to the Hospital. Dr. Clark described in the following words the philosophy behind these two units, at the dedication of the Research Building:

"At present, patients from all walks of life may, for bed care, benefit from the research and education carried on at the Massachusetts General Hospital, whether they are private, semi-private, or general hospital patients, but out patients may obtain these benefits only if they are financially needy. This seems an unfair discrimination against those in more comfortable circumstances. Our staff believes that the services of our highly trained personnel and complex equipment should be utilized as fully as possible by the whole community."

As they read the balance of the list, any member of the staff or graduate of the M.G.H. will immediately appreciate the urgency of the situation, and we hope that graduates of the Hospital will help us make our hopes a reality by making their own contributions or by telling us where gifts may be found for one or more of these projects. They are:

1. New house officers' quarters, and a new auditorium—both of which are needed if the Hospital is to meet its present undergraduate and graduate teaching responsibilities and extend the opportunity for teaching and research to a greater number of students whose medical education at the M.G.H. can help to resolve the national shortage of doctors.

2. Renovations to improve the efficiency of the operating rooms and X-ray Department.

3. Last but not least, a new laundry and maintenance shop. One of the trustees, Francis W. Hatch, suggests in verse a unique opportunity to memorialize the donor:

A monument to Harkness, the Harvard Houses stand,
A son of Yale extending, the monumental hand.
The beauty of the Esplanade which you'll enjoy tomorrow,
Forever keeps the memory green, of Boston's James J. Storrow.
And Rockefeller's Williamsburg will treasure, first and last,
The wisdom for the future in the lesson of the past.
Oh Heaven, where's our angel, where walks the kindly feller,
Who'll do his benefacting in the M.G.H.'s cellar?
There in the swirling soapsuds, we'll wash his sins away
And starch his memory fresh and clean, a dozen times a day;
So if at Christmas, once again, you find you're in a quandary,
How in the name of humanity, would you like to give a laundry?

The Ten Year Plan presents a challenge to the trustees and staff of the Hospital. Something has already been accomplished in the two years since the Plan was announced. As far as the endowment needs are concerned, we are constantly announcing these in one way or another. The new type of brief annual report describes the endowment needs and tells people how to make gifts and bequests to the Hospital. It is felt that the future endowment requirements will largely be met, as in the past, by generous bequests from a grateful community. Since 1951 we have received a few of these, which have gone into the General Fund. We are making progress toward our goal, but we have a long way to go. At the same time the endowment fund for the Research Building has been started and has now grown to more than $100,000. This year the trustees announced their plans to raise an endowment for Research and Teaching. This will be their share of the $7,500,000 which the Hospital and Medical School must find before 1961. Mr. Francis C. Gray, Chairman of the Board of Trustees, has written a number of personal letters to people who have shown a continuing interest in the welfare of the Hospital over a period of years, and gifts large and small are coming in to this fund, which we hope will reach its goal in the next few years. Others are helping to further the work of individual departments and services—such as the Smith-Petersen Foundation—through separate endowments.

As far as the building plans go, it is gratifying to be able to report, as you all know, that one unit of the new Nurses' Residences has been subscribed, planned, and built. Today 154 student and graduate nurses are housed in this building, named Bartlett Hall in honor of the Reverend John Bartlett, who first saw the need for the Hospital in 1810.

A second building, a five-story west wing for the Baker Memorial, is in the final planning stages, and ground will be broken for this in 1954. It will house Pathology and Dermatology, and will help resolve some of the problems of the X-ray Department by combining the Phillips House and Baker x-ray units on the second floor of Baker. These buildings will be connected by new first and second floor corridors from Phillips House to Baker. A new public entrance on Charles Street for Baker patients may also be provided. Other possible features of this building, depending upon the availability of funds for this purpose, include a floor for Neuropathology and Neurology and one for Psychiatry. These additions, if they can be made, will ease the pressure on space in the Bulfinch Building.

Next year every effort will be made to raise the necessary funds for the new Ambulatory Clinic. The present Out-Patient Building was opened in 1903 and enlarged in 1927. This was at a time when the average age of patients was about 35 years. It was also designed to handle the entirely different types of disorders and diseases of thirty or forty years ago. When diagnosis made in the Medical Clinic indicated typhoid, diphtheria, pneumonia, or malaria (those diseases most frequently seen at that time), the patient was usually hospitalized and treated by rest, diet, baths, or hydrotherapeutics. In the new Ambulatory Clinic diagnosis of disease or disorder will be made and when treatment involves the administration of drugs that require no hospitalization, the patient will be sent home, this to be followed by subsequent visits to the Clinic or by the Home Care Service of the Hospital. The emphasis in the new Ambulatory Clinic will be on bringing the diagnostic, research, and clinical services of the Hospital to the patient, and this service eventually will be available to him in the new Clinic without regard for his financial status. The present O.P.D., of course, is available only to those in limited circumstances. The new Ambulatory Clinic will be available to all. The Ambulatory Clinic will be the focal point and central facility for the sick within the framework of the General Hospital. Although it is difficult to visualize what this building will look like, it will in all probability be located as an ell to the Connecting Building and present O.P.D. bridging or, possibly, crossing Fruit Street, and will be parallel to North Grove, extending back to the jail wall. The shops now located in the old stable will be relocated in the old Pathology Building and Power House, so that the stables can be torn down. When the new Ambulatory Clinic is built, the old O.P.D. will be made over for the Nurses' Training School, thus accomplishing another step in the Ten Year Plan.

As the plans for the future unfold, many smaller changes that have already been made can be explained. The new nurses' home made it possible to demolish some of the buildings on Parkman Street; the closing of Fruit Street from North Grove to Blossom has permitted the enlargement of the Bulfinch lawn, opening the vista from North Anderson Street. The generous interest of a beloved member of the Board of Trustees has made possible the landscaping of the Bulfinch lawn and that between the White Building and the Phillips House, so that they may be permanently enjoyed by all.

The Hospital is following several changes in the community that are in the offing beyond the Ten Year period. For several years studies have been in the making concerning the area north of the Hospital, from Allen Street to the North Station. The Urban Redevelopment Section of the Boston Housing Authority has studied this area carefully and has made specific recommendations in its preliminary report which might result in a new middle-income housing development in this area. The Hospital has enlisted the counsel of Mr. Robert M. Morgan, Vice President of the Boston Five Cents Savings Bank and former President of the Boston Real Estate Board, as consultant in these affairs, as the Hospital is very much interested in the future of this area.

Several studies are being made simultaneously of the area south of the Hospital. The future of the Suffolk County Jail has been discussed for many years. Drs. Earle Chapman and John Cass have been working with the Boston Legal Department on several ideas that might allow the city to turn over this area and buildings to the Hospital. The General Court has set up a Recess Commission this summer to study the various plans and they will make recommendations that might speed the acquisition of the jail property. Dr. Dean A. Clark has been appointed by Governor Herter to this commission, and their meetings this autumn and winter will give the Hospital a better indication of when, if ever, the acquisition of the jail property will become an actuality. Mr. Thomas Joyce, Legislative Agent for the Utilities Industry, is acting as consultant for the Hospital in this matter.

The Hospital is also working with the Urban Redevelopment Section of the Boston Housing Authority on plans which might assist the Hospital in acquiring additional property bordered by Grove Street, Blossom Street, and Cambridge Street. This is also being studied for the Hospital by Mr. Morgan. This plan might provide for a wide access to the Hospital from Cambridge Street, on the site of Anderson Street.

For a number of years the Hospital has been following closely the development of the various traffic arteries in the area and has, with the permission of the Metropolitan District Commission, acquired exclusive parking privileges, together with the Eye and Ear Infirmary and the jail, in the new area beneath the clover leaf at the Charles Street circle, between the hours of 8:30 and 5:30 daily. This, and the acquisition of the Cambridge Street Garage and the development of new parking areas on Hospital property, cleared by demolition of old houses, has done much to ease the parking crisis of two years ago.

Credit for the growth of the Hospital must be shared by the staff and employees, past and present. The acquisition of the funds necessary to implement the plans outlined above will be forthcoming only as the record and renown of the Hospital grows. A generous community, in gratitude for the service of the M.G.H. in the past and present, will provide for the future. Under the leadership of the Board of Trustees and the General Director the future of the Hospital is promising. The help, advice, and vision of the staff—both professional and nonprofessional—have created the atmosphere for the growth of Massachusetts General in the future.

David C. Crockett,
Associate Director for Resources and Development

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On July 18, Dr. Churchill was elected an Honorary Member of the Thoracic Society of England.

* * *

Dr. Ellsworth T. Neumann, until recently Executive Officer at M.G.H., has been appointed Administrator of the Hospital, effective September 1. In this capacity Dr. Neumann will continue to serve as Chairman of the Administrative Committee and to supervise the operation of the Baker Memorial. In addition, he will be responsible for the day-to-day operation of the entire Hospital. In Dr. Clark's absence, he will attend meetings of the Trustees and of the various committees of the Staff.

* * *

Miss Marjorie L. Shea has been appointed Associate Community Relations Consultant at the Massachusetts General Hospital, where she will work with Mrs. Soma Weiss, our Community Relations Consultant.

Miss Shea is thoroughly familiar with the functions of voluntary hospitals, as she has been the Public Relations Officer at the New England Medical Center for the past six years. She was previously Executive Secretary of the Alumnae Association of Simmons College, of which she is a graduate.

MASSACHUSETTS EYE & EAR INFIRMARY

On August 31 and September 1, Dr. W. Morton Grant of the Howe Laboratory presented a two-day course entitled "Ophthalmic toxicology", as one of the Lancaster Courses in Ophthalmology. These courses, sponsored by the Ophthalmological Study Council, were given at Colby College through the summer months.

During the summer several doctors started their residencies at the Infirmary. In Ophthalmology—Dr. Alfred W. Scott, on July 1; Dr. S. James Bullington, on October 1. In Otolaryngology—Dr. Robert E. Klotz, on July 1; Dr. Stuart M. Frame, on August 15; and Dr. William Patterson, on September 1.

On August 19, Dr. Samran Wangspa arrived at the Infirmary from Thailand. He will start his residency next year, after he has become better acquainted with our language. Meanwhile, he is taking postgraduate courses in Otolaryngology.

On September 12, Dr. David G. Cogan, Director of the Howe Laboratory, spoke on "Some common eye disorders in older people", at Ocean City, Maryland. His talk was part of a medical symposium held under the joint auspices of the Maryland Academy of General Practice and the Lederle Laboratories. Dr. Cogan then traveled on further to Charleston, North Carolina, where the North Carolina Ear, Nose and Throat Society and the South Carolina Society of Ophthalmology and Otolaryngology were holding a joint meeting on September 14 through 16. There Dr. Cogan presented three papers: "Neuro-ophthalmic syndromes", "Lesions of the corneal stroma", and "Dizziness as a symptom of ocular disturbance".

Dr. Charles I. Johnson, Surgeon in Otolaryngology, will deliver a lecture at the Medical Military Symposium for military and civilian physicians and allied professions, at the U. S. Naval Hospital in Chelsea on October 12. His subject will be "Osteomyelitis of frontal bones: Complicating acute frontal sinusitis". Dr. Johnson holds the rank of Captain, MC, USNR.

The Board of Trustees, at their meeting on August 21, voted:

To accept with regret the resignation of Dr. George E. Donaghy, Associate Anesthetist, effective September 14;

To accept the resignation of Dr. Merle A. Haanes, Assistant in Dermatology, effective September 1;

To accept with regret the resignation of G. David Novelli, Ph.D., Associate Biochemist, effective September 1;

To accept with regret the resignation of Dr. Thomas F. Paine, Jr., Chief of the Bacteriology Department and Assistant Physician, effective September 21;

To accept the resignation of Paul A. Srere, Ph.D., Assistant Biochemist in Research Chemistry, effective September 1.

To appoint:

Dr. William R. Buchanan, Jr. as Intern on the Children's Medical Service for one year, beginning July 1, 1954;

Dr. Melvin J. Glimcher as Assistant Resident on the Orthopedic Service for one year, beginning July 1, 1954.

The Trustees also voted:

That the appointment of Dr. Oscar B. Williams, Jr., as Assistant Resident in Anesthesia, become effective as of July 27 instead of October 1;

That the Children's Medical Service be permitted to appoint an extra Intern for the year beginning January 1, 1954, in place of an Assistant Resident who has not been able to accept her appointment.

At their meetings on August 12 and 19, the General Executive Committee voted:

To continue the appointments of:

Dr. Herbert B. Locksley as Clinical and Research Fellow in Neurosurgery, through December 31;

Dr. Athol G. Riddell as Clinical and Research Fellow in Surgery for one year, beginning October 1.

To reappoint:

Dr. Julian J. Goodman as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of July 1.

To appoint:

Dr. Saul Aronow as Research Fellow in Physics, effective as of July 20;

Dr. Jose V. Bado as Research Fellow in Neurology, for a period of four months, beginning September 1;

Dr. Dorette K. Bashour as Graduate Student Assistant in Medicine, effective as of March 1;

Dr. Willard Dalrymple as Clinical Assistant in Medicine, beginning August 1;

Dr. Alejandro Jimenez as Research Fellow in Neurology, for the period September 1 through December 31;

Dr. Ming K. Wang as Research Fellow in Medicine, assigned to the Allergy Clinic, effective as of August 10;

Dr. Ruth S. Weiss as Clinical and Research Fellow in Psychiatry, effective as of July 1;

Dr. Paul G. A. J. Wilkin as Clinical and Research Fellow in Surgery, assigned to Gynecology, beginning September 1.

* * *

Dr. Benjamin Castleman, Chief of our Pathology Department, was invited to present a paper on the value of the clinico-pathological conference before the First World Conference on Medical Education, held in London during the last week in August. Although this exercise is taken for granted in this country and is, as Professor Arnott of Birmingham, England, called it, "A powerful educational influence which is emulated throughout the New World", until recently it has not been used very generally outside the United States. However, it was gratifying to learn from the discussions at this meeting that many institutions in various parts of the world are now holding sessions modeled after the MGH C.P.C.'s.

While in London, Dr. Castleman visited with Dr. George Cunningham at St. Bartholomew's, with Dr. G. R. Cameron at University College, and with Dr. A. G. E. Pearse at Hammersmith Postgraduate Hospitals. A very pleasant afternoon was spent with Mr. and Mrs. Geoffrey Keynes at their country house outside Cambridge. Mr. Keynes, a famous British surgeon, known to many for his thymectomies in myasthenia gravis, is perhaps better known in England as an authority on Blake and for his collection of rare books and first editions. He showed Dr. Castleman many of his treasures, including a letter written by Isaac Newton to Robert Boyle.

* * *

At the annual meeting of the American Electroencephalographic Society, the following officers were elected:

President: Dr. Mary A. B. Brazier, Massachusetts General Hospital
President-elect: Dr. Earl Walker, Johns Hopkins Hospital
Secretary: Dr. W. T. Liberson, Hartford Hospital
Treasurer: Dr. Charles Henry, Institute of Living, Hartford

The Conseil des Organisations Internationales des Sciences Médicales (under the auspices of UNESCO) has arranged for a symposium on "Thalamo-cortical relationships and their bearing on problems of consciousness", to which they have invited 20 delegates, representing 9 different countries. Dr. Brazier has been invited as a delegate from the United States. The meeting will be held in Canada.

* * *

HYPERTENSION RESEARCH LABORATORY

For the last six years investigations have been conducted by members of the cardiovascular department of this Hospital on the relationship of the central nervous system to circulatory regulation. One phase of this work has been concerned with the long-term assessment of the effect of lumbodorsal sympathectomy in patients with hypertensive vascular disease, and the other with physiological studies directed at determining the anatomical regions of the brain that may be related to circulatory regulation and emotional expression.

In view of the contradictory opinions of the therapeutic value of sympathectomy for patients with hypertension, a study of this question was reopened at this Hospital in 1947 when Dr. Kenneth A. Evelyn, McGill Medical School, Montreal, was asked to review the surgical results in patients operated upon during the previous 2-8 years. The main defect in this study was due to the inadequate length of the follow-up period. Work is now under way to review the status of these same patients after a further lapse of 6-7 years. So far as possible the results of this long-term follow-up of surgical treatment will be compared with the results of medically treated cases both from this Hospital and from the Royal Victoria Hospital, Montreal.

The studies of the relationship of certain brain structures to circulatory regulation have been carried out in patients undergoing psychosurgery for psychiatric disease or intractable pain. For this purpose, we have been fortunate in having access to patients and the collaboration of members of the Neurosurgical Department at this Hospital and workers at outside institutions. These collaborators include Dr. Hannibal Hamlin, who has been in charge of the studies carried out on patients at the State Hospital for Mental Diseases, Howard, Rhode Island; Drs. James L. Poppen and Kenneth Livingston, Lahey Clinic; Dr. Harry C. Solomon, Boston Psychopathic Hospital; Dr. Robert B. Livingston, formerly at Yale Medical School and now at the University of California Medical School, Los Angeles; Dr. Jose Delgado, Department of Physiology, Yale Medical School; and Drs. James C. White, William H. Sweet, and Mary A. B. Brazier, at this Hospital.

The initial stimulus for the regional brain studies as they relate to the circulation was the reported observation that psychotic patients with hypertension had a fall in blood pressure after frontal lobotomy. Systematic study in such patients proved that this impression was incorrect. Investigation of the general problem was then continued by employing the well-established neurophysiological technique of electrical stimulation of the brain. In our patients, areas were stimulated that were accessible during the operative exposure for psychosurgery. It was found that electrical stimulation of several regions of the surface of the brain caused a decrease or cessation of breathing, elevation of blood pressure and, on occasions, a decrease in heart rate. The areas from which these responses were obtained were similar to the regions from which similar results had been found in animals by a large number of investigators. Such areas, according to the comparative anatomists, represent the more ancient regions of the brain in the phylogenetic scale. Our patients were electrically stimulated while under anesthesia which presented certain difficulties in the interpretation of the results. One could not be certain but that the responses might be due to the spread of current over pain-sensitive structures in the cranial cavity, such as blood vessels and the covering of the brain. Clinically it is a well known fact that changes in circulatory function involving the brain may take place in association with changes in emotion. Anesthesia prevented our knowing if the patient experienced pain or emotional changes at the time of electrical stimulation. A way had to be found, therefore, in which such observations could be made in the conscious patient. With the assistance of Dr. Delgado, electrodes were constructed which enabled the neurosurgeon to perform the desired neurosurgical procedure by electrical coagulation with electrodes placed inside the brain. At the same time these electrodes could also be used to study the function of the particular regions of the brain prior to destruction by electrical coagulation. These electrodes are now used in several medical centers in this country and abroad. Preliminary observations indicate that this new development in technique may be helpful therapeutically as well as in gaining a better understanding of brain function. For instance, prior to their use, lobotomy had to be done by a knife which destroyed more than the desired areas of the fiber tracts of the frontal lobes. Now these areas can be reached by only a needle puncture and the region destroyed by electrical coagulation.

As these electrodes can be left in for days, much pertinent information can now be gained from electrical stimulation and electrical recording of brain waves while the patient is free of anesthesia or other medications. There are certain brain areas, which may be related to pain sense and possible emotion and behavior patterns as well as to circulatory regulation, that are small and require precise skull x-ray measurements for identification. A sterotaxic apparatus designed for use in humans by Paul McPherson and Dr. William H. Sweet and modified by us permits access to these regions. The instrument, with the aid of measurements of skull and brain markings, delivers the electrodes to the brain structures selected for therapeutic destruction and study.

Our experiences thus far with this new technique, which has made possible observations in the conscious patient, have been encouraging. We now know that the circulatory and respiratory responses previously mentioned can be obtained with the patients not reporting pain or other discomfort. It has been surprising to find that brain areas destroyed by frontal lobotomy have not thus far given rise to clear cut emotional or behavior changes during electrical stimulation. There are a few exceptions about which there is a difference of opinion as to interpretation. The electrical recordings from the depths of the brain are compared to cortical and conventional scalp recordings. The results appear interesting. Many more studies are essential before the meaning of such electrical activity for the patient's illness or for physiology will become apparent.

William P. Chapman, M.D.,
Assistant in Medicine

* * *

ESTABLISHMENT OF A BERYLLIUM CASE REGISTRY

A man-made illness of considerable interest has been reported in the medical literature in this country since 1943 under various titles, in general referring to its association with exposure to certain beryllium compounds. As the years go by, more cases continue to appear from a variety of industrial and research operations which use beryllium compounds. With funds supplied by the Atomic Energy Commission, it is planned to develop a Beryllium Case Registry at the Massachusetts General Hospital. The purpose is to make possible a study of the epidemiology of this disease, an evaluation of the beryllium hazard of incriminated operations, and the dissemination of knowledge of the clinical course of beryllium poisoning, especially in relationship to its medical management. The material collected is to be available for study, and from time to time data will be sent to participating physicians, summarizing facts that have been established.

This description of the project is being published with the hope that physicians, roentgenologists, and pathologists, who have knowledge of cases of beryllium poisoning, will wish to participate in making this Beryllium Case Registry as complete as possible. We have facilities and funds for prompt handling of any material that is submitted—such as case records, x-rays, and tissue. It is planned to enter cases anonymously in the registry.

We welcome any correspondence on the subject, and urge particularly the cooperation of all members of the MGH Staff.

Our telephone extension here at the Hospital is 820.

Harriet L. Hardy, M.D.,
Associate Physician

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The classification of material still continues to be omitted in a few instances. It would save your editor considerable time and trouble if you would, PLEASE, REMEMBER TO INCLUDE THAT INFORMATION. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to The News.

The following new titles have been received:

General Medicine

Burrage, W. S., and Irwin, J. W.
Microscopic observations of the pulmonary arterioles, capillaries, and venules of living mammals before and during anaphylaxis.
J. Allergy 24:289-296.

Neurology, Neurosurgery, and Psychiatry

Bakay, L.
Studies on blood-brain barrier with radioactive phosphorus. III. Embryonic development of the barrier.
A.M.A. Arch. Neurol. & Psychiat. 70:30-39.

Bakay, L., and Sweet, W. H.
Intra-arterial pressures in the neck and brain. Late changes after carotid closure, acute measurements after vertebral closure.
J. Neurosurg. 10:353-359.

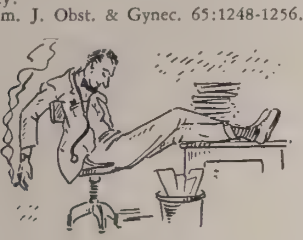
Orthopedic Surgery

Barr, J. S., Elliston, W. A., Musnick, H., DeLorme, T. L., Hanelin, J., and Thibodeau, A. A.
Fracture of the carpal navicular (scaphoid) bone. An end-result study in military personnel.
J. Bone & Joint Surg. 35-A, no. 3:609-625.

Cave, E. F.
Injuries to the wrist joint.
In American Academy of Orthopedic Surgeons. Instructional course lectures, Ann Arbor, J. W. Edwards, vol. 10, pp. 1-26.

Pathology

Scully, R. E.
Hyperestrinism in old women: Report of a case with cortical and medullary hyperplasia of the ovaries and possible adrenal hyperactivity.
Am. J. Obst. & Gynec. 65:1248-1256.



BIOGLETS

Dr. William D. Cochran, Assistant Resident on the Children's Medical Service—born in St. Paul, Minnesota, March 1, 1923; U.S. Naval Air Corps: 1942-46—training in U.S., service in Iwo Jima and Okinawa, 1944-45; A.B., Harvard College, 1948; M.D., Harvard Medical School, 1952; Intern in Medicine, Children's Medical Center, Boston, 1952-53; married; three children; temporary home: Waltham, Massachusetts.

Dr. Ralph C. Darling, Jr., Intern on the Children's Medical Service — born in Richmond, California, August 28, 1927; U.S. Marine Corps: American Legation, Peiping, China, 1945-46; A.B., Boston University, 1949; M.D., Boston University School of Medicine, 1953; married; one daughter; home: Taunton, Massachusetts.

Dr. Pierre M. Dreyfus, Assistant Resident in Neurology—born in Geneva, Switzerland, October 14, 1923; U.S. Army: Counterintelligence Corps, Military Intelligence Agent, 3d and 7th Armies, France and Germany, 1944-46; B.S., Tufts College, 1947; M.D., Columbia University College of Physicians and Surgeons, 1951; Intern and Assistant Resident in Medicine, New York Hospital, Cornell Medical Center, New York, N. Y., 1951-53; married; home: Boston, Massachusetts.

Dr. Howard S. Frazier, Intern in Medicine—born in Oak Park, Illinois, January 16, 1926; University of Chicago, 1942-44; U.S. Navy: Western Pacific Area, 1944-46; Ph.B., University of Chicago, 1948; M.D., Harvard Medical School, 1953; married; one son; permanent address: Champaign, Illinois.

Dr. Lamont W. Gaston, Intern in Medicine—born in Sterling, Kansas, July 29, 1926; U.S. Army: United States and Philippine Islands, 1944-46; A.B., University of Kansas, 1950; M.D., University of Kansas, 1953; home: Lawrence, Kansas.

Dr. Robert G. Greene, Assistant Resident in Orthopedic Surgery—born in New York, N. Y., November 13, 1924; A.B., Franklin and Marshall College, Lancaster, Pennsylvania, 1943; M.D., University of Pennsylvania School of Medicine, 1947; Intern, Lenox Hill Hospital, New York, N. Y., 1947-48, and Roosevelt Hospital, New York, N. Y., 1948-49; Resident in Orthopedic Surgery, Lenox Hill Hospital, 1949-50; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, 1950; U.S. Navy, 1951-52: Lieutenant (jg), U.S. Naval Hospitals, Charleston, South Carolina, and Portsmouth, Virginia; Surgical Team 15, U.S. Naval Hospital, Yokosuka, Japan; 1st Provisional Casual Company, Kyoto, Japan; C Medical Company, 1st Marine Division, Munsan-ni, Korea.

Dr. Parker Heath, Jr., Assistant Resident in Medicine—born in Detroit, Michigan, June 12, 1924; A.B., Williams College, 1946; M.D., University of Michigan Medical School, 1948; Rotating Internship, Union Memorial Hospital, Baltimore, Maryland; Student Health Service, Wisconsin General Hospital, Madison, Wisconsin, 1949-50; Resident, City of Detroit Receiving Hospital, Detroit, Michigan, 1950-51; U.S. Navy, 1951-53: Lieutenant (jg), Great Lakes Naval Hospital and Annapolis Naval Hospital, Bureau of Medicine and Surgery; 3-months' course in Photofluorographic Interpretation; Medical Officer in charge of X-ray Department, Boston Naval Shipyard; married; two daughters; home: Wellesley Hills, Massachusetts.

Dr. J. Drennan Lowell, Assistant Resident in Orthopedic Surgery—born in Worcester, Massachusetts, April 9, 1922; Harvard College, Class of 1944; M.D., Harvard Medical School, 1946; Intern, General Surgery, Boston City Hospital, 1946-47; U.S. Army, 1947-49: Captain, Stuttgart, Germany; Assistant Resident, General Surgery, Emory University Hospital, Emory University, Georgia, 1949-50; Research Fellow in Vascular Surgery, Emory University, 1950-51; Assistant Resident, Orthopedic Surgery, Children's Medical Center, Boston, 1951-52; home: Worcester, Massachusetts.

Dr. David J. L. Luck, Intern in Medicine—born in Milwaukee, Wisconsin, January 7, 1929; S.B., University of Chicago, 1949; M.D., Harvard Medical School, 1953; home: Milwaukee, Wisconsin.

Dr. Joseph J. M. McGovern, Out-Patient Resident on the Children's Medical Service and, concurrently, Research Fellow in Hematology, Children's Medical Center, Boston—born in Boston, Massachusetts, August 29, 1925; Boston Latin School, Class of 1943; U.S. Navy: Pharmacist's Mate 2/c, 1944-46, assigned to Marines in Epidemiology Unit, 1945-46; A.B., Boston University, 1947; M.D., Georgetown University, 1951; Intern, Children's Hospital, Washington, D. C., 1951-52; Junior Assistant Resident, Children's Medical Center, Boston, 1952-53; Polio Foundation Resident to Epidemic Polio Area, Vicksburg, Mississippi, 1952; married; one son.

Dr. Harold L. May, Intern in Surgery—born in Peekskill, N. Y., August 19, 1926; attended Harvard College; U.S. Army: Air Corps, 1945; M.D., Harvard Medical School, 1951; Intern in Medicine, University of Minnesota Hospitals, Minneapolis, 1951-52; Assistant Resident in Medicine, Boston City Hospital, 1952-53; home: Poughkeepsie, N. Y.

Dr. Russell M. Nelson, Assistant Resident in Surgery—born in Salt Lake City, Utah, September 9, 1924; B.A., University of Utah, Salt Lake City, 1945; M.D., College of Medicine, University of Utah, 1947; Intern in Surgery, University of Minnesota Hospitals, Minneapolis, 1947-48; Fellow in Surgery, University of Minnesota Hospitals, 1948-51; U.S. Army, 1951-53: Captain, Surgical Staff, Walter Reed Army Medical Center, Washington, D. C.; Army Surgical Research Team, Japan and Korea, 1951; married; three daughters.

Dr. James A. Petersen, Assistant Resident in Radiology—born in Dannebrog, Nebraska, June 22, 1924; Wheaton College, Wheaton, Illinois, 1942-44, 1946-47; U.S. Army: 80th Infantry Division, Europe, 1944-45; B.S., College of Medicine, University of Illinois, 1949; M.D., College of Medicine, University of Illinois, 1951; Intern, Worcester City Hospital, Worcester, Massachusetts, 1951-53.

Dr. John F. Radebaugh, Jr., Intern on the Children's Medical Service—born in Springfield, Massachusetts, January 10,1925; U.S. Army: Infantry, Armored Division, 1943-45; 27th Infantry, Okinawa, 1945; 11th Airborne Division, Japan, 1945-46; B.S., Bates College, 1948; M.D., Harvard Medical School, 1952; Intern, rotating, Mary Hitchcock Memorial Hospital, Hanover, New Hampshire, 1952-53; married; two sons; present address: Belmont, Massachusetts.

Dr. Désiré J. A. Rebello, Assistant Resident in Dermatology—born in Paris, France, September 17, 1921; Bachelor of Medicine and Bachelor of Surgery, University of Bombay, Bombay, India, 1947; Medical Education at the Seth Gordhandas Sunderdas Medical College, Bombay; Diplomate in Venereology and Dermatology, University of Bombay, 1950; House Physician in the Department of Venereology and Dermatology, King Edward VII Memorial Hospital, Bombay, May to October 1950; Assistant in Dermatology, Bai Jerbai Wadia Hospital for Sick Children, Bombay, 1951-53.

Dr. Edgar J. Schoen, Assistant Resident on the Children's Medical Service—born in New York, N. Y., August 10, 1925; B.S., University of Illinois, 1945; M.D., New York University College of Medicine, 1948; Intern, Lincoln Hospital, New York, N. Y., 1948-49; Clinical and Research Fellow on the Children's Medical Service, Massachusetts General Hospital, 1949-50; Intern on the Children's Medical Service, Massachusetts General Hospital, July through November 1950; U.S. Navy: Flight Surgeon with the Atlantic Fleet, 1950-52.

Dr. Stanley Sober, Assistant Resident in Orthopedic Surgery—born in London, England, March 19, 1924; M.B. and B.S., University College and Hospital, University of London, 1947; worked in Slough Emergency Hospital and Lister Hospital, England, 1947-48; Italien Hospital and Government Hospital in Haita, Israel, 1948-50; and in Jewish Hospital, Brooklyn, N. Y., before coming to Massachusetts General Hospital; married.

Dr. Raymond D. Sphire, Assistant Resident in Anesthesia — born in Detroit, Michigan, February 12, 1927; U.S. Air Force: 1st Lieutenant, in United States and Europe, 1944-46; B.S., University of Detroit, 1948; M.D., Loyola Medical School, Chicago, Illinois, 1952; Intern, Grace Hospital, Detroit, Michigan, 1952-53; married, September 5, 1953.

Dr. John B. Stetson, Assistant Resident in Anesthesia—born in Chicago, Illinois, March 18, 1927; U.S. Navy: Combat Aircrew, 1945; M.D., Harvard Medical School, 1951.

Following my internship here on the East Medical Service in 1946-47, I became a servant of the Senior Surgeon in the Navy Medical Corps (1947-49), and subsequently worked in basic research pertinent to the histochemistry of the skin.

None of these activities has removed my site of operations beyond a 3- or 4-mile radius from the General. My Navy duty was in a permanent installation carefully reserved for Reserves—the Boston Naval Shipyard Dispensary.

My introduction to basic research technique came in two enjoyable years spent in the Department of Anatomy at the Harvard Medical School, where, under the guidance of Drs. G. B. Wislocki and E. W. Dempsey, I was engaged in an exploration of the histochemistry of normal skin and wound healing. Here, too, was my first encounter with the callous gaze of H.M.S. I.

Thus initiated, in July of 1951 I joined the staff in Dr. Frazier's Dermatological Research Laboratory, the aims and activities of which have been eloquently stated in Dr. Frazier's report which appeared in

No. 42 in a series of Staff photographs
Mr. David C. Crockett, Associate Director for Resources and Development

the March 1953 issue of The News. My associations there were with colleagues whose common interest in the biochemistry of skin and whose varied scientific backgrounds made for a broadening and wholly gratifying experience. During these past two years my own endeavors were focussed on the principal biosynthetic products and function of the skin, keratins, and keratinization.

My recent re-entry into the clinical realms has been effected in anticipation of pursuing that commendable brand of dermatology advocated by Dr. Frazier.

George F. Odland, M.D ,
Assistant Resident in Dermatology

New addresses:—

- Lt. Irving P. Ackerman, MC, USNR (*M.* 1951), H & S Co., 2nd Bn., 9th Rgt., 3rd Mar. Div., FMF, c/o Fleet Post Office, San Francisco, Calif.
- Dr. Dulcie E. Blunden-Morris (a.r.p. *An.* 1953), 306 Patterson Court, Takoma Park, Md.
- Dr. Peter T. Brooks (*E.S.* 1943), Walla Walla Clinic, Walla Walla, Wash.
- Dr. Ben Eiseman (*E.S.* 1943), Veterans Administration Hospital, Denver, Colo.
- Dr. Lucie J. Jessner (r.p. *Psychiat.* (*McL.*) 1939), Massachusetts General Hospital, Fruit St., Boston 14, Mass.
- Dr. Susanne J. Lamdin (*C.M.* 1953), 31 2nd St., Hamden, Conn.
- Dr. Thomas F. Paine, Jr. (c. *B.* and a.p. 1953), University of Michigan Medical School, Ann Arbor, Mich.
- Lt. William A. Tisdale, MC, USAR (*M.* 1952), 30th Medical Group, APO 301, c/o Postmaster, San Francisco, Calif.

Brief bits:—

A card has arrived from Lt. James J. Ferguson, Jr., MC, USNR (*M.* 1951) announcing the arrival of a son, James J. Ferguson, III ("Terry"), on August 26. Dr. Ferguson is stationed at Quonset Point, Rhode Island. His home address is 15 Penguin Avenue, East Greenwich, R. I.

Dr. Vincent P. Perlo, Assistant in Neurology on our Staff, announces the opening of his office for the practice of Neurology, at 412 Beacon Street, Boston 15, Mass.

When we wrote to Dr. James A. Halsted (*W.M.* 1932), asking for a more accurate address for him than the one we had, we suggested that he include an account of his professional activities out there on the west coast. In reply, this nice letter from him has arrived:

> Thank you for your note. My address is Veterans Administration Center, Los Angeles 25, California. I have been here for three years.
>
> This is a large center, with a general hospital (Wadsworth V. A. Hospital, which has 1,100 medical and surgical beds), a neuropsychiatric hospital, and a domiciliary home. The general medical research and radioisotope units are quite extensive, and some very active teaching and research activities are going on at this institution. We are closely affiliated with UCLA Medical Center, which is a mile away. I am in charge of activities relating to gastroenterology at the V.A. Center and am an Associate Clinical Professor of Medicine at the University of California (Los Angeles).
>
> I would like to receive The News regularly. Please send me a bill for a subscription.

This message from Lt. James M. Davis, MC, USAR (*S.* 1948), Tokyo Army Hospital AU 8059, APO 1052, c/o Postmaster, San Francisco, California, was written on his subscription card:

> We enjoy The News so very much. The only MGH-ers presently in Tokyo are Austin Vickery, Bob Scully, and I.
>
> Will write soon. My family arrived in Tokyo in April. Very little else of interest has happened since I last wrote.

We were glad to receive this letter from Dr. Richard T. Barton (*Otolar.* 1945), from Beverly Hills, California.

> Here at last are a few progress notes concerning my activities since I left the Eye and Ear Infirmary.
>
> My service in the Navy consisted of five days at the U. S. Naval Hospital, St. Albans, Long Island, a year at sea in the North Atlantic, and then out to the Mariana Islands on a destroyer-escort. Thereafter, I was assigned to the U. S. Naval Hospital, San Diego, California, where I was later separated and returned to civilian life.
>
> For the past seven years I have been practising in Beverly Hills and teaching at both the University of Southern California, where I am an Instructor in Surgery, and the University of California at Los Angeles, where I am an Associate Consultant in Otolaryngology. I am an Attending Specialist on a very interesting service at the local Veterans Administration Hospital, where ENT has been abolished and absorbed as a general surgical service called the Head and Neck Service. As a result of my experience in this field, I was invited to read a paper entitled "Neoplasms involving the carotid artery" at the International Congress of Otorhinolaryngology in Amsterdam in June.
>
> After the Holland meeting, my wife and I went to Italy for a couple of weeks' vacation, and then home to the same old grind.

This short letter from Dr. W. Robert Harris (a.r.s. *Or.* 1952) was enclosed with his subscription to The News:

> Since leaving M.G.H. a year ago, I was fortunate enough to be awarded a McLaughlin Travelling Fellowship by the University of Toronto and have spent the past ten months visiting orthopaedic centers in Scandinavia and Great Britain. I hope to get off a proper account of this in due course. In the meantime I have started practising here with the Toronto General Hospital and, as you see, I am not so overwhelmed by private patients that I haven't time to drop you a line!

These very few words, but very much appreciated ones, have come from Dr. E. Grey Dimond (clin. fel. *M.* 1949). From the University of Kansas Medical Center, Kansas City, Kansas, he writes:

> The News is most enjoyable. I circulate my copy among our staff and it is probably our most popular "journal".

THE NEWS

No. 128 Boston, Mass. November 1953

DEPARTMENT OF PATHOLOGY

It is about ten years since the first drawings for a new pathology laboratory were prepared. These and many others have been worked over for countless hours but were scrapped when the Research Building was erected or when the sites for the building were changed. At the present writing it does appear very hopeful that ground will be broken next summer.

The building will be "L" shaped: the long arm of the "L" will project to Charles Street as a west wing of the Baker Memorial, running parallel with and between the Thayer and the corridor now connecting Baker Memorial with the Phillips House; the short arm of the "L" will connect with the Phillips House. Old Ward E, now occupied by dermatology research laboratories, will have to be sacrificed.

Pathology will occupy the basement, first, and second floors; Neurology and Neuropathology the third, and Dermatology Research the fourth floor. There will be adequate space for experimental pathology, and one of the highlights of the building will be the Tracy Burr Mallory Memorial Library overlooking the Charles.

It is well known that there is a great dearth of pathologists throughout the country. This scarcity is not because fewer men are choosing pathology as a specialty, but because the demand has increased. Most hospitals of 100 beds or more are seeking full-time pathologists to be in charge not only of pathologic anatomy, but of all branches of clinical pathology, including bacteriology, chemistry, hematology, blood bank, and cytology. The pathologist often is the only full-time physician in the hospital. In order to help supply this demand and to prepare men for the American Board of Pathology in both pathologic anatomy and clinical pathology, the trustees have approved a four-year residency program which includes, in addition to pathologic anatomy, rotation through the various clinical pathological laboratories and also a four-month period at the Memorial Hospital in Worcester with Dr. Ronald Sniffen. The program is sufficiently elastic, however, to enable those residents who prefer to limit themselves to pathologic anatomy and research to do so.

Since many of the small suburban hospitals, especially those of under 100-bed capacity, cannot support a full-time pathologist and even if they could would be unable to secure one, the Department of Pathology at the Massachusetts General Hospital has begun in a small way to supply pathology service to a few of these hospitals. This service consists of assigning one of the assistant pathologists to be the liaison between the laboratory and the suburban hospital. He attends their monthly staff meeting, at which he reports on the autopsy findings in their cases (these having been done by our resident staff) and conducts an educational exercise usually in the form of a Clinico-pathological Conference. The surgical specimens are sent to the Massachusetts General Hospital by either messenger or mail. This service is very valuable to all concerned: the suburban hospital gets the opinions of a large teaching hospital laboratory with its routine laboratory work; the pathologist has an opportunity to inform the suburban hospital staff about what is going on at the Massachusetts General Hospital and in this way many of the puzzling cases are often referred to the Massachusetts General; the pathologist learns the point of view of the general practitioner and has an opportunity to see how medicine is practised away from the ivory tower. There is no doubt that our affiliations with the Emerson Hospital in Concord, the Brockton Hospital, and more recently with the Lawrence Memorial Hospital in Medford have fostered good public relations with the medical community in those areas.

With the acquisition of space on the fourth floor of the Domestic Building and with the aid of financial grants, the members of the Pathology Department have recently been able to expand their research activities. In addition to problems of clinico-pathological correlation that have been the mainstay of the department for many years, projects dealing with the histochemical and experimental approach have been started. Dr. Agnes S. Burt is studying the anterior pituitary in neoplastic disease, with special reference to the effects of steroid hormone therapy. Dr. Richard B. Cohen, a product of the Seligman School of Histochemistry, has been applying various techniques to the adrenal glands removed surgically from patients with hypertension, Cushing's syndrome, and neoplastic disease. With Drs. Sniffen and Fred A. Simmons, he has begun a histochemical study of the function of the interstitial and Sertoli cells of the testis in relation to spermatogenesis in the normal, infertile, and diseased states. In connection with Dr. Castleman's interest in the thymus gland in myasthenia gravis, Dr. Cohen is applying a specific acetylcholin esterase tissue stain to muscle and thymus removed from patients with myasthenia gravis.

Dr. Winfield S. Morgan, after having spent a year at Oxford in the Cytology Division of the Zoological Laboratory, under Dr. John R. Baker, is continuing his studies on the Golgi apparatus in mouse pancreas homogenates and observing the effect of the Coxsackie virus on the Golgi network.

A closer relationship between the pathology laboratory and the laboratories in the Research Building has recently been consummated by the appointment of Dr. Edgar B. Taft, a research fellow in the Huntington Laboratory and well trained in pathology, as an assistant pathologist. He has been spending half time in the laboratory and has proved to be very valuable in analyzing both routine and research projects. His flair for architecture has resulted in his being given the job of working with the architects in planning the new Pathology Building. Another liaison with the Research Building has been effected by having Dr. David Kahn, one of the assistant pathologists, devote half his time with the Arthritic Research Group, under Dr. Bauer. Other less formal ties with clinical and research groups, such as Dr. Robert H. Fennell's association with the Gynecologic Service, Dr. Morgan's association with the Thyroid Clinic (substituting for Dr. Austin L. Vickery, Jr., who is with the Army), and Dr. Wilbur A. Thomas's interest in cardiac problems, have developed over the years.

Benjamin Castleman, M.D.,
Chief, Department of Pathology

* * *

Contributions to THE NEWS in the amount of $555.50, over and above the subscription fee, were received during the fiscal year 1952-1953. Notes of appreciation are always sent promptly to each contributor, but THE NEWS takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

* * *

Dr. René J. Dubos, member of the Rockefeller Institute for Medical Research, will give the Warren Prize Lectures of the Massachusetts General Hospital for 1953 at 4:30 P.M. in the Auditorium of the Museum of Science, Boston, on the subject "Biochemical aspects of infection". The lectures will be given on the following dates:

Monday, November 9
Wednesday, November 11
Friday, November 13
Tuesday, November 17
Thursday, November 19

The Trustees of the Hospital hope that

all members of the staff will be interested in attending. It would be helpful to the committee planning the receptions following the lectures if you would let Dr. Clark know if you are planning to attend. Self-addressed cards have already been sent out for this purpose.

* * *

The construction job disaster in Everett occurred on October 3. The following Monday Dr. Clark sent out this letter to all our staff members and non-professional employees:

> My compliments on the rapid and efficient way things were set up for emergency treatment of accident casualties last Saturday.
>
> Although we received only two of them it seemed likely for a time that there would be many more, and it was obvious that a much larger group would have been taken care of promptly and well.

The Board of Trustees, at their meeting on September 18, voted:

To accept the resignation of Dr. Jay L. Hoffman from the position of Clinical Associate in Psychiatry.

To reappoint:

Dr. John M. Head as Third Assistant Resident in Surgery, effective September 15;

Dr. John D. Pitts as Second Assistant Resident in Surgery, effective September 1.

To appoint:

Dr. Sheamus Dundon as Associate Physician pro tem to the Children's Medical Service, for the period September 21 to October 26;

Dr. William F. Ketchum as Assistant Physician to the Children's Medical Service;

Dr. Alexander L. Zaoussis as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1954.

The Trustees also voted:

To change the title of the Committee on Nurses to the "Trustees' Committee to the School of Nursing and Nursing Service", with the following membership:

Mr. John E. Lawrence, Chairman
Mr. Lloyd D. Brace
Mrs. Robert Homans
Dr. Chester M. Jones
Dr. J. Gordon Scannell
Mrs. Lloyd D. Brace
Mrs. W. K. Jordan
Dr. Dean A. Clark
Miss Ruth Sleeper
One vacancy to be filled

To change the title of the Ladies' Advisory Committee to the "Advisory Council to the School of Nursing", with the following membership:

Mrs. Lloyd D. Brace, Chairman
Miss Dorothy Bartol
Miss Daphne Corbett
Miss Betty Dumaine
Miss Sigrid Edge
Mrs. Van Courtlandt Elliott
Mrs. Harris Fahnestock
Mrs. Robert Homans
Mrs. Paul Jones
Mrs. W. K. Jordan
Dr. Rita M. Kelley
Miss Cecile Littlefield
Mrs. Thomas Motley
Mrs. Thorvald Ross
Miss Mary M. Sullivan
Mrs. Ralph Wetmore
Miss Barbara Williams

Ex officio Members
Miss Ruth Sleeper, Dr. Dean A. Clark, Mrs. J. H. Means

Honorary Members
Mrs. Arthur W. Bell
Mrs. Henry Bigelow
Mrs. G. Tappan Francis
Miss Sally Johnson
Mrs. John R. Post

At their meetings during September, the General Executive Committee voted:

To terminate the appointment of Dr. John A. Benson, Clinical and Research Fellow in Medicine, as of September 30.

To extend the appointments of:

Dr. Luis I. Arias as Clinical Fellow in Medicine, assigned to Cardiology, through October 31;

Dr. Joseph B. Tanner as Senior Resident in Orthopedic Surgery, from January 1, 1954 through March 31, 1954.

To promote:

Dr. Thomas L. DeLorme to the position of Senior Resident in Orthopedic Surgery, beginning April 1, 1954, for a period of one year.

To appoint:

Dr. Winston E. Cochran as Clinical and Research Fellow on the Children's Medical Service, for the period September 1, 1953 through August 31, 1954;

Dr. Walter R. Eberlein as Clinical and Research Fellow on the Children's Medical Service, beginning September 8;

Dr. Waldo L. Fielding as Clinical Assistant in Surgery, assigned to Gynecology for one year, in order that he may assist Dr. Langdon Parsons in the care of his patients at the Baker Memorial and Phillips House;

Dr. Thomas Frank as Clinical Assistant to the Children's Medical Service, effective as of August 15;

Dr. Lowell P. Hager as Research Fellow in Biochemistry, effective as of September 1;

Dr. Peter L. Hurst as Clinical and Research Fellow on the Children's Medical Service, for the period beginning September 1;

Dr. Gustavo Mogollon as Graduate Student Assistant in Pathology for one year, beginning September 15;

Dr. Robert B. Sloane as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert M. Todd as Clinical and Research Fellow on the Children's Medical Service, for a period of six months, effective as of September 23;

Yale J. Topper, Ph.D. as Research Fellow in Biochemistry, effective as of September 1;

Dr. Joseph M. Zucker as Clinical Fellow in Psychiatry, effective as of September 15.

Dr. Peter E. Sifneos, Assistant in Psychiatry at the Massachusetts General Hospital, has been appointed part-time Associate Psychiatrist to the McLean Hospital. He began his duties there on September 1.

* * *

NUTRITION CLINIC

The chief purpose of the Nutrition Clinic is to interpret to the ambulatory patient the physician's dietary prescription in terms of "what to eat" and "what not to eat", adapted to his socio-economic status.

How may the dietitian aid in the dietary treatment of the patient? First, a dietary history will determine the patient's usual food habits. This forms a basis for establishing good, sound nutrition, modified to the therapeutic needs of the individual. The education of the patient is simplified by setting up sample meals with wax models, suggesting available low-cost foods and various ways of preparing foods.

The poor dietary intake of the elderly patient who lives alone is often influenced by the common belief that milk furthers constipation, by poor teeth which interfere with the use of foods requiring chewing, and by loneliness, economic stress, and the physical difficulties involved in procuring or preparing food. We emphasize the importance of an adequate diet to these patients and are glad to give suggestions for preparing easily digestible foods, as a protection against prolonged malnutrition.

Approximately 60% of the 1200-1500 new dietary instructions given each year are for weight reduction. Those patients having the determination to change their eating habits will lose 1 to 2 pounds a week until their ideal weight is reached. A maintenance diet will then be given, based on three well-balanced meals which include the essential foods. Because of financial reasons the patient is often reluctant to return to the Nutrition Clinic unless he is visiting another clinic. Therefore, frequent reviews of diet instructions which have been given are arranged on a consultation basis to coincide with the time of the patient's return visit with his doctor. The cooperation of the physician in recognizing this need of follow-up usually results in more careful adherence to the prescribed diet.

The trend toward low sodium diets in this Clinic is shown by an increase from 20 in 1945 to 300 in 1953. The accepted terms "Low sodium", "Moderately low sodium", and "No added salt", as approved by the Medical Staff in the *Diet Manual of the Massachusetts General Hospital,* have helped to effect more accurate and efficient interpretation of the physician's diet order. The low sodium diet means not only the restriction of salt, but also of baking soda, regular baking powder, food products containing sodium compounds, and certain vegetables and protein foods having a high sodium content. Terms such as "Low salt", "Salt free", "Salt poor", etc. should be discouraged, since the dietitian is obliged to call the physician to find out exactly what is being ordered.

The dietary education of the diabetic patient has been simplified by the adoption of *Meal planning with exchange lists,* a booklet developed by a joint committee of the American Dietetic Association, the American Diabetes Association, and the Public Health Service. Since 1950 we have used 1,200 of these booklets in our Diabetes Clinic. Diabetics have reacted favorably since they can discuss their diets with other diabetics and find that the same procedure is now used in many different institutions. There is considerable psychological value in the greater variety of foods offered, permitting the patient to live a more normal life and allowing him to choose food with greater ease when eating away from home. In addition to the initial individual dietary instruction, which usually takes an hour, group demonstrations covering some phase of dietary care are given by one of the dietetic interns.

The Nutrition Clinic Staff includes two graduate dietitians and three dietetic interns who spend six weeks of their year's dietetic internship in the Clinic. We are fortunate during the busy morning hours from 9 to 12 in having volunteers who assist in admitting and weighing patients, answering the telephone, and procuring patients' records.

The Nutrition Clinic is open from 8:30 A.M. to 4:30 P.M., with the exception of Tuesdays, Fridays, and Saturdays, when it closes at noon. A dietitian is assigned to the Medical Clinic on Tuesday and Friday afternoons, to give dietary instruction to patients being referred during the time of the Diabetes Clinic, which is held on Tuesday and Friday afternoons. This arrangement has allowed the dietitians in the Diabetes Clinic to devote more time to the education of the diabetic patient without interruption, and also has been a great convenience to the Medical Staff and the patients.

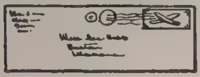
Of the average 9,000-10,000 patients seen each year by the dietitians, 2,200 are diabetics.

The facilities of the Nutrition Clinic are available to any persons referred for dietary advice by a physician in any one of the clinics in the Out-Patient Department.

Approximately 235-250 food budgets are planned each year at the request of Social Service and submitted to the various welfare organizations.

Posters, exhibits, and take-home pamphlets, emphasizing the normal diet and encouraging well-balanced meals, are arranged by the dietetic interns and displayed in prominent places throughout the Out-Patient Department.

Martha D. Chase,
Ruth A. Nelson,
Clinic Dietitians



New addresses:—

Dr. George E. Donaghy (assoc. an. 1953), Faulkner Hospital, Jamaica Plain, Mass.
Dr. Buford Hall (*M.* 1946), 273 South Limestone St., Lexington 4, Ky.
Dr. George H. Jackson, Jr. (*Or.* 1919), 855 Hinman Ave., Evanston, Ill.
Dr. William F. Ketchum (*C.M.* 1948), 501 Boylston St., Boston, Mass.
Dr. J. Drennan Lowell (a.r.s. *Or.* 1953), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Lt. Col. Frank A. Mantz, Jr., MC, USAR (res. fel. *Path.* 1950), Officers' Mail Section, Fitzsimons Army Hospital, Denver 8, Colo.
Dr. Isaac M. Taylor (*M.* 1946), North Carolina Memorial Hospital, Chapel Hill, N. C.
Dr. John L. Watson (r.s. *U.* 1930), 4010 N.W. 7th Ave., Miami, Fla.

Brief bits:—

Dr. Earle M. Chapman gave a lecture in the Isotopes in Medicine Course at the Oak Ridge Institute of Nuclear Studies, on September 22. His subject was "The treatment of hyperthyroidism with I^{131}".

Lt. Lincoln D. Clark, MC, USAR (*M.* 1948) has sent us a card from Wurzburg, Germany, giving his new military address as 10th Field Hospital, APO 800, c/o Postmaster, New York, N. Y. His card also announces the arrival of a brand new daughter — Linda Stone Clark — on August 28.

Dr. Donald S. King has moved from Boston to Hanover, New Hampshire, to be Consultant in Chest Diseases at the Hitchcock Clinic.

Dr. Robert R. Linton was elected vice president of the International Society of Angiology, at Lisbon, Portugal, on September 18. Dr. Linton read a paper there on September 20. His subject was "The surgical treatment of the postthrombotic syndrome with ulceration".

Dr. Patricia A. McIntyre (*M.* 1953) is at present an assistant resident in Medicine at the Johns Hopkins Hospital, Baltimore 5, Md.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Werner Mueller, Director of the Mosher Laboratory, traveled to Chicago in October to administer the National Board Examinations in Otolaryngology. Dr. Daniel E. M. Martinez and Dr. Yunis M. Saeed, residents at the Infirmary, were members of the group taking the examinations.

The Infirmary has welcomed several new members to its staff.

Mrs. Virginia Jarvis arrived on October 13 to begin her new duties as a histological technician in the Mosher Laboratory. Prior to her appointment here, Mrs. Jarvis served as a histological technician at the Salem Hospital and in the Mallory Laboratory at the Boston City Hospital.

Three new doctors have started their residencies at the Infirmary. Dr. S. J. Bullington has joined the ophthalmological staff, and Drs. Alfred L. Hurst and Louis Griffey have begun their residencies in otolaryngology.

Dr. George Nager, who has spent the past two and a half years in the United States taking postgraduate courses in otolaryngology, has returned to his home in Zurich, Switzerland, after his most recent study here at the Infirmary. With him was his wife, Mathilde, also an otolaryngologist. Dr. Nager is the son of Dr. Felix Nager, retired Professor of Otolaryngology at the University of Zurich. The elder Dr. Nager is known internationally as one of the leading physicians in ear, nose, and throat medicine. He is one of the founders of the Collegium Otolaryngologico.

Dr. Anthony Zovickian and Dr. John E. Regan have been appointed Graduate Assistants in Otolaryngology. Dr. Zovickian comes to the Infirmary from Johns Hopkins, where he specialized in reconstructive plastic surgery of the head and neck. He will join our plastic surgery service, under Dr. Edgar M. Holmes.

Dr. James C. Appleton began his duties as Anesthesiologist on September 26. Dr. Appleton received his Bachelor of Arts degree from Miami University and his Doctor of Medicine degree from the University of Louisville. He interned at the Springfield City Hospital.

During World War II, Dr. Appleton served as a lieutenant in the United States Naval Reserve, and was called to active duty in Saipan as Chief of the Dependents' Service. Immediately after the war, he was in private practice until he began his residencies in anesthesiology at the V.A. Hospital in McKinney, Texas, and at the Massachusetts General Hospital under Dr. Henry K. Beecher.

Prior to his recent appointment at the Infirmary, Dr. Appleton practised anesthesiology in Dayton, Ohio.

The New England Oto-Laryngological Society will meet here at the Infirmary on November 18. The program, which starts at 11 A.M. and continues throughout the afternoon, will be conducted in the upper OPD Amphitheatre.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The omission of the classification of material has constantly caused your editor considerable time and trouble. This month only two people omitted their classifications—the best record, to date. PLEASE REMEMBER TO INCLUDE THAT INFORMATION. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

All requests for reprints are to go to the individual authors and not to Treadwell Library nor to THE NEWS.

The following new titles have been received:

Dermatology

Swartz, J. H.
Actinomycosis.
In Therapeutics in Internal Medicine, 2d edition, Franklin Keyser (Editor), New York, Paul B. Hoeber, pp. 134-147.

Swartz, J. H., with Coolidge, M. H.
Kontrastfarbung fur Pilze in Hautschuppen, Nageln und Haaren.
Hautarzt 2:61-63.

General Medicine

Fromer, J. L., and Burrage, W.S.
Ragweed oil dermatitis.
J. Allergy 24:425-433.

Irwin, J. W., and Burrage, W. S.
Effects of cortisone and corticotropin on allergic reactions.
Postgrad. Med. 14:262-267.

General Surgery

Linton, R. R.
The emergency and definitive treatment of bleeding esophageal varices.
Gastroenterology 24:1-9.

Linton, R. R.
The surgical treatment of bleeding esophageal varices secondary to cirrhosis of the liver and Banti's syndrome.
Cincinnati J. Med. 34:197-205.

Linton, R. R., and Warren, R.
The emergency treatment of massive bleeding from esophageal varices by transesophageal suture of these vessels at the time of acute hemorrhage.
Surgery 33:243-255.

Laboratory Science

Montagnani, C. A., and Simeone, F. A.
Observations on the liberation and elimination of myohemoglobin and of hemoglobin after release of muscle ischemia.
Surgery 34:169-185.

Morgan, W. S.
Cytological studies of the acinar cells of the pancreas of the mouse. Part I. The formation of neutral red granules.
Quart. J. Microscop. Science 94:141-153.

Morgan, W. S.
The neutral red granule cycle and the relationship of the neutral red granule to the Golgi apparatus in the acinar cell of the mouse pancreas. (Abstract)
Lab. Invest. 2:319.

Neurology, Neurosurgery, and Psychiatry

Clark, L. D., Quarton, G. C., Cobb, S., and Bauer, W.
Further observations on mental disturbances associated with cortisone and ACTH therapy.
New England J. Med. 249:178-183.

Cobb, S.
Review of Neuropsychiatry.
A.M.A. Arch. Int. Med. 92:273-283.

Cobb, S., and Nemiah, J. C. (Editors)
A case of low back and leg pain complicated by psychologic factors.
Am. J. Med. 15:391-398.

Lorenz, M., and Cobb, S.
Language behavior in psychoneurotic patients.
A.M.A. Arch. Neurol. & Psychiat. 69:684-694.

Ophthalmology

Dunphy, E. B., and Selverstone, B.
Uptake of radioactive phosphorus by normal and neoplastic ocular tissues.
Am. J. Ophth. 36:774-776.

Otolaryngology

Kelemen, G.
Congenital laryngeal stridor.
A.M.A. Arch. Otolaryng. 58:245-268.

Ether Day, October 16, was observed again this year with what has come to be known as the Service Pin Ceremonies.

After a few words of greeting to the assembled group of recipients and invited guests which filled the Moseley Rotunda to overflowing, Dr. Clark introduced Mr. Francis W. Hatch, a member of our Board of Trustees. Mr. Hatch brought greetings to all from the Board and then went on with what we have come to expect of him—a delightful talk woven on threads of wit and wisdom. Included in his remarks was a comparison of the M.G.H. of Morton's time with the Hospital as we know it today.

The musical part of the program followed—a brilliant rendition of Bach's Concerto No. 3 in D minor for Two Violins, with Nina Wulfe Finesinger and Wolfe Wolfinsohn as violinists, and Rowland G. H. Sturges at the piano.

Before the presentation of Service Pins, Dr. Clark reminded us that up to last year such pins had been awarded to non-professional personnel only and only to those with a minimum record of 10 years of uninterrupted service at the Hospital. Last year two additional groups were included for the first time: all non-professional workers who had served the Hospital for 5 years, and all doctors on the active staff who had served the Hospital for a continuous period of 25 years or more. This year another innovation was made: pins were awarded also to members of the Board of Consultation who, at the time of their appointment to the Board, had served for 25 years or more on the active staff.

The pins were awarded by Dr. Clark, aided in the distribution to the large 5-year group by our assistant directors. A complete list of the names of recipients was included in the program for the first time this year. Unfortunately, space limitations make it impossible to repeat those names here, but the following figures show the numbers of recipients in each group:

Non-professional

5 years—134
10 years— 57
20 years— 7
30 years— 1—Katherine H. Emerson
40 years— 2—Mary A. Dacey
Patrick J. Kilcoyne

Professional

25 years—18
30 years—14

Refreshments were served in the East Dining Room after the ceremonies.

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The fall meeting of the MGH Staff Wives Hospital Committee took place at Walcott House on Wednesday morning, October 21. Dr. Harriet L. Hardy, Associate Physician, addressed the meeting on "The relationship of the M.G.H. to the study of occupational diseases".

The first tea of this season for visitors to the M.G.H. from abroad will be held in the Medical Staff Room of the Bulfinch Building on Thursday, November 12, from 4:30 to 6 P.M.

An increasing number of these visitors have been invited to the homes of our Staff since the commencement of our hospitality program. Becoming better acquainted with one another has proved to be a most enjoyable experience for everyone.

Mrs. Abraham L. Finesinger, Chairman of the Music Committee, has already begun this year's program of concerts in the Chapel for patients. The October 22d program presented Miss Hope Wright, viola soloist with piano accompaniment, and a string quartet. On November 4 Mrs. Helen H. Cushing gave an organ recital, and on December 9 there will be a Chamber Music Concert.

The response to these programs has been most enthusiastic on the part of both the audience and the performers. We are counting on many more concerts.

* * *

THE SUMMER SCHOOL
OF PASTORAL CARE

July 13—August 21, 1953

Groups of clergymen come to study at our Hospital each summer. One reason for this is that the Massachusetts General is a teaching hospital where, during a 12-month period, some 26 different student groups join our staff of those who are striving to learn as we serve. Ours is a closely organized world where the sick and the well learn more clearly through the ministry of illness what life is really like.

Down a hallway on Moseley 2 is a little sign which reads: Protestant Chaplain's Office. Here, in this room, the Reverend James H. Burns, Protestant Chaplain to the Massachusetts General Hospital and Executive Secretary of the Institute of Pastoral Care, trains theological students and ordained ministers in the art of ministering to people. Fifteen ministers attended the course during July and August this past summer. The group included men from 9 different States and represented 8 denominations. Five of the clergymen are serving as chaplains in general hospitals and mental institutions, 8 are parish ministers, 1 is a writer in the field of counseling, and 1 a professor in a theological seminary. The youngest person in the group was 34, the oldest 59. All were experienced clergymen yet all were students, eager for a chance to learn how to bring a more truly helpful ministry to their people.

The clergy are in the Hospital 8 hours a day, 5 days a week, for 6 weeks. They begin their training each summer by exchanging their clerical garbs for the white coats of hospital aides. For the first two weeks they serve as part-time volunteer helpers, learning such skills as how to give a patient that comforting service—a back rub. At first they are very conscious of the newness of the situation. Their unfamiliar role is as awkward to them as the starch in their coats; but two weeks of working along beside experienced male hospital aides, added to the discipline of writing reports on each day's activities, gives the men a feeling of confidence and sharpens their astuteness as sympathetic observers of people. The lowly bedpan can teach a great deal! The Admitting Office, Social Service Department, Nursing Service, and the Administrative branch of the Hospital also help to orient them during these first two weeks.

Their orientation period over, they exchange their white coats for the gray coats of a chaplain. In a ceremony of dedication they take their silver crosses from the altar of the Chapel, and pin them on one another as a symbol of their mutual support and fellowship. They are then ready for their four weeks of work as hospital chaplains. In their daily calls on patients they are accepted as representatives of religion. Each chaplain is assigned a definite floor or ward in the Hospital as his "parish". Each day he makes his rounds. Some calls last only three or four minutes and some may extend to twenty minutes. In every case he is conscious of his special pastoral role in the presence of illness. Body and mind are never separated in sickness, and very frequently what appears to be only a physical ailment has deeper emotional roots. Chaplains find that an illness of the body may be a symptom of an emotional problem that only understanding and guidance can heal.

Each day the clergyman writes a confidential report on one of the several calls he has made, giving an account of his conversation with the patient exactly as it took place. This direct report of the pastoral call is prefaced by a summary of the patient's condition and general background, the particular purpose of the call, and what the chaplain did by way of spiritual preparation beforehand. In the conclusion he evaluates the call and considers the important responses of the patient, what the chaplain might have done better, and the leads to follow in another call. As soon as the report is submitted, one of the supervisory staff reads the notes and writes instructive comments on a margin of the paper. This is the heart of the clinical pastoral training program. Not only does the note-writing enable the chaplain to have a cumulative record of the patient's progress, but it also enables him to work out his own feelings concerning the problem, helps him to see his mistakes, and renders him a more secure and confident person when he visits this same patient again, or later when he visits someone else in the Hospital or in his own parish.

The face-to-face interview draws the chaplain and the patient into a basic spiritual relationship. Therefore, the fundamental preparation for the ministry to the sick is prayer. In addition to daily group devotions the individual chaplain often spends time in the Chapel before he visits a patient who is facing a crisis in his life. Many patients ask that the chaplains pray with and for them, which they do, both as individuals and as a group. Sometimes one or two patients will visit the Chapel with their chaplain for a private service.

The students have ready access to Chaplain Burns, their Supervisor, to talk over both the reports on their pastoral calls and new possibilities for helping patients. These conversations often result in sharing other personal and professional ideas.

As the calling on patients proceeds, lectures are planned to illuminate the situations the chaplains meet. Lectures during the six weeks include such subjects as "Cancer", "Religion and Psychiatry", "Alcoholism", "The skin patient", "Understanding the menopause", "The minister's use of social agencies", "Ethical problems of counseling", and "What the church expects of its minister". Many of these lectures are given by members of the regular professional staff of the Massachusetts General Hospital. Opportunity is given for general group discussion of the issues arising from these studies, with particular reference to the problems of the parish minister. These general discussions are supplemented by smaller, more intimate weekly meetings, where the students are given more time to discuss their own emotions. Here the student takes hold of the raw material of his own experience and, by using his own feelings and his reactions to others in the group as source material, learns what it means to accept the reactions of others.

One clergyman spontaneously wrote as follows, "Quite factually, for the first time 'Life' has become my laboratory—the orderly service; the observations of autopsy, anesthesia, surgery, of films of a delivery, of mentally and emotionally upset patients; the surgical grand rounds; the medical grand rounds; the esophageal voice class; the group seminars; the lectures by doctors, hospital administrators, social workers, and nurses—all of these activities were centered in and focused upon *persons*. The key and core of it all is *personality*—what happens to persons; how they feel toward the event; how they relate it to their total experience—past, present, and future; and what they will make of it—all of this has constituted the critical question and shaped the ultimate decisions. I find that I have moved from a theological orientation in religion to a person-centered orientation."

Clinical Pastoral Training is this meeting of one personality with another in such a way that both are helped to see and feel the love of God that is present in every man, woman, and child—sometimes concealed, but always waiting to be released.

Rev. James H. Burns,
Protestant Chaplain
to the Massachusetts General Hospital

BIOGLETS

Dr. Joseph Stokes, III, Resident in Medicine—born in Philadelphia, Pennsylvania, December 2, 1924; Haverford College, 1942-44; Research Fellow, Department of Physiology, Harvard Medical School, 1945-47; M.D., Harvard Medical School, 1949; Medical Intern and Assistant Resident, Johns Hopkins Hospital, 1949-51; Senior Assistant Surgeon, U.S. Public Health Service, helping in an epidemiologic study of heart disease, in Framingham, Massachusetts, 1951-53; home: Framingham, Massachusetts.

Dr. Frederick S. Tomchik, Assistant Resident in Radiology—born in Bridgeport, Connecticut, May 2, 1920; attended University of Bridgeport and University of Connecticut; M.D., Harvard Medical School, 1951; Intern in Medicine, New Haven Hospital, 1951-52; Intern in Surgery, New Haven Hospital, 1952; married; home: Fairfield, Connecticut.

Dr. George D. Zuidema, Intern in Surgery—born in Holland, Michigan, March 8, 1928; A.B., Hope College, Holland, Michigan, 1949; M.D., Johns Hopkins University Medical School, 1953; married; home: Holland, Michigan.

In our September issue we reported that Dr. Michael E. De Bakey, Professor of Surgery at Baylor University College of Medicine, had been Acting Chief in our General Surgical Services from June 16 to July 1. After his return to Houston, Dr. De Bakey not only subscribed to The News, but he sent this very nice letter to Dr. Clark which we feel every MGH-er will enjoy reading.

> I should like again to express my grateful appreciation to you and to all your associates who contributed so much to the pleasure of my recent visit at the M.G.H. I can truthfully say that it was one of the most delightful experiences I have ever had.
>
> I am, of course, deeply appreciative of the implicit honor of this visit, but I cherish even more the warm reception extended me and the stimulating professional associations provided me during my stay at the hospital. While I had long admired the traditional medical strength of the M.G.H., I had never fully appreciated the underlying basis for it. I believe now that I have gained a much better understanding of it through my observations on the surgical service where it is so well exemplified. Actually, it consists simply in the careful blending of the three major factors which constitute good medicine, i.e., clinical care, research, and education. The formula is simple enough, but the manner in which it is applied and the selection and utilization of the highest quality personnel to apply it provide the key to success in the use of this formula. It was not only a pleasure but a real stimulus to observe how well this had been done by Dr. Churchill. He has provided a superb degree of leadership in this regard. The house officer staff is the best I have ever observed, but even more impressive is the quality of his junior full-time staff. I believe these men constitute the finest array of surgical talent I have yet seen in a single surgical service. If the future of surgery rests on the shoulders of these men, it is bright indeed.
>
> You have every reason to take pride in your great institution, and I shall always take pride in the opportunity you and Dr. Churchill provided me to be a part of it even for such a short time. Please express to all your associates my sincere and grateful appreciation for their many kindnesses and the generous hospitality extended to me.

A letter from another "singleton". In case you may be a new-comer at the Hospital, an explanation of that title "singleton" is in order. A few months ago we sent out letters to every doctor who was at that time the only MGH-er in his particular area and from whom we had received no word for a long time. We asked for information concerning their professional and social activities, and for anything in the way of interesting local color. Several long and engaging replies have been received and published in previous issues of The News. Now, here is another. It comes from Dr. William M. Shedden (*E.S.* 1920), Chief of the Surgical Service at the Veterans Administration Hospital in Lake City, Florida. He writes:

> I head up a surgical staff here in a Veterans Administration Hospital of 378 beds, of which 172 are surgical. The surgical staff numbers ten. The men on my staff are recent surgical ex-residents who are working toward examination for the American Board of Surgery. These men have been doing extremely well with the examinations. After about two years in this

No. 43 in a series of Staff photographs
Dr. Benjamin Castleman—Chief, Department of Pathology

Hospital they either enter private practice or transfer to positions in other Veterans Administration Hospitals. We have a fairly rapid turnover of cases and the men are trained to do some pretty difficult surgery. Recently one of my staff was offered the position of Chief Surgeon at the Veterans Administration Hospital in Augusta, Georgia.

At the present time our surgical staff is complete, but if any MGH-ers are interested I would be glad to hear from them, as sometimes an opening occurs unexpectedly. At the present time there are two openings on the Medical Service. If you know of anyone who is interested I suggest that he communicate at once with the Chief, Professional Services, Veterans Administration Hospital, Lake City.

Congress has allocated four and a half million dollars for the construction of a new four-story building here. It has been under construction for two months and the walls are beginning to rise. It will contain a number of modern innovations and will give me four new operating rooms.

Lake City is a beautiful little town of about eight thousand, situated among many lakes and about sixty miles from Jacksonville. We are in the northern part of Florida and may have quite marked seasonal changes. The fishing, I am told, is excellent. Some of us have little beach houses at Jacksonville Beach where we can go for week ends. We have a fine little 9-hole golf course which I have tested to my satisfaction. The townspeople are very friendly and there is an active little country club which is enjoyed by our staff.

You may have surmised from the above that I am enamored of Lake City. I am.

An extra dividend—a reply to our "singleton" letter from Dr. Edward V. Johnston (*W.S.* 1947) who, as his letter explains, is not the only MGH-er in his town. He writes:

I am always happy to have a letter from the M.G.H. because of the intense feeling of admiration and pride I feel for that institution.

My news report on personal activities must first correct one fact. The address you have is my parents' home. My current address is 1404 Fourth Street, S.E., Rochester, Minnesota. This may well affect interest in any personal news, as I am in my fourth year as a surgical resident, or "Fellowship", as it is called here at the Mayo Clinic. However, should you still be interested in news from former MGH-ers who are in training elsewhere, the following is offered. [Of course we are. Once an MGH-er, always an MGH-er.—*Editor*]

I spent a year obtaining an M.S. degree in anatomy at Northwestern University Medical School, with Dr. B. J. Anson. I have been at the Mayo Clinic since July 1950. I have been secretary, and now president, of the Fellows' Association (500 strong), and was elected to Sigma Xi this year.

Photography has waned on my hobby horizon, and I am now a full-fledged hifidelity fan. My den abounds in speakers and gadgets. I had the pleasure of entertaining Dr. George Nardi with some ear-shattering music when he visited here two years ago. I was also fortunate enough to see Dr. Castleman and Dr. Richard Sweet on their visits here during the past year or so.

My warmest regards to the MGH family.

This letter has come from Dr. John H. Peters (*W.M.* 1943):

I have delayed renewing my subscription to The News in order to be able to say a little about my new location. On the first of July I left Pittsburgh to become Assistant Chief of Medicine and Director of Medical Research at the U.S. Veterans Hospital here in Atlanta. The position is a fine one, working with a splendid group of people, although the title would seem to imply a good deal more eminence than is actually the case.

For a city of this size the number of MGH alumni is small, perhaps because of the tremendous influx in the middle 1940's from another Harvard hospital which shall be nameless.

The fact that the deep south is not proving to be as alien as might be expected is undoubtedly due to the high standards of medical and academic performance which prevail in the medical school community.

This letter has come from Dr. Richard W. Garrity (sr. r.s. *N.S.* 1950), Chief of Neurological Surgery at the U.S. Naval Hospital, San Diego 34, California:

Apropos of your note about a note from former MGH people, may I state that it has been our pleasure here to have two former staff members who have been praised by doctors, nurses, corpsmen, and patients on innumerable occasions. They are Drs. Bill Richardson (*W.S.* 1945) and John Kennedy (*S.* 1950). We sincerely hope they enjoyed their time here almost as much as we enjoyed having them.

I would like to send along my best wishes to all the old friends in the M.G.H. and to express my opinion about how pleasant and invigorating was my tour in that wonderful institution.

* * *

LET'S ALL SING!

A cordial invitation was extended to the entire Hospital family—professional and nonprofessional—to come to the meetings of the M.G.H. Glee Club, the first of which was held in the Lower O.P.D. Amphitheatre on Wednesday evening, November 4, from 7:30 to 9 o'clock.

No tryouts! No rehearsals! No dues! Just a good time for everyone who likes to sing for the sheer joy of singing.

Miss Margot Warner will direct the Glee Club. Meetings are scheduled for the first and third Wednesdays of each month.

Refreshments will be served at the conclusion of each meeting.

Watch for further notices, but in the meantime reserve these particular Wednesday evenings for the Glee Club.

THE NEWS

No. 129 Boston, Mass. December 1953

DR. FRITZ LIPMANN — 1953 NOBEL PRIZE RECIPIENT

On October 22 came the announcement that Dr. Fritz Lipmann, our Biochemist in Research Chemistry, had been awarded the 1953 Nobel Prize in Medicine and Physiology.

The honor received by Dr. Lipmann is richly deserved. All of us at the Massachusetts General Hospital and the Harvard Medical School join in congratulating him and in expressing our pride in being associated with him. Dr. Lipmann's magnificent accomplishment amply justifies the confidence the Staff and the Trustees have long had in him, and also illustrates the Hospital's far-sighted wisdom in supporting a broad program of basic scientific research.

All the best to you, Fritz!

ean A. Clark, M.D.] D. A. C.

Articles featuring Dr. Lipmann's professional career appeared in leading newspapers from coast to coast when the award was announced, and the following release was issued by Harvard University:

BIOGRAPHY OF FRITZ LIPMANN

Dr. Fritz Lipmann is Professor of Biological Chemistry of Harvard Medical School at the Massachusetts General Hospital and Biochemist-Head of the Biochemical Research Laboratory of the Massachusetts General Hospital. He has been working in the research laboratories of M.G.H. since 1941, and has been on the research staff of Harvard since 1944.

A native of Germany, he earlier had worked in laboratories in Berlin and Copenhagen and, in the United States, at the Rockefeller Institute for Medical Research and Cornell University.

Dr. Lipmann has devoted much of his career to studying the mechanisms of biosynthesis: how the body builds and renews itself out of the basic factors in food. It was recognized that this building process required large amounts of energy, but it was not known how this energy was made available.

In 1941, while working at Cornell, Dr. Lipmann had proposed the concept of a "metabolic dynamo" by which energy-rich phosphate bonds continuously supplied the needed energy for the building process. As an outgrowth of this work came the discovery of coenzyme A—now recognized as a key substance in biosynthesis.

In 1945, Dr. Lipmann isolated and identified this new factor—coenzyme A—as a crutial element in providing useable energy for the building process, in part by converting phosphate bond energy into other useful forms of chemical energy. Later he and his Harvard co-workers at M.G.H. showed how coenzyme A brings forth the construction of large units, such as fatty acids and steroids, necessary to the body's renewal and growth. In his work, Dr. Lipmann was assisted principally by Dr. Nathan O. Kaplan (now of the Johns Hopkins University), Dr. G. David Novelli (now of Western Reserve University), Dr. John D. Gregory of Harvard and M.G.H., and Dr. Morris Soodak of M.G.H.

Recently, Dr. Lipmann has been investigating the mode of action of the thyroid hormone. This hormone had long been recognized as a regulator of energy utilization. His studies have now opened an approach to a chemical understanding of its working mechanisms, in particular of its toxic effects as manifested in hyperthyroid conditions.

Now 54, Dr. Lipmann was born in Koenigsberg, Germany, and received the M.D. degree from Berlin in 1922 and the Ph.D. in Chemistry from Berlin in 1927. From 1927 to 1931 he worked as a research assistant in Berlin under two famous chemists, Otto Meyerhof and Albert Fischer. In 1931-32 he came on a fellowship to work at the Rockefeller Institute for Medical Research in New York under Dr. P. A. Levene. In 1932 he returned to Europe to work as an investigator in the Biological Institute of the Carlsberg Laboratories in Copenhagen.

Dr. Lipmann had intended to return to his native country, Germany, but the advent of the Hitler regime found him unacceptable. He, therefore, continued to work on in Copenhagen until he immigrated to this country in 1939.

Back once again in New York he found a temporary position in the Department of Biological Chemistry at Cornell University. There, Dr. Ernst Oppenheimer of the Ciba Pharmaceutical Company heard of him and became interested in his work. Professor A. Baird Hastings, Head of the Department of Biochemistry at the Harvard Medical School, also became interested in him, and both recommended him to the Massachusetts General Hospital.

In July of 1941 Dr. Lipmann started his career as Research Chemist at the Massachusetts General Hospital, the Ciba Company offering the initial financial support. Subsequently his investigations have been supported by many others, including the U. S. Public Health Service, the Commonwealth Fund, and the Rockefeller Foundation. From a start as Research Fellow in the Department of Surgery, he has become the Chief of the Biochemical Research Laboratories of the Hospital.

He became a research fellow of the Harvard Medical School in 1944. He was promoted to Associate in Biological Chemistry in 1946 and in 1949 he became Harvard's Professor of Biological Chemistry at the Massachusetts General Hospital.

In 1947 he received the Honorary Degree of M.D. from the University of Marseilles and this past June the University of Chicago awarded him the Honorary Degree of Doctor of Science.

His wife is the former Freda M. Hall of Defiance, Ohio, and they have an eight-year-old son, Stephen Hall Lipmann. The Lipmanns live at 100 Revere Street, Boston.

Our May 1953 issue of THE NEWS was honored with an article by Dr. Lipmann in which he described his work in "developing and mapping a relatively new field of biochemical research concerned with the synthesis of body material — the study of biosynthetic mechanisms", his current interest in the new field of hormone biochemistry, and his hopes for a closer affiliation in the future between the biochemist and the clinical investigator.

A few copies of this issue are still available in the office of THE NEWS for anyone who might like to procure a collector's item.

Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service, has been appointed to the Health Resources Advisory Committee of the Office of Defense Mobilization.

* * *

BLOOD BANK—DONORS NEEDED

During recent years the Blood Bank has been faced with increasing difficulties in keeping a sufficient blood supply in the Bank. This shortage has resulted in cancellation of operations and in other inconveniences to the clinical staff. The main reason for the shortage of blood supply has been that an increasing number of our patients are having their blood use replaced by the Red Cross on a unit for unit basis.

This arrangement has, to a large extent, made it impossible for the Blood Bank to obtain a surplus of blood which can be used to take care of the blood needs of patients who are not able to replace blood drawn from the bank.

The extra blood need has been met by a heavy draining of our professional donors and therefore the supply from this source has been exhausted at times, particularly as far as special blood types are concerned.

We feel it would be very helpful for the Blood Bank, in its effort to keep a sufficient supply of blood on hand at all times, if the clinical staff would ask the patients who can be expected to require blood during their stay in the Hospital to bring in donors before or when they are admitted.

Our efforts to obtain more blood would be greatly helped if, in particular, a larger percentage of private patients brought in donors. This will work to their advantage both in avoiding delay in surgery and in sparing them the expense of professional blood.

It should be explained that every unit of blood which has been donated to the Bank in advance and is not used by the patient during the admission may be used to erase the laboratory and administration charges for blood received by the patient, or be kept on record in the Bank as a personal blood credit to the patient for three months.

Morten Grove-Rasmussen, M.D.,
Director, Blood Bank
Dean A. Clark, M.D.,
General Director

MASSACHUSETTS EYE & EAR INFIRMARY

The regular fall meeting of the New England Oto-Laryngological Society was held on November 18 in the upper Amphitheatre of the Massachusetts General Hospital. The morning clinical conference, led by Dr. LeRoy A. Schall, was followed by the regular afternoon meeting, with Dr. John A. Murtagh presiding.

Dr. Daniel Cunning of New York City was the guest speaker. His subject was "Errors in Otolaryngology". Other speakers included Mrs. Paul A. Doehler — "A new voice", Dr. Werner Mueller — "Hearing aids: An office problem", and Dr. George F. Reed — "Ventricule-mastoidostomy: Its significance to the otologist". The last three speakers are members of the staff at the Infirmary.

The 414th meeting of the New England Ophthalmological Society was also held at the Infirmary on November 18, with an operating clinic in the morning and a presentation of cases by Dr. Peter Beck in the afternoon. Speeches included "Discussion and demonstration of microscopy of the fundus" by Dr. Joseph J. Lo-Presti, "The pathology of the retinopathy of prematurity" by Dr. Parker Heath, and "The fixation of corneal grafts" by Dr. Brendan D. Leahey. All these speakers are members of our staff.

Dr. John R. Richardson of the Otolaryngology staff, participated in a symposium on "Tonsillectomy — Yes or no?", held at the Statler Hotel in Boston on November 4. The symposium was a part of the New England Postgraduate Assembly program.

Drs. Daniel E. M. Martinez, Yunis M. Sa'eed, Morris Sherman, and N. Edward Nachlas were among the candidates who successfully passed the National Board examinations in Otolaryngology, given in Chicago last October.

MYASTHENIA GRAVIS CLINIC

A full report of the history and purpose of this special clinic within the Department of Neurology appeared in the July and August 1948 issue of The News, admirably presented by Dr. Henry R. Viets. In 1951 Dr. Viets retired from active clinical teaching in the Hospital and the clinic was taken over by Dr. Robert S. Schwab who had been associated with him in myasthenia gravis research since 1935.

In brief summary for those who cannot obtain the old No. 70 copy of The News, the clinic began in the Neurological Out-Patient Department in 1935 and has continued unbroken up to the present time. During some years it was held at least once a month, and in others, weekly. It is estimated that in the past 18 years nearly 500 patients with myasthenia gravis have been seen in the clinic or privately by those attached to the clinic and whose records are available for study. This means that an average of 30 new cases of myasthenia gravis are seen each year by the group at the Massachusetts General Hospital. The history of myasthenia gravis at this Hospital, where the first case diagnosed was studied in 1905, reveals that the incidence in the 30 years up to the opening of the special clinic was about one case a year. The development of the special test for myasthenia gravis, using the drug Neostigmine intramuscularly to neutralize, in a few minutes, the symptoms and thereby establish the presence of the disease, was largely responsible for this increase in the number of patients encountered.

This test was worked out in the clinic and first described in 1935 in the *New England Journal of Medicine*. Failure of Neostigmine to benefit any other neurological disorder provided the necessary accuracy for a clinical test. The large number of patients encountered in this clinic has led some neurologists in other parts of the country, such as the Middle West, to suppose that the disease is geographically restricted to the eastern seaboard. The rapid growth to 200 cases of a similar clinic in Indianapolis, under the direction of Dr. Tether, has shown that these patients are common enough if they can be diagnosed.

It must be pointed out that approximately 3 out of every 4 patients who are referred to us to see if they have myasthenia gravis, because of fatigue, diplopia, or difficulty in swallowing, do not have this disorder. The fourth one does have myasthenia gravis and joins the clinic group. This means that our "yield" is somewhere around 25 percent and indicates the importance of physicians considering the possibility of myasthenia gravis in their patients.

An example of such a situation is as follows:

A 70-year-old, retired businessman, living in another continent, noticed suddenly, while driving his car, double vision and difficulty in fixing his eye. A month or so later he had trouble moving both eyes and there was dropping of the lids. This was much worse in the afternoon and comparatively much better in the morning. Local physicians were at a loss to explain his symptoms since he had no other trouble. He flew to a large European medical center and consulted several specialists in the course of a month's study, making most of his medical rounds in the afternoon when his symptoms were most marked. An unsatisfactory diagnosis of hemorrhage into the brain, with a hopeless outlook, was made. He sought help at another medical center but received no encouragement and returned home. By chance, a physician who saw him had been a visitor to the Myasthenia Gravis Clinic at M.G.H. two years previously and had witnessed the effect of an intramuscular injection of Neostigmine on ocular palsy (ocular myasthenia gravis). On a hunch that this might be the same condition, he gave the patient a diagnostic injection of 1.5 mg. Neostigmine. There was prompt opening of the eyes and disappearance of the ocular palsy. When the patient heard of the source of the doctor's knowledge he promptly flew 7,000 miles to Boston and was admitted to the Hospital for study. Here his condition was confirmed and oral medication adjusted so that his eyes were open most of the day.

In the clinic various types of drugs have been tested on cooperative and willing patients, in order to find better medication for this distressing disease. These include such preparations as endocrine products, thymus extract, special types of vitamin B, pantothenic acid, and many others. Newer preparations that depress the cholinesterase activity in the blood, such as TEPP and OMPA, have been assessed in a number of cases. Analogues of Neostigmine, such as Tensilon and Pyridostigmine, are under investigation at the present time.

Approximately 80 patients of our group have been subjected to thymectomy, with dramatic results in some patients and disappointing failures in others. Careful analysis of these results compared with an equal number of our patients who did not have the operation is now the subject of a report in press in the *Journal of the American Medical Association*. We have found, for example, that young females in our group have approximately twice the chance of getting better if they have thymectomy than if they do not, and about twice the chance of surviving than the control group. Older females or males and all patients who have demonstrable tumors (thymomas) seem to do just as well without the operation.

We have been able to keep about three-quarters of our patients in a reasonable state of medical remission by very careful and individual treatment. The complete disappearance of the symptoms and elimination of any need for medicine (Type A remission) is unfortunately rarely reached, even with excellent medical adjustment on Neostigmine. Therefore, these drugs which produce an excellent improvement in the patient's symptoms and allow the majority to resume their work and normal living seldom, however, reach a complete remission of the Type A. It is for this reason that we are still searching for better methods of therapy, more satisfactory drugs or combinations thereof, and encouragement from operative procedure.

It is also worth pointing out that the disease occurs in children and in adults up to the age of 80. There are far more females who develop the disease before the age of 30 (75 percent) and, interestingly enough, far more males develop the disease after the age of 50 (66 percent). The sex difference and the difference in response to thymectomy in the sexes is mentioned, as it strongly suggests that the disease is part of some yet unknown endocrine dysfunction. We hope, in the near future, to participate with the Endocrine and Medical Departments in the Hospital in a more thorough investigation of this aspect of myasthenia gravis.

Our group was active in supporting the organization of the new Myasthenia Gravis Foundation, of which Dr. Viets is the Director of the Medical Board and Dr.

Schwab is a member of the Board. Dr. William H. Timberlake is at present in the Myasthenia Gravis Clinic every Friday morning. Mrs. Sylvia Walker, from the E.E.G. Laboratory, is also present on the clinic day, to record the ergograms and grips of every patient in the clinic. In addition, special studies are carried out in the E.E.G. Laboratory as indicated. The Myasthenia Gravis Clinic staff is actively working with this large group of patients on a number of different aspects of the condition and we all hope to participate in the ultimate solution of the true pathological condition causing this disease.

Robert S. Schwab, M.D.,
Head of Myasthenia Gravis Clinic

The Board of Trustees, at their meetings on October 2 and 30, voted:

To accept the resignation of Dr. John C. Coolidge, Assistant in Psychiatry, as of September 30;

To transfer Dr. Howard Rasmussen, Third Assistant Resident in Surgery, to the position of Assistant Resident in Medicine;

To establish a temporary additional residency in Orthopedic Surgery.

To appoint:

Dr. Robert S. Bandurski as Assistant in Biochemistry;

Dr. Paul Colokathis as Assistant Resident on the Orthopedic Service, for the period October 15, 1953 through June 30, 1954;

Dr. Sharad C. Misra, Professor of Surgery at the Medical College of Lucknow, India, as Consultant in Surgery pro tempore for one year, beginning October 1;

Dr. Eric Nilsson as Senior Fellow in Anesthesia, for six months, beginning January 1, 1954;

Dr. Rosalind V. Pitt-Rivers as Visiting Biochemist, beginning September 1;

Dr. Morten Smith-Petersen as Assistant in Orthopedic Surgery, as of October 1.

At their meetings on September 30 and during October, the General Executive Committee voted:

To continue the appointment of Dr. Paul H. Painter as Clinical Fellow in Psychiatry, through December 4.

To reappoint:

Dr. Samir B. Bashour as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. John H. Lamont as Clinical Fellow in Psychiatry, for the period November 1, 1953 through June 30, 1954;

Dr. Jorge M. Martin as Clinical and Research Fellow in Medicine for one year, beginning September 9;

Dr. Patrick A. Ongley as Clinical Fellow in Medicine for one year, beginning October 1;

Dr. Stuart Ragland, Jr. as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Warren B. Weil as Clinical Fellow in Medicine, for the period November 1, 1953 through April 30, 1954.

To appoint:

Dr. Charles Allard as Graduate Student Assistant in Surgery, for the period September 1 through December 31;

Dr. Yvon C. Baillargeon as Graduate Student Assistant and Clinical Fellow in Dermatology, effective October 1;

Dr. William E. Braisted as Graduate Student Assistant in Surgery, for the period October 1, 1953 through April 30, 1954;

Dr. Nicholas J. Fiumara as Graduate Student Assistant and Clinical Fellow in Dermatology, effective October 1;

David M. Geller, Ph.D. as Graduate Student Assistant in Biochemical Research, beginning September 30;

Dr. Mohd Kamal as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Raymond D. Manchester as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Angelo E. Paletto as Graduate Student Assistant in Surgery, for the period September 8, 1953 through March 15, 1954;

Janey H. Park, Ph.D. as Research Fellow in Biochemistry, effective October 22;

Dr. Vincent P. Perlo as Clinical Fellow in Neurology, for the period September 1, 1953 through June 30, 1954;

Dr. Luis D. Sepulveda as Graduate Student Assistant in Surgery, for the period September 15, 1953 through March 15, 1954;

Dr. Elbert P. Tuttle, Jr. as Clinical and Research Fellow in Medicine, beginning October 1.

The General Executive Committee also voted to appoint the following group of students as Graduate Student Assistants in Medicine, assigned to Cardiology, for one year, beginning October 1:

Dr. Benoit Angers of Canada
Dr. Dimitrios Bogiazides of Greece
Dr. Lamol Bunyaman of Thailand
Dr. Keran Chobanian of Rhode Island
Dr. Guillermo Gonzalez-Barrientos of Panama
Dr. Ernesto Lima of El Salvador
Dr. Kareem Minhas of Pakistan
Dr. Enrique Parás-Chavero of Mexico
Dr. Yvan Rouleau of Canada
Dr. Hsi-Chin Tsai of Formosa

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

The omission of the classification of material still causes your editor needless time and trouble. Two people omitted classifications last month, and only one person failed in that respect this month. IS IT TOO MUCH TO HOPE FOR A PERFECT SCORE NEXT TIME? Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
A method for quantifying the intensity of pain.
Science 118:322-324.

Cardiology

Sprague, H. B.
Modern therapy of coronary artery disease.
In M. Clin. North America 37, No. 5, Philadelphia, W. B. Saunders Company, pp. 1283-1301.

Sprague, H. B.
The price of comfort in angina pectoris.
M. Rec. & Ann. 47:481-485.

General Medicine

Jacobson, B. M.
Effects of cortisone and corticotropin on prolonged bleeding time.
A.M.A. Arch. Int. Med. 92:471-477.

Palmer, R. S., and Muench, H.
Course and prognosis of essential hypertension: Follow-up of 453 patients ten years after original series was closed.
J.A.M.A. 153:1-4.

General Surgery

Cope, O., Nardi, G. L., and Castleman, B.
Carcinoma of the parathyroid glands: 4 cases among 148 patients with hyperparathyroidism.
Ann. Surg. 138:661-671.

Kupperman, H. S., Bernstein, A., Forbes, A. P., Cope, O., and Albright, F.
Remission in Cushing's syndrome after bilateral hemiadrenalectomy.
J. Clin. Endocrinol. & Metab. 13:154-164.

Waddell, W. R., Geyer, R. P., Saslaw, I. M., and Stare, F. J.
Normal disappearance curve of emulsified fat from the blood stream and some factors which influence it.
Am. J. Physiol. 174:39-42.

Neurology, Neurosurgery, and Psychiatry

Lorenz, M.
Language as expressive behavior.
A.M.A. Arch. Neurol. & Psychiat. 70:277-285.

Zetzel, E. R.
The depressive position.
In Affective disorders, P. Greenacre, Editor, New York, International Universities Press, Inc., pp. 84-116.

Zetzel, E. R.
The dynamic basis of supervision.
Social Casework 34:143-149.

Ophthalmology

Clark, W. B., Dunphy, E. B., Irvine, S. R., Post, L. T., and Vail, D. T.
Initial treatment of acute injuries of the eye.
Bull. Am. Coll. Surgeons 38:367-374:388.

Pediatrics

Brazelton, T. B.
The pediatrician and hysteria in childhood.
Nerv. Child 10:306-313.

Brazelton, T. B., Holder, R., and Talbot, B.
Emotional aspects of rheumatic fever in children.
J. Pediat. 43:339-358.

Physiology

Irwin, J. W., and Macdonald, J., III.
Microscopic observations of the intrahepatic circulation of living guinea pigs.
Anat. Rec. 117:1-15.

Books

Means, J. H.
Doctors, people, and government.
Boston, Little, Brown and Company.

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The first of the fall season teas for our visitors from abroad was given on Thursday, November 12, in the Medical Staff Room of the Bulfinch Building. As a gesture of hospitality and as an opportunity to meet one another, these teas have proved themselves most popular.

Patients who have attended the bimonthly concerts, held at 3 P.M. in the MGH Chapel, have enjoyed programs of great variety, expertly performed.

Concerts given during October have already been mentioned in THE NEWS. On November 4 a piano recital was given by Mr. Rowland G. H. Sturges; and on November 18 a sonata program was presented by Helen Teschner-Tas. Mrs. Tas is well known for her series of Bach recitals in New York and for performances of works written especially for her. For her concert here she used a rare old Stradivarius violin. Mr. David Bacon, pianist on the program with Mrs. Tas, is a concert artist.

The closing concert of the 1953 season will be given in the MGH Chapel at 3 o'clock on December 8, when a pre-Christmas program will be sung by the Morning Chorale, under the direction of Mrs. John J. Loud.

We hope that all Staff members who can will invite one or more of our visitors from other lands to spend some part of the Christmas and holiday season with them. Christmas time is a family time, and it is liable to be lonely for those who are away from home.

DISTAFF CLUB

The Distaff Club held its first business meeting of the fall season in the Penthouse on October 15. The meeting was opened by the Acting President, Mrs. Richard N. Kleaveland, with election of officers for the coming year. The new officers are:

Mrs. Charles E. Huggins, President
Mrs. H. Robert Dudley, Jr., Vice-President
Mrs. Charles G. Barnett, Secretary
Dr. Wilma J. Canada, Treasurer

Mrs. George D. Zuidema was hostess.

The program for the rest of 1953 follows:

November 10 — Dr. Joseph C. Aub, Physician at M.G.H., spoke on his experiences in India. The talk was given at 8 P.M., in the Penthouse.

November 20 — A Thanksgiving cake and candy sale, sponsored by members of the Club, was held in the MGH Brick Corridor, with Mrs. Carl F. Essig, Jr., acting as Chairman. The sale was held to raise funds for the Club. Each member was asked to contribute cake or candy.

December 17 — This is a tentative date for the Club's Christmas Party. Further notices will be given out concerning this event.

CORTICAL FUNCTION LABORATORY

In 1944, under the direction of Dr. Edwin M. Cole, Associate Neurologist, the Cortical Function Laboratory was set up as a part of the Neurological Service at Massachusetts General Hospital. At that time it was one of the first such units to be established in a general hospital. It began as a research project, with the object of selecting or devising a battery of psychological tests which would be useful in evaluating cortical function — that is, such functions as learning, remembering, reasoning — in patients with impairment of the central nervous system. Such an examination should provide an extensive and intensive quantitative survey of the patient's present mental capacities. Because standardized tests were to be used, various comparisons would be possible. For example, a particular patient could be compared with the general population. Because a wide variety of abilities would be sampled, an intra-individual comparison would be possible, to see whether various functions would be differentially affected by impairment. Because a detailed permanent record of test results and their interpretation was obtained, this could be used as an objective baseline for comparison with other examinations of the same patient, and the comparability of the results obtained by different examiners would be increased. Then, as case records accumulated, the test results of various groups of patients could be correlated and examined for trends or patterns which would be diagnostically valuable.

It had been postulated from the literature on the subject that the intellectual impairment of patients with organic brain damage would be demonstrated on tests of such functions as memory, or tasks such as the spontaneous application of new concepts. Tests to measure these and a variety of other functions for comparison were selected, and, after preliminary trials, a battery of tests was assembled and has been administered now to over 3,000 patients.

Empirically, from test results it has been found that the brain-damaged patient typically does poorly on tests requiring, for example, the making of new associations, the ability to be flexible in shifting from an established set, sustained attention and concentration, and speed of visual-motor response, while least impaired are those functions dependent on old learning, such as vocabulary and information. A reliable pattern established among the scores of the various tests differentiates significantly between this group and a control group.

In addition to detecting such generalized impairment, one must test for more specific impairments in localized lesions. It was noticed early in the testing program that the test pattern for patients with left temporal lesions differed from that in patients with brain tumors in other locations. This lead has been followed up with an intensive study of the test records of a group of right-handed patients with lesions of the left temporal lobe of the cerebral cortex and of another group of right-handed patients with lesions of the right temporal lobe. These findings will be reported in greater detail elsewhere; but briefly, the primary defect in intellectual functions resulting from the left temporal lesions seems to be in the manipulation of language symbols for the expression of verbal concepts, while in the right temporal lesions the striking impairment is in tests involving visual-spatial organization — that is, manipulating materials into correct relations in space. Other groups of patients with specifically localized lesions remain to be studied similarly for quantitative or qualitative diagnostic clues.

In examining patients for specific defects such as the aphasias, it is often necessary to use additional tests. In this laboratory a battery of tests for aphasia has been worked out, with the purpose of sampling language functions sufficiently extensively to detect higher level language impairment as well as the more gross defects in avenues of communication. The tests evaluate comprehension of spoken and written language at different levels of difficulty; recognition and naming from visual, auditory, and tactile cues; repetitive and automatic speech; ability to follow oral and written directions; writing spontaneously, from dictation and from copy; and spatial orientation — that is, right-left discrimination. Although these functions are seldom affected singly, the general trend of language impairment — whether it is of expression or comprehension, for example — is diagnostically helpful.

Another series of tests used, where indicated, as supplements to the main test battery are the Goldstein-Scheerer tests for sampling ability to do abstract thinking. These have been administered to each individual in a group of patients with brain injuries which resulted in aphasia. Contrary to some published reports, ability to make abstractions was not impaired in all these cases of brain damage. Instead, the results obtained were highly individualized — ability to assume an abstract attitude was not necessarily impaired, and when it was, the impairment was not demonstrated in all areas except in the most severely deteriorated patient. For one patient the sorting test would be more difficult, while others made more errors on the block design or stick tests. Correlating the type of impairment with the type, location, and extent of the lesion should be of diagnostic significance. Variability in the type of impairment according to the lesion would be consistent with the finding that in the left temporal lesions in right-handed patients a non-verbal measure of abstract thinking was unimpaired, while it was the use of words for conceptual thinking that was impaired.

More recently, projective techniques such as the Rorschach Ink Blots, the Thematic Apperception Test, and a Sentence Completion Test have been utilized when possible within the limits of time. The Rorschach technique, depicting the personality structure of the individual, reflects the alterations in personality consequent upon brain damage and is particularly useful, not only in differential diagnosis as, for example, between "organic" and "psychogenic" illness, but also in evaluating the patient's reaction to his illness. The Thematic Apperception Test and the Sentence Completion Test give clues as to the content of the patient's problem. For example, from the Rorschach it might be possible to say that anxiety is prominent in the picture and to indicate ways in which this anxiety affects other functions, while the other two techniques might suggest whether this anxiety centers around physical illness or the handling of hostility.

One current project consists of gathering test records of children with localized brain lesions and comparing the test patterns obtained from the Wechsler Intelligence Scale for Children with those obtained from adults on the Wechsler-Bellevue. From the few cases available to date, no definite conclusions can be drawn, but so far there seems to be a close relationship between the test patterns.

Periodic psychological examinations of a group of Korsakoff patients is presently being conducted, also, in association with Dr. Maurice Victor. Tests being utilized are the Wechsler-Bellevue Intelligence Scale and the Wechsler Memory Scale. Since this study is not yet completed, only certain generalizations will be presented at this time.

All of the Korsakoff patients have, in general, revealed a marked memory loss and disturbance in the formation of new associations. It is felt that the failure of association is likely to be due to an inability to combine permanently two associates. We are not certain of the brain change; however, the general effect seems to be not so much an obliteration of old as a resistance to the formation of new associations. This inability to form new associates can account in part for many oddities depicted by the Korsakoff's behavior — for example, difficulty in associating names with objects, places, etc.

The defective orientation for time, as well as the tendency toward confabulation so characteristic of the Korsakoff patient, may be explained in terms of the inability to form new associations. The patients have attempted to fill up gaps of memory, though not deliberately. We have found that the readiest association may not be entirely faulty. It is more than likely that the patient has done what he states — but when? Yesterday? three weeks ago? It is the temporal orientation that has been lost.

The use of psychological evaluation as an adjunct to neurological examinations is a relatively new trend. Its contribution is to provide a careful description of the total psychological functioning of the individual patient and to evaluate specific dysfunction. In order to make the best possible use of psychological tests and techniques as applied to neurological patients, our psychological results must be validated by checking them against anatomical and pathological findings, and other laboratory data, as is infrequently possible in a separate psychological laboratory. Shortages of time, space, and personnel have limited full use of this type of cross-checking, but this is a direction in which more progress must be made in the future.

Elizabeth E. White, M.A.

Brief bits:—

Dr. Allan M. Butler gave the Sixth John H. Musser Lecture at Tulane University School of Medicine, New Orleans, on November 6. He spoke on "Homeostatic limitations to safe parenteral fluid therapy".

Dr. Bradford Cannon presided at the Session of the Forum on Plastic Surgery, at the recent meeting of the American College of Surgeons in Chicago.

Dr. Daniel C. Dawes announces the removal of his office for the practice of Psychoanalysis and Psychiatry to 51 Brattle St., Cambridge 38, Mass.

Dr. Bernard M. Jacobson delivered a lecture before the New England Society of Oral Surgeons, at Poland Springs, on October 11. His subject was "Why the patient bleeds and what to do about it — from the point of view of the oral surgeon".

Dr. J. Gordon Scannell delivered three lectures recently. On September 23, with Dr. Gordon S. Myers, he discussed "Cardiac problems" at the meeting of the Massachusetts Academy of General Practice; on October 23, at the Veterans Administration Hospital in Rutland Heights, Massachusetts, he talked on "The physiological basis of cardiac surgery"; and on October 28, at the meeting of the New Bedford Medical Society, he gave a lecture, with Dr. Myers, on "Cardiac surgery".

Dr. William R. Waddell discussed the subject "The clinical use of emulsified fat in parenteral nutrition" at the Memorial Hospital in Worcester on October 1.

Dr. James C. White has sent us a nice long Brief Bit. He writes: "In September I took a trip to Lisbon to attend the Fifth International Congress of Neurology and, the following week, a meeting of the International Surgical Association. I talked to the Neurological Society about the studies Dr. William H. Sweet and I have made of pain conduction in the spinal cord, and on neurosurgical relief of pain in thoracic aneurysm at the symposium on blood vessels at the second meeting. Mrs. White and I were delighted to see again two former members of the MGH neurosurgical staff — Dr. David Gamsu of Johannesburg and Dr. Jean Lepoire of Nancy. Dr. Pierre Stricker, who worked at M.G.H. as the first Maurice Richardson Fellow in 1929, was there with his wife and took us back to France across northern Spain in his car. This proved to be a most delightful trip and a most efficient refresher course in the French language — so much so that I was able to give an hour's lecture in Paris to Professor David's staff at the Hôpital Ste. Anne and to discuss cases at Grand Rounds at the Pitié on the Neurosurgical Service of Professor Petit-Dutaillis. Thanks to Pan American, we had a month abroad and were gone only 32 days."

New addresses:—

Dr. Benjamin A. Barnes (*W.S.* 1945), 1180 Beacon St., Brookline 46, Mass.
Dr. William P. Boger, Jr. (a.r.p. 1942), R.D. 1, Meadow Lane, Wayne, Pa.
Dr. Bedford F. Boylston (sr. r.s. *Or.* 1950), 5215 South Main St., Houston 4, Tex.
Dr. Clyde W. Dawson (*Or.* 1936), 150 East Broad St., Columbus, Ohio.
Dr. Ira M. Dixson (*W.S.* 1930), 1601 Downing St., Denver 18, Colo.
Dr. William E. Eaton (*D.* 1907), American College of Surgeons, 40 East Erie St., Chicago 11, Ill.
Dr. Arthur B. Emmons, II (*W.S.* 1905), Brewster Drive, Bay View Estates, Indian Rocks, Fla.
Dr. Richard S. Eustis (*W.M.* 1912 & *C.M.* 1913), Hancock, N.H.
Dr. Richard A. Field (*M.* 1950), Dept. of Biochemistry, Washington University Medical School, St. Louis, Mo.
Capt. Boy Frame, MC, USAF (*M.* 1949), 73 Partridge Court, Selfridge AFB, Mich.
Dr. Elmer F. Franseen (j.r.s. *Or.* 1947), 146 Chestnut St., Springfield, Mass.
Dr. John F. Hogan (*M.* 1949 & *C.M.* 1950), 156 Broadway, Pawtucket, R.I.
Dr. Carl E. Horn (*Or.* 1940), 2901 Capitol Ave., Sacramento 16, Calif.
Dr. Frederick C. Irving (*W.S.* 1911), 2 North Pine Circle, Belleair, Clearwater, Fla.
Dr. Albert J. D. Michel (a.r.p. *An.* 1950), Chirugien à l'Hôpital St. Joseph, Lyon, France.
Dr. H. Bristol Nelson (a. obst. 1953), 711 Marina Blvd., San Francisco 23, Calif.
Dr. Richard V. Riddell (*E.S.* 1943 & *Path.* 1947), 902 Edmond St., St. Joseph, Mo.
Dr. John C. Snyder (*W.M.* 1939), Dept. of Microbiology, Harvard School of Public Health, 695 Huntington Ave., Boston, Mass.
Dr. Iwao Uyeda (*C.M.* 1950), 30 Fortuna Ave., San Francisco 15, Calif.
Lt. Charles W. Wahl, MC, USNR (clin. a. *Psychiat.* 1953), U.S. Naval Hospital, Philadelphia, Pa.
Dr. Eugene Walker (past a. dir.), 102 Cotswold Rd., Baltimore 10, Md.

The letters from "singletons" still continue to arrive. Here is a very interesting one from Dr. Edward H. Risley (*E.S.* 1908).

Your request for an *expansive* description of the life of a lone MGH-er in Waterville, Maine, might run into quite a volume if I tried to relate all the changes and vicissitudes I have been through since I came to Waterville in 1920.

Probably the most important development has been that of a new and absolutely modern and perfectly equipped hospital of 75 beds — the new Thayer Hospital, which compares favorably with the most modern and best hospitals in Boston. It has a keen and active staff and a nursing group who give it a homelike atmosphere, with all the friendliness which is so conspicuously absent in larger hospitals in big cities. I have been a patient in both kinds and I know the difference.

I am well past the retiring age, but I am still very active surgically because I have learned that *two* vacations a year are what every active physician should have in order to keep fit and fresh.

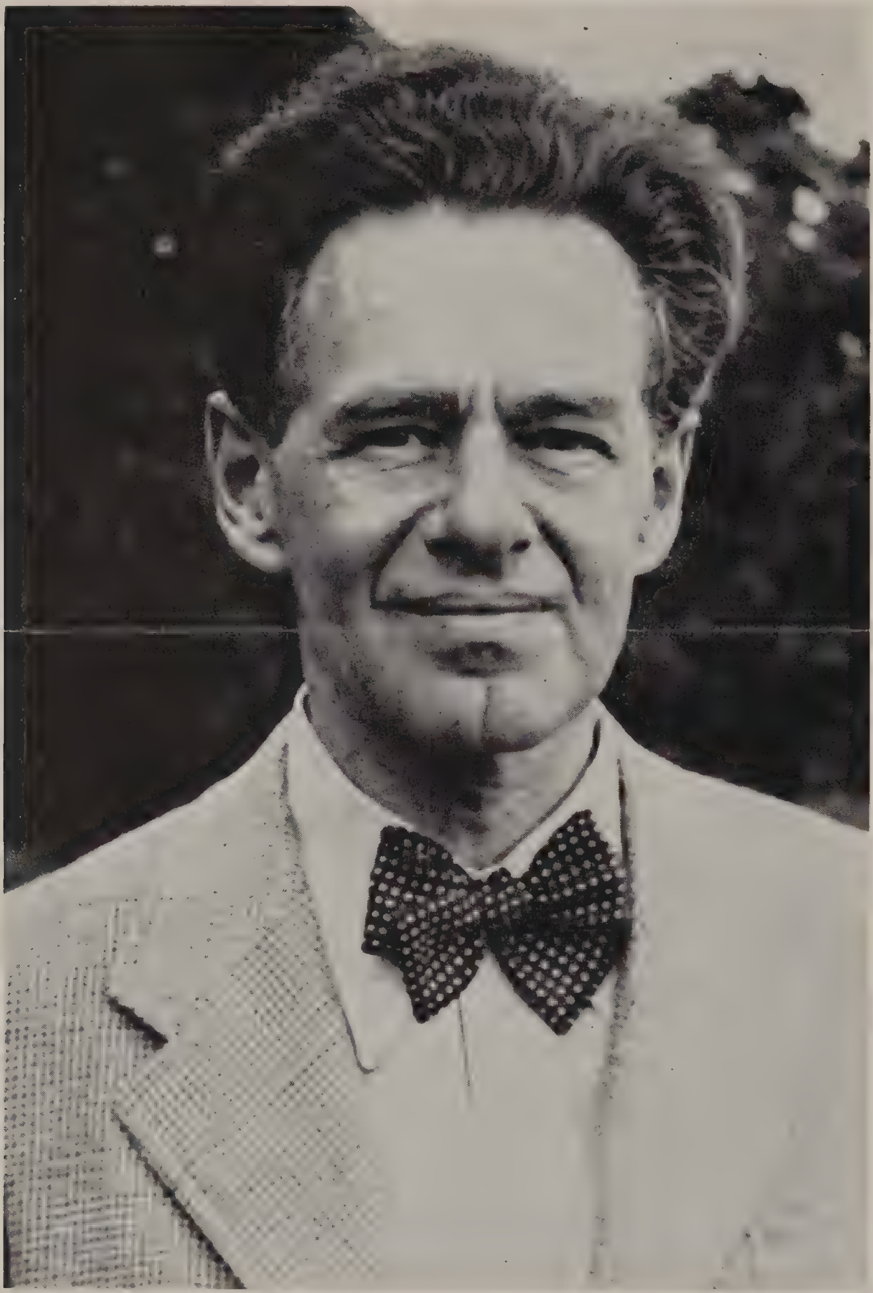
My trip last winter — flying down the west coast of South America to Lima, Peru, and Santiago, Chile, then across the Andes to Buenos Aires and Montevideo, and to Sao Paulo for the Inter-American American College of Surgeons meeting — was intensely interesting and profitable. We returned from Rio by boat in time to take in the sectional meeting of the College in Boston. When I reached home I felt I had been well educated both surgically and geographically. I take a boat trip every February to some part of the warm Caribbean.

I have a beautiful summer place on Great Pond in the Belgrade Lakes region, only 15 miles from my office, where I can relax, swim, sail, water ski, and play tennis with my friends and children.

I go to Boston frequently in order to keep in touch with surgical progress, and I come back home with the knowledge that we are as well equipped here, with our laboratory and all the aids to medical progress, as are the best hospitals in Boston. This is not boasting. It is an actual fact, due largely to the fine group of keen younger men who have come here in the past few years and who have been a definite stimulus to us older doctors. We are so well equipped with men in all branches of medicine and surgery that it is rarely necessary to refer patients to the larger centers for treatment.

A very welcome letter has come from Lt. Giles D. Toll, MC, USNR (*S.* 1952), written aboard the U.S.S. *Franklin D. Roosevelt* (CVA 42), c/o Fleet Post Office, New York, N. Y.

The News continues to be a constant source



No. 44 in a series of Staff photographs
Dr. Fritz Lipmann—Recipient of the 1953 Nobel Prize in Medicine and Physiology

of pleasure and interest, and of great help in keeping in touch with the M.G.H.

After being somewhat skeptical of the Navy's slogan about joining up and seeing the world, I have been fortunate in learning there's definitely an element of truth in it. After spending the early part of last summer in Morocco with the Sea Bees, I was transferred to the F.D.R., which is presently on a Mediterranean cruise.

Our perigrinations took us to Beirut, Lebanon, on October 23, where a small gold mine of MGH people was found at the American University. My intention in visiting there was to look up Bill Shorey, only to learn that he'd moved to Damascus about a month before. However, he has been replaced by John Wilson, of San Francisco and more recently Siam, who was most gracious in his welcome. Helping him with the nursing service is Miss French; and, by good luck, Dr. Aufranc was there that particular evening for an excellent talk on reconstructive hip surgery. The interest and enthusiasm of both the house staff and students were impressive, and gave an idea of how much Bill Waddell's visit last spring had meant to them. This brief return to an academic environment and a group of people from the "Old Massachusetts" was most refreshing.

My very best to everyone there.

* * *

Dr. Churchill called to our attention an excellent and inspiring article by Sir Harold Himsworth, in the October 17 issue of *The Lancet.* While the entire article is well worth reading, a part of the section titled "Purpose of the teaching hospital" is of particular significance to every MGH-er because of a tribute paid to Dr. Nathaniel W. Faxon, our past Director. It reads:

> . . . The National Health Service Act lays on the boards of governors [of the teaching hospitals] the duty of providing the facilities necessary for medical education and research, but does not specify the priority that should be accorded to this among their other manifold responsibilities. That there is some divergence of opinion on this point is evident. It may, therefore, interest you to know the view of one of the greatest and most successful administrators of a teaching hospital, Dr. Nathaniel Faxon of the Massachusetts General Hospital in Boston. He epitomized his considered judgment on this matter in one sentence:
>
> > "The functions of a teaching hospital are first, to advance knowledge; second, to set an example of practice; and third, to train future doctors; they are not primarily to cater for local needs."
>
> Stated in this forthright manner these opinions may seem a little startling; but, if one examines them, their inescapable logic impresses.
>
> Leaving aside, for the moment, the order of priorities he assigns to these different functions of a teaching hospital, I think that we should all agree that to advance knowledge, to set an example of practice, and to train doctors are, each and all, duties which a teaching hospital must undertake. But none of them can be discharged in any high degree without special facilities, special staff, and specially directed effort on the part of all concerned. For medical education all are required. Taken together, their demands on an institution are so exacting that they are unlikely to be met unless their full realization is taken as the primary and deliberate aim of policy to which other claims must be regarded as secondary.
>
> But let us return to the first part of this statement and examine the priorities accorded to the different functions of the teaching hospital. There is the same clear logic in the sequence given to these priorities. How can one set a high example of practice if one is not advancing knowledge? How can one train future doctors if one is not setting such an example? The motive point is research. Personally, I would go so far as to say that in the association of research with teaching we have the essence of the distinction between education and training. And it must necessarily be so if the aim of education is to liberate a man to think for himself. The crucial test of a man's understanding of a subject is his ability to advance it. If a student does not see his teachers thinking effectively how can he learn to think for himself? It is only by living and working in an atmosphere imbued with the thirst for new knowledge that a student can acquire that critical receptivity and perception on which alone he can rely when, as so often happens in medicine, established knowledge fails him. . . .

As we finished our reading of the article, an impulse to quote also the closing sentences became too strong to resist. While the words are directed especially to those in the medical profession, every one of us — whatever his vocation may be — will find here food for thought and an impetus for worth while self-examination.

> . . . More than two thousand years ago a code of conduct was laid down for the medical profession. To the fact that the spirit of this code has been faithfully observed by succeeding generations of medical men we can attribute the public trust which we have inherited. But the original code was concerned only with the relations of medical men to individuals under their care. Today medicine has acquired extensive relations with society in general. Nevertheless the spirit of the Hippocratic Oath is as relevant to medicine now as it was two thousand years ago. And what is its essence? It can be given in one sentence. *Act always so as to increase trust.* That is the first and paramount law of social ethics. In your relationship with individuals act so as to increase their trust in your professional skill and your character as a man. In your research act so as to increase confidence in scientific integrity. In public relations act so as to increase the confidence of society in your profession. With that criterion as a guide, whatever changes occur in the social context, neither the individual nor his profession need fear the future.

Professor Himsworth visited Massachusetts General in 1947, while he was in Boston to deliver his five Lowell Institute Lectures on diseases of the liver. At the request of Dr. Means, he made ward rounds on both the East and West Medical Services. His picture is in the June 1947 issue of The News.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 130 Boston, Mass. January 1954

PSYCHIATRIC RESEARCH
1934 — 1953

Twenty years ago we tried to define psychoneurosis (neurosis) and listed the different psychoneurotic syndromes in order of severity, the nearest to normal at the top and the nearest to schizophrenia at the bottom, as follows:

- Nervousness (exaggeration of physiological reactions)
- Anxiety neurosis
- System neurosis (psychosomatic reactions)
- Hysteria
- Depressive reactions
- Obsessive and compulsive reactions
- Hypochondriasis

At first we studied these conditions symptomatically, interesting ourselves especially in the symptoms produced by disorders of the autonomic nervous system. Interpersonal relations were also investigated by clinical interviews and charted by means of the interaction chronograph, a machine for recording the time relations of an interview between doctor and patient. In the next year respiration was studied particularly, and the effect of oxygen and sugar supply on the electroencephalogram. Microscopic examinations were made of living capillaries in cases of hysteria and anxiety neurosis. Such psychosomatic diseases as ulcerative colitis and peptic ulcer were given systematic psychiatric evaluation.

An investigation of neurocirculatory asthenia was begun along physiological and psychological lines. In 1944 these studies were continued and emphasis was put on the central nervous system. Our physiological studies of respiration, heart rate, and vasomotor phenomena showed that patients with anxiety neurosis have a greater lability and greater reactivity to stimuli than normal persons. There is no evidence that there is a disturbance in the peripheral pathways, hence we conclude that the disturbance must be in the central nervous system, especially in the higher centers which mediate the functions of the autonomic nervous system. We completed several studies, using conditioned reflexes and the electroencephalograph which support this hypothesis.

The Cocoanut Grove disaster of 1943 brought in a large group of acutely suffering and grieving persons, whose reactions then and on prolonged follow-up were clinically observed. They led to important conclusions concerning normal and abnormal grief reactions.

From 1941 to 1945 neurocirculatory asthenia and anxiety neurosis received much of our attention because they were disorders common in the armed forces. Likewise peptic ulcer, a common disease in the Army, was studied psychologically. The effect of emotional stress upon the adrenocortical hormones was examined in experimental situations.

Studies on 60 cases of peptic ulcer were brought together in 1946. Our previous experience with neurocirculatory asthenia was brought to bear on the subject of fatigue in a joint study with the Department of Physical Medicine. A new method of analyzing the brain-waves of patients with barbiturate intoxication, neurosis, and normal controls was instituted. Long range follow-up studies on patients treated for anxiety neurosis and hysteria were begun. During 1948 these studies were continued and an especial effort was made to understand the psychotherapeutic process, specifically, by studying interviews and analyzing what is said by the patient and by the doctor. For this purpose an electronic analyzer was devised which has replaced the older chronograph. In 1949 the studies on anxiety neurosis, especially the follow-up work, were concluded and reported. A group of patients with anorexia nervosa was brought together and examined clinically; old cases were followed up and added to the report.

In 1946 a paper was published on the histopathological effects of short and repeated periods of anoxia of the brain. The work which was started during the war on the psychological effects of oxygen deprivation was brought to a close in 1949. Its relation to the electroencephalogram and to the effects of anesthesia were brought out by cooperative research with the Anesthesia Department.

During 1950 and 1951 studies on language were emphasized. A paper was written on manic speech and a general review of the literature was made, to bring out the aspects of this broad study that are especially applicable to medicine. The results are being applied to patients before and after cerebral operations and before and after radiation, as well as to patients with neurosis. The cooperation with the Neurosurgical Service has given us an opportunity to study a series of patients suffering from intractable pain. This has been a valuable experience. Among the patients suffering severe pain, both relatively normal and conspicuously neurotic persons have been found. Their reactions to pain, to drugs, and to operations have been compared.

Our interest in the relation of adrenocortical hormones began in 1946 when some work was done on the effects of emotional stress, in cooperation with the Worcester Foundation for Experimental Biology. During the past two years about 70 patients have been seen on the Medical Service who were undergoing treatment with adrenocorticotropic hormones or cortisone. The psychiatric reactions of these patients have been of great interest and have been studied by a group of psychiatrists in cooperation with the arthritis and endocrine groups working in the Medical Laboratories. Four papers have been written dealing with endocrine reactions. At present a psychiatrist is assigned to work in the Thyroid Clinic and another to see all cases with adrenal and pituitary disorder. Appropriate patients are brought to the Psychiatric Ward for care and study.

An investigation of the psychological reactions of patients with coronary thrombosis has been carried on for the last three years with the cardiac group of the Medical Service. On the Children's Medical Service a study of patients with rheumatic fever has been under way and is nearing completion. Asthma and low back pain are two other conditions under investigation. All of these psychosomatic studies are dependent upon our getting patients with the desired diagnoses from the Medical Services; the work is therefore opportunistic and often has to be carried on in a piecemeal way over a period of years before an adequate number of cases have been studied. Exceptions to this were the investigations of coronary thrombosis and rheumatic fever, where large groups of cases had already been collected by the medical workers, and these groups were made available to us; the study on neurocirculatory asthenia was similarly made possible by the use of Army personnel. Rare diseases like Cushing's syndrome have come to us in large enough numbers to make a significant study possible, because of the reputation of the Endocrinology Division of the Medical Services; the same may be said of our work in ulcerative colitis, in cooperation with the Gastrointestinal Clinic. Common diseases such as arthritis, asthma, and eczema, that seem to have important psychosomatic aspects, are being investigated psychologically by one or more of our psychiatrists, usually in the Out-Patient Department or on the general wards, but certain cases are sent to the Psychiatric Ward. Thus data are being collected steadily on the "psychic" side of these "psychosomatic" problems.

Over the twenty years many changes have taken place in our attitudes and we have learned much. The diagnoses we use and the way we apply them to patients keep changing. This is hopeful, because it shows a willingness to change and admit ignorance. In the early years we thought of psychosomatic diseases as forms of neurosis expressed through the autonomic nervous system and developing lesions because of chronic malfunction. In general this concept still holds, and much evidence for the psychogenesis of lesions has been brought forward. We have learned, however, that there are two groups of psychosomatic disorders. One is made up of patients with very common but sometimes trivial nervous complaints, such as sweating, palpitation, tremor, anxiety, diarrhea, motor habits, and escape reactions. These are important because of their frequent occurrence, and are as a rule reversible with simple therapy. The other group is composed of patients with medical disorders that can be severe or even fatal, but that nevertheless have psychological factors of critical importance; the most commonly recognized are alcoholism, drug addiction, asthma, eczema, rheumatoid arthritis, peptic ulcer, and ulcerative colitis. Experience has shown that the personality deviations in this group often go beyond the bounds of neurosis and that life stress or unwise psychiatric handling may precipitate severe mental illness. Sometimes the symptoms are schizophrenic in type, or the patient may go into a deep depressive reaction. Here we have learned to proceed with caution, but also we have learned how valuable psychiatry may be to medicine in certain cases.

These investigations and our clinical experience have changed our point of view toward neurosis to some extent. We still believe that neurosis is largely caused by maladjustment in interpersonal relations, but these maladjustments occur most often in predisposed persons. The predisposition can be the result of heredity, malformation, infection, degenerative disease, or trauma. We now would classify the neuroses as follows:

Nervousness (exaggeration of physiological reactions)
Mild psychosomatic reactions
Anxiety reactions
Substitution reactions (hysteria)
Depressive reactions
Obsessive and compulsive reactions
Severe psychosomatic reactions
Hypochondriasis

Papers to the number of 234 have been published. Also, two books: *Emotions and Clinical Medicine* by Stanley Cobb, and *Case histories in Psychosomatic Medicine,* edited by Dr. Henry H. W. Miles, Dr. Stanley Cobb, and Dr. Harley C. Shands. A complete bibliography will be sent on request.

Stanley Cobb, M.D.,
Chief of Psychiatry Service

* * *

Christmas celebrations at M.G.H. began this year on December 8 and continued through the 24th. The festivities began with a concert of Christmas music given in the Chapel by the Morning Chorale, with Mrs. Mary Loud directing. This was followed by the singing of Christmas carols on the wards throughout the month by members of such groups as the Harvard Glee Club, the Winsor Glee Club, the Intervarsity Christian Fellowship, the New England Conservatory of Music, and the MGH Carolers. The Radcliffe College Bell Ringers gave a lovely program here on December 10, and the traditional and very impressive Nurses' Candlelight Service was held on December 21. Other events included the Distaff Club's Christmas Party, the Christmas Formal Dance for Student Nurses, the party for all members of the MGH family (including their wives or husbands and children), and the Children's Party held in the Burnham Memorial Hospital.

Lighted Christmas trees on the Hospital grounds, rows upon rows of wreaths outside the windows, and gayly painted scenes on walls and doors and windows within the various buildings gave a miracle-like background for the many activities which only those who have been at M.G.H. during a holiday season can fully appreciate.

* * *

The new doors in the George Robert White Building entrance of the Massachusetts General Hospital were officially opened on November 13.

A generous gift from the Nathaniel and Elizabeth P. Stevens Foundation made the construction of the doors possible. As a Trustee of the Foundation and as a member of the Corporation of the Hospital, Mr. Abbot Stevens cut the ribbon at the ceremonies which marked the occasion. Then, escorted by Dr. Dean A. Clark, he was the first to walk through the new doors.

A mere touch of a finger on the push and pull bars, or a step or the touch of a crutch on the mat operators opens a 250-pound Herculite door. Besides accommodating the usual flow of traffic in a most efficient manner, the 4 wide doors have greatly lightened up the Main Entrance room and have enhanced the appearance of the White Building, both inside and out.

New addresses:—

Dr. Samir B. Bashour (gr. stud. a. *M.* 1953), National Hospital, Aleppo, Syria.
Dr. William P. Boger (a.r.p. 1942), 640 North Broad St., Philadelphia, Pa.
Dr. Albert G. Engelbach (a.dir. 1937), c/o N.F.I.P., 915 St. Joseph St., Dallas, Tex.
Mr. Phillips Ketchum (*Trustee & Vice-President of the Corporation*), 294 Washington St., Boston, Mass.
Dr. Richard G. Nilges (r.s. *N.S.* 1951), 2717 Wabash Ave., Gary, Ind.
Dr. Maurice M. Pechet (a.r.p. 1952), National Heart Institute, National Institutes of Health, Bethesda, Md.
Dr. Traute Richter (fel. *An.* 1953), Univ.—Frauenklinik, Graz/Stmk, Austria.
Lt. John C. Rowe, MC, USAR (*M.* 1952), Medical Co., 8th U.S. Cav. Regt., APO 201, c/o Postmaster, San Francisco, Calif.
Dr. John C. Seed (*M.* 1946), Sterling Winthrop Research Institute, Rensselaer, N. Y.
Col. Milton S. Thompson, MC, USA (*Or.* 1934), 98th General Hospital, APO 34, c/o Postmaster, New York, N. Y.

MASSACHUSETTS EYE & EAR INFIRMARY

The Board of Managers of the Infirmary has voted to proceed with the construction of three new stories, built above the present OPD Connecting Building, to provide the space and equipment needed for research and teaching. Plans are expected to be completed in March, and it is hoped that construction will begin in the early spring.

The new Research Center will give us 15,000 useable square feet and will provide modern, compact laboratories for the research projects now scattered in cramped quarters throughout the Infirmary.

Dr. Earle W. Rice has completed his residency and returned to Worcester, Massachusetts, where he has begun private practice with his father and brother. Dr. Rice is the third member of the Rice family to train here at the Infirmary. Theodore was the first. He completed his residency in Ophthalmology in 1942. John left the Infirmary in 1943, having received his training in Otolaryngology.

Dr. William Patterson, from Vancouver, British Columbia, has begun his residency in Otolaryngology. Dr. Patterson comes to the Infirmary after studying at the University of British Columbia and receiving his degree at the Ottawa Medical School.

Miss Helen T. Patten, teacher in the Speech Clinic, Winthrop Foundation, was chosen to be the recipient of an award from the Executive Board of Emerson College's Women's Committee. This award was presented to Miss Patten on December 5, in recognition of her "inspiring and encouraging" help in planning and advising for the installation of the new Speech Clinic at the College.

The Samuel D. Robbins Speech Clinic, sponsored by this Women's Committee, was dedicated at exercises held at the College on December 4. With its new equipment, the Clinic will have the facilities for treating and training all cases of speech handicaps. Miss Patten has been chosen to serve on the Executive Committee of the Clinic.

* * *

Dr. Beecher tells us that an operative in Long Beach, California, informed him that *The hospital in contemporary life* has been checked out of the Public Library there eighteen times since 1949. Dr. Beecher adds: "Dr. Faxon please note."

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

YOU DID IT! AND YOUR EDITOR IS MOST GRATEFUL. For the first time since this column was started in July of 1950, not a single classification of material was omitted this month. As a result, the time required to set up your titles for the printer was appreciably reduced. Your editor thanks you.

The following new titles have been received:

Cardiology

Cohen, M. E.
The management of disturbed cardiac patients.
Mod. Concepts Cardiovas. Dis., pt. 1, 22:182-183; pt. 2, 22:186-188.

King, R. L., Jenks, J. L., Jr., and White, P. D.
The electrocardiogram of a Beluga whale.
Circulation 8:387-393.

Littmann, D., and Bland, E. F.
Some pitfalls in electrocardiography.
In M. Clin. North America 37, No. 5, Philadelphia, W. B. Saunders Company, pp. 1341-1350.

Sprague, H. B.
The clinical value of phonocardiography.
Bull. New England M. Center 15:94-96.

Sprague, H. B.
Diagnostic challenges of heart disease.
In Proceedings of the Twenty-Second Annual Postgraduate Symposium on Heart Disease, San Francisco Heart Association, pp. 218-226.

Sprague, H. B.
Pattern of the youthful coronary patient.
In Proceedings of the Twenty-Second Annual Postgraduate Symposium on Heart Disease, San Francisco Heart Association, pp. 178-186.

Sprague, H. B.
Phonocardiography.
In Proceedings of the Twenty-Second Annual Postgraduate Symposium on Heart Disease, San Francisco Heart Association, pp. 22-27.

Sprague, H. B.
Resistant congestive failure.
In Proceedings of the Twenty-Second Annual Postgraduate Symposium on Heart Disease, San Francisco Heart Association, pp. 81-90.

Sprague, H. B., and Tansey, W. A.
Fever as a sign of quinidine toxicity: Report of sensitivity in two brothers with thyroid disease.
New England J. Med. 249:796-798.

Thomas, W. A., Averill, J. H., Castleman, B., and Bland, E. F.
The significance of Aschoff bodies in the left atrial appendage: A comparison of 40 biopsies removed during mitral commissurotomy with autopsy material from 40 patients dying with fulminating rheumatic fever.
New England J. Med. 249:761-765.

White, P. D.
Principles and practice of prognosis, with particular reference to heart disease. (Billings Lecture)
J.A.M.A. 153:75-79.

White, P. D.
The range of the normal heart rate.
Am. Scholar 22:315-322.

Dermatology

Lever, W. F.
Bestimmung der Lipoproteine und Glycoproteine im Plasma von Patienten mit verschiedenen Hautkrankheiten.
Hautarzt 4:426-428.

Lever, W. F., Smith, P. A. J., and Hurley, N. A.
Effects of intravenous heparin on the plasma lipoproteins in primary hypercholesteremic xanthomatosis and idiopathic hyperlipemia.
Science 118:653-654.

General Medicine

Isselbacher, K. J., Klaus, H., and Hardy, H. L.
Asbestosis and bronchogenic carcinoma: Report of one autopsied case and review of the available literature.
Am. J. Med. 15:721-732.

Waddell, W. R., Geyer, R. P., Clarke, E., and Stare, F. J.
Role of various organs in the removal of emulsified fat from the blood stream.
Am. J. Physiol. 175:299-302.

Waddell, W. R., Van Itallie, T. B., Geyer, R. P., and Stare, F. J.
Liver function during intravenous infusion of emulsified fat to humans.
Ann. Surg. 138:734-740.

General Surgery

Kay, J. H., Harrison, T. S., and Zuidema, G. D.
The effect of sympathectomy on experimental frostbite in the dog.
Surgery 34:867-869.

Scannell, J. G., and Robbins, L. L.
X-ray examination of the chest and its surgical significance.
Ciba Clin. Sympos. 5:131-166.

Laboratory Science

Blank, I. H.
Further observations on factors which influence the water content of the stratum corneum.
J. Invest. Dermat. 21:259-271.

Blank, I. H., and Barker, F. M.
The action of hexachlorophene-detergent mixtures on the bacterial population of the cutaneous surface.
Proc. Scientif. Sec., Toilet Goods Assoc. 19:50-54.

Griesemer, R. D., Frazier, C. N., and Blank, I. H.
Nutritional influences on the physiology of the skin: Observations on the metabolism of vitamin A.
Medicine 32:293-321.

Matoltsy, A. G.
Analysis of the ultrastructure of vitrosin fibers on the basis of the polarization optical method.
Biochim. et Biophys. Acta 11:326-328.

Matoltsy, A. G.
A study of the medullary cells of the hair.
Exper. Cell Research 5:98-110.

Neurology, Neurosurgery, and Psychiatry

Barry, H., Jr., and Marshall, F. E.
Maladjustment and maternal rejection in retrolental fibroplasia.
Ment. Hyg. 36:570-580.

Physical Medicine

Watkins, A. L.
Rheumatoid arthritis in industrial medicine.
New York State J. Med. 53:2330-2334.

Miscellaneous

Garland, J.
Trends in American Medicine.
Practitioner 171:445-451.

Sleeper, R.
The Sixth World Health Assembly.
Am. J. Nursing 53:1463-1464.

Books

Klein, A., Joplin, R. J., Reidy, J. A., and Hanelin, J.
Slipped capital femoral epiphysis.
Springfield, Ill., Charles C. Thomas.

The Board of Trustees, at their meeting on November 25, 1953, voted:

To reappoint:
Dr. Robert W. Hopkins as First Assistant Resident in Surgery, effective November 1, 1953;
Dr. John H. Kennedy as Second Assistant Resident in Surgery, effective November 1, 1953.

To appoint:
Dr. Robert L. Brent as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. Julie S. Crocker as Assistant Resident in Anesthesia, beginning July 1;
Dr. Walter B. King, Jr. as Third Assistant Resident in Pathology, beginning July 1;
Dr. Bernard Loitman as Second Assistant Resident in Radiology, beginning July 1;
Dr. Dean L. Moyer as Second Assistant Resident in Pathology, beginning July 1;
Dr. Henning Pontoppidan as Assistant Resident in Anesthesia, beginning December 1, 1953;
Dr. Leonard J. Rothfeld as Assistant Resident in Anesthesia, beginning July 1;
Dr. Richard J. Stenger as Third Assistant Resident in Pathology, beginning July 1;
Dr. Thomas J. Whitfield as Intern on the Children's Medical Service for one year, beginning January 1.

At their meetings on November 18 and 25, 1953, the General Executive Committee voted:

To promote:
Dr. Wilma J. Canada to the position of Resident in Radiology, effective January 1;
Dr. Si-Chun Ming from the position of Second Assistant Resident to that of First Assistant Resident in Pathology for one year, beginning January 1;
Dr. Jane S. Rasmussen from the position of Intern to that of Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Frederick S. Tomchik to the position of First Assistant Resident in Radiology, effective January 1.

To continue the appointments of:
Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine, on leave of absence, for one year, from October 1, 1953 through September 30, 1954;
Dr. Nancy Rollins as Clinical Fellow in Psychiatry, from January 1 through June 30;
Dr. Rhett Talbert as Clinical and Research Fellow in Neurology, for six months, from January 1 through June 30;
Dr. Frederick E. Whiskin as Resident in Psychiatry, through December 31.

To appoint:
Dr. Jack R. Dreyfuss as Clinical Fellow in Radiology for one year, beginning July 1;
Dr. William E. Gatlin as Clinical Fellow in Radiology for one year, beginning July 1;
Dr. Robert B. Giles, Jr. as Clinical and Research Fellow in Medicine for one year, effective as of October 15, 1953;
Dr. George H. Gray, Jr. as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, for a period of six months, beginning December 1, 1953;
Dr. Adil O. Icgoren as Clinical Fellow in Radiology for one year, beginning January 1;
Dr. John J. Lorentz as Clinical Fellow in Physical Medicine for one year, beginning August 1;
Dr. Morton J. Olin as Clinical Assistant on the Dental Service, effective as of November 4, 1953;
Dr. Georges Ouzounian as Graduate Student Assistant in Surgery, effective as of November 18, 1953;
Dr. Paul M. G. St. Aubin as Clinical Fellow in Radiology, on leave of absence, from

January 1 through June 30;
Dr. Otto A. Wurl as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning November 1, 1953.

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On Thursday morning, December 3, Mrs. Mildred B. Plunkett, language therapist in the Language Clinic of the O.P.D., was the guest of Polly Huse on the "Domestic diary" program of WBZ-TV. Mrs. Plunkett told of the interesting and important work being carried out in this Clinic for patients referred from other clinics who have language disabilities — such as speech defects, learning problems complicated by reading disabilities, loss of speech, etc.

With Mrs. Plunkett on the televised program was a young boy who has been helped by this therapy, and together they demonstrated some of the techniques used in aiding a child with a specific reading disability.

It was through the courtesy of the United Community Services that this telecast was arranged.

* * *

ILEOSTOMY CLINIC

History. Nearly half of the patients with ulcerative colitis seen at the Massachusetts General Hospital in the past thirty years have required ileostomy. This represents a surviving population of approximately 250 individuals, most of whom were, at the time of their operations, at the beginning of the active and productive part of their lives.

Ileostomy patients previously received advice as to the proper care and management of their intestinal function from individual doctors in the Gastrointestinal Clinic and from other patients with whom they chatted on the waiting benches in the O.P.D. That such a method of handling the problem of rehabilitation had been successful in its final result was evidenced by the report of Dr. L. S. McKittrick and Dr. F. D. Moore in 1947(1), stating that of 150 patients carefully followed, 97% were able to undertake full, gainful activities and 67% were completely free from restrictions in their social lives. But that such a method of rehabilitation was ungainly in its mode of operation became more evident as the number of new ileostomy appliances on the market has increased.

In January 1951 a group of interested individuals in the Gastrointestinal Clinic gathered together, in order to provide for patients in need of ileostomy rehabilitation (a) the benefit of the opinions of several doctors at once and (b) an opportunity for group discussion with other ileostomy patients of many of the problems with which the novice is beset, such as skin irritation, deodorants, avoidance of stomal shrinkage, and leakage.

Activities of the Clinic. Since its first meeting on January 2, 1951, the Clinic, which meets as a subdivision of the Gastrointestinal Clinic on the first Tuesday of each month, August excepted, has been visited 158 times by 49 patients. Patients who have ileostomy problems are seen by appointment and recommendations are made from the group of doctors present. Short, informal discussions frequently follow, at which samples of available appliances are demonstrated.

The Ileostomy Clinic is much like the Amputation Clinic, in that eligibles are not confined to alumni of our hospital wards. Patients from other hospitals and from private doctors frequently appear for guidance. Furthermore, it is not confined entirely to ileostomy patients. The occasional colostomy patient who has a problem, particularly the "wet colostomy", has been helped by discovering that there are many tricks and appliances to choose from, one of which may be more adapted to her particular problem than any she had heard of before.

A reference file is kept in the Clinic, which serves as a storehouse of information on every topic related to ileostomy and is available to all who are interested. No such impartial clearinghouse for information had previously existed.

QT Boston. When the Ileostomy Clinic was first organized, a discussion group was held following the period of medical examination. It soon became apparent that, although the group was supposed to be run by the patients themselves, the presence of professional people at the meetings made it difficult for this to occur. Accordingly, under the energetic guidance of Mrs. Lenneberg, operating along the lines of and carrying a name like the QT Alumni of New York(2), but conceived and organized independently, a group of patients met for the first time as an autonomous body in October 1952. The meetings of this group, having been originally confined to patients only, now are open on alternate months to other interested individuals. They are held monthly at some point outside the hospital. The membership has grown from a nucleus of 9 women at the first meeting to 35 of both sexes at the last meeting— with 58 active members.

The QT Boston supplies two needs which the discussion group in a hospital could not, namely, that of free discussion among one's peers with regard to handicap and that of a psychological realization that one has cut the string binding one to the hospital. If the Ileostomy Clinic had anything to do with the formation of such a group, it can be proud thereof.

Organization and personnel. Any patient wishing to visit the Clinic may obtain information from the Admitting Office of the O.P.D. Information concerning QT Boston may be procured from Mrs. Edith Lenneberg of 12 Mason Street, Cambridge; telephone ELiot 4-6277.

The individuals who have organized and served the Clinic have been so many that an attempt to name them is tantamount to omitting at least one. The doctors have been Daniel S. Ellis, John B. McKittrick, Warren Point, and Richard Warren. Miss Dorothy E. Kellogg of the Social Service Department, Mrs. Ruth Foley, G-I Clinic secretary who is a volunteer, Miss Gertrude Leonard and Miss Lois Martin who have served as Ileostomy Clinic recorders, have all done their valuable parts. By far the most important element in the Clinic, however, has been its nursing guidance. For what other condition gives more of a challenge to that particular service which only a nurse can provide? To Mrs. Lena Glass Miller belongs the original concept of the Clinic. When illness forced her withdrawal there followed a succession of individuals without whose services the Clinic could not have continued. Acknowledgment is made to Mrs. Ruth Farrisey, Mrs. Sue Gardon, Miss Margaret Manning, Mrs. Margaret Smith, Mrs. Cecelia Winston, and to Mrs. Margaret Matthie who, despite her many other duties, is the present enthusiastic and efficient Supervisor of the Clinic.

[Richard Warren, M.D.] R. W.

(1) McKittrick, L. S., and Moore, F. D.: Ulcerative colitis; ileostomy — problem or solution?, J.A.M.A. 139: 201-206, 1949.

(2) Lyons, A. S.: An ileostomy club, J.A.M.A. 150: 812, 1952.

* * *

HAND CLINIC

The Hand Clinic at the Massachusetts General Hospital was instituted entirely through the efforts and interest of Dr. Henry C. Marble. He had long had an assignment on infections and injuries of hands, and as a result of his visiting the Out-Patient Department to see follow-ups, the House Staff gradually made appointments for hand patients to come in at a given time. Thus, after a period of years, the Hand Clinic came into being in about 1930. For several years Dr. A. William Reggio and Dr. Franklin G. Balch, Jr. shared the assignments and instruction of the House Staff.

Dr. Marble's enthusiasm, knowledge, and personality stimulated many of the House Staff to greater interest in injured hands and it was axiomatic that, whereas one could obtain help in the case of the gallbladder or complicated appendix patient from any one of a number of the Visiting Staff, there was only one source to apply to for hand problems.

In 1946 Dr. Marble retired, and hand problems were assigned to Dr. Edward Hamlin.

Hand problems — involving, as they do, skin, tendon, nerve, and bone, and their altered physiologies — require for effective therapy either the wide experience of one individual or of a pool of individuals who are experienced in the separate specialties involved.

During World War II hand injuries, which were very numerous, were grouped in centers where the attending surgeons acquired a vast experience in reconstructive hand surgery in a relatively short space of time. It is these men who are now in charge of a great majority of the hand clinics in this country.

Since no one on the staff of the Massachusetts General Hospital had had exactly that experience, it appeared wise to bring together interested staff members whose total experience would include all the various specialties associated with any hand problem. Accordingly, in 1946, the Hand Clinic was reorganized to include Dr. Joseph S. Barr, Dr. James C. White, Dr. Bradford Cannon, Dr. Arthur L. Watkins, and Dr. Charles B. Burbank. This group has remained intact up to the present time.

The Hand Clinic functions in an advisory capacity only. There is no operative assignment, although the members will frequently assist or even demonstrate a procedure for the benefit of the House Staff.

This year the Hand Clinic has become the first Out-Patient Department clinic to accept private, paying patients. In order to increase its scope and because a vast majority of hand injuries are those of private patients under the Workmen's Compensation Act, the Trustees and the General Executive Committee of the Massachusetts General Hospital voted to establish a consultation service for patients of any income category, either as in or out patients.

The Hand Clinic meets on Wednesdays at 1 P.M. Arrangements have been made to facilitate the admission of all patients to the Clinic without waiting. Appointments for patients may be made by sending a letter with pertinent information to the Out-Patient Department, attention of the Hand Clinic secretary. Appointments may also be made by telephoning the Hand Clinic secretary at Extension 2135.

Edward Hamlin, Jr., M.D.,
Head of Hand Clinic

Brief bits:—

Dr. Mary A. B. Brazier was one of the invited speakers at a symposium held during the December 26-31 meeting of the American Association for the Advancement of Science, in Boston. The subject discussed was "Experimental approaches to the study of brain function".

Dr. Bradford Cannon has been appointed to the Forum Committee by the Board of Regents of the American College of Surgeons. He and Mrs. Cannon recently returned from a professional trip to the west coast.

Dr. Edwin F. Cave has returned from a trip to the Universities of Minnesota and Colorado, where he gave a series of lectures in each institution on "Management of fractures". He spoke also to the Minnesota Pathological Society on "Pathological fractures".

On October 1, 1953, Dr. Edward D. Churchill accepted the position as Senior Civilian Consultant in Thoracic Surgery to the Surgeon General. On November 5, Dr. Churchill was appointed to serve on the Commission on Organization of the Executive Branch of the Government.

Dr. J. Gordon Scannell addressed the U.S. School of Public Health on November 17. The subject of his talk was "The place of surgery in tuberculosis control".

Dr. Anne Wight, who is President of the New England Division of the American Women's Medical Association, presided at the annual fall meeting of the Association, held in Winchester.

DR. MEANS AND M.I.T.

You have asked me to write you concerning my present activities at Massachusetts Institute of Technology. In the first place I may say that I am having a wonderful time there, and this is due both to the nature of the work and to the great cordiality and consideration with which I have been treated by my chief, Dr. Dana L. Farnsworth (*W.M.* 1935), and by all the other members of his department. Although I shall always love the M.G.H., it nevertheless is the truth that I have been so happily busy at M.I.T. that no incapacitating nostalgia for the M.G.H. has beset me. Another factor in this may be the fact that we have a goodly sprinkling of MGH-ers in our department, including my devoted secretary, Mrs. Fouhy. Of course I no longer need her for more than a fraction of her time, but she works for the department and even part time as private secretary to Mrs. Killian, the President's wife.

I have learned since coming to M.I.T., and I suspected it before, that the best way to deal with required retirement at a fixed age is to get a new, but slightly easier, job, in a field as professionally satisfying as possible.

The medical department at M.I.T. is a medical practice group offering complete medical care, preventive as well as corrective, for the whole M.I.T. family — students, faculty, and employees —if they desire it. Major surgery is covered by affiliation with the M.G.H. and other nearby hospitals. In Tech parlance, it is a service department, not a teaching department, but indirectly Dr. Farnsworth has exerted a great influence on education here by convincing the faculty that it is not enough merely to fill the mind with knowledge; to make the knowledge useful, both mind and body must be kept healthy. The marriage of psychiatry and education, which has been consummated here under Dr. Farnsworth's leadership, is a pioneer movement of great educational importance.

My own activities in this setting are as follows: I have ten hours a week of office practice, in which I see whoever pops in, and care for him if I can, or I summon one or more of our specialists if I need help. I may say that it is far easier to get this specialist service here than at the dear old M.G.H. We are a more compact and closely working team.

Another activity which I much enjoy is that of taking part in a health survey of the faculty which Dr. Farnsworth started in 1950. Every member of the faculty who wishes the service is given a thorough medical check-up annually, and any service between times which his care may require. It is an undertaking in preventive medicine to keep our very valuable faculty in as good health as possible.

I have accumulated in this practice some 158 faculty members who not only have got their health check-ups from me, but who in return have given me many fascinating bits of information about the many disciplines they represent. In the initial health check-up each patient, after seeing the physician, is also seen by ophthalmologist, otolaryngologist, and psychiatrist. No one has objected to seeing the psychiatrist, and the fact that the professors do this sort of thing has taken all stigma against consulting a psychiatrist out of the minds of the students. They come in now on their own initiative and ask for a conference with a psychiatrist about some personal problem that may be troubling them.

Because medical education is a major interest of mine, I looked about at Tech for some way of keeping in touch with it. This was easily found in the shape of pre-medical students. Although M.I.T. is primarily an engineering school, there are nevertheless some forty to fifty students who are planning to go into medicine. With these I have had some contact on a purely informal or voluntary basis. Many of them come to me to talk over their plans, and often to have their medical school applications signed by a college doctor. Also I interview a certain number of Harvard Medical School candidates sent to me by Harvard.

An interesting activity related to medical education takes the form of psychodynamic group meetings for pre-medical students. Started originally in 1950 for freshmen as a contribution to their educational process, this experience was offered to pre-medical students beginning a year ago. The idea is that if anyone needs to know himself, it is the physician, and since medical schools have been rather backward in giving their students any such experience, we thought we might make a constructive contribution by offering it to pre-medics. At the present time there are seven groups in operation, each composed of eight to ten students and a psychiatrist. The activity is in its second year and while it is too early to make a really significant appraisal, the results to date seem to indicate that many of the participants believe at least that they have gained some insight as a result of the experience.

My other hours at M.I.T. are miscellaneous — seeing patients by appointment, making infirmary visits, etc., etc. I do no outside medical practice except a rare consultation at the Phillips House or Baker. I am still a full timer. Dr. Farnsworth, however, has been very generous to me in the matter of vacations and ease of schedules, so I have time for a number of extracurricular activities—writing books and papers, attending medical meetings, and occasionally giving talks either on the thyroid or on the public affairs of medicine. The latter is of constantly increasing interest to me. I also have time to travel, indulge my favorite pastime of watercolor painting, and above all, to enjoy life with my wife, family, and friends.

For many years, while at M.G.H., I had made abortive efforts to introduce teaching rounds on the medical patients in the Baker. It is Dr. Bauer, however, who has finally achieved this, and I am very happy that I am to have the opportunity to participate, beginning this January, in his program. It will be for me a "refresher" experience of great importance.

James Howard Means, M.D.,
Past Chief, Medical Services, M.G.H.,
now a member of our *Board of Consultation*

VOLUNTEER GROUP

Distaff Club

Our Christmas Party, held in the Penthouse on December 17, was a fine start for the holiday season. Mrs. Howard S. Frazier, Chairman, arranged a very enjoyable evening.

The Distaff Club members are looking forward to the meeting planned for January 28. Mrs. Margaret N. Southworth, a representative of Shreve, Crump and Low Company, will speak on general home decor.

The Distaff Club is no longer in charge of reservations for the Penthouse. These reservations may now be made through Dr. Clay's office.

Mrs. George D. Zuidema has been appointed Chairman in charge of the general housekeeping of the Penthouse.

Mrs. Federico Mora is the Chairman of our Housing Service. Anyone desiring information about apartments in or around Boston may telephone her at STadium 2-4441.

It was "Cap'n Nay" for him, and "Mister Billy" for me until I began medical school when it became "Doctor Billy", and I really didn't know whether I was going forward or backward.

Nay was impressive. He stood six and two, and all of his one hundred eighty pounds were muscle and bone. But his bearing spoke more eloquently of physical power, and by his features one knew that Nay had lived — at first like a great fish hooked and fighting until, in time, there came understanding. Wisdom and mirth lurked with sorrow in his dark eyes. Nay was gray along the temples and bald on the top of his head when we first met. Still, he could beat me in a foot race, knife throwing, card playing, and certainly at baseball and at hunting.

Nay had played on a pick-up country ball team for years, and he and it took great delight in traveling about the South and beating the city boys. Nay batted cross-handed and played center field. I'm certain he could have placed hits with any of the greats like Cobb, Wagner, or Doyle.

Cap'n Nay had an old loosely-jointed, single-barrel Iver Johnson. Shells were five cents apiece during the early thirties, and he could afford only two or three at a time. When he went hunting two shells were the equivalent of two rabbits, or two squirrels, and once, to my knowledge, three partridges. Nay always said he couldn't afford to miss, and he couldn't. I've often marveled that he did bring up eight children during the depression on nine dollars a week.

It was really through some of his boys that I got to know Cap'n Nay, and probably because of them I developed a proficiency at golf. When I first met Nay he was caretaker for the small golf course in Warrenton, a southern town of a few more than a thousand people. The course had been built in the flush of the twenties. During the early thirties only a few people were playing. Men who had been extremely interested in golf were struggling to get enough to eat. I was the only teen-ager who made use of the course. Certainly, in the mornings Nay's boys and I had the course to ourselves. They had been playing with an odd assortment of clubs for quite a while. Charlie, the oldest, was a natural. His only trouble was that he swung left-handed and we had only right-handed clubs. Yet more than once I've stepped off 275 yards to measure the distance he hit a ball on the fly, using the *back* of a right-handed club. Sammy, the youngest, wasn't big enough to hold a man-sized stick out in front of him, yet he played a creditable game by using an open stance and holding his hands well in front of the club head. He was unusually good around the greens, for here his stance and natural deftness produced an unparalleled cut shot with which he sank dozens of approaches.

Nay never played, but he did putt. He putted cross-handed. He seldom missed, and he never missed if there were a penny or a nickel to lose. Some people have that championship capacity — to win best when the chips are down. In his own way Cap'n Nay was a graceful champion, and I used to think that this quality was entirely inborn. Later it seemed to me that it could be acquired. Skill in shots was relatively easy to come by, but it was three years before I could beat in a match some people whom I outshot easily.

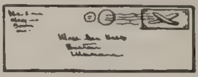
Actually, my first real win was something of a fluke, although Nay thought I, too, was becoming a champion. In an early interclub match I got into the rough two or three times. Sammy was caddying for me. In the heat of competition I did not notice that my lie was as good as if I had been in the fairway. When the match was over I noticed that Sammy was barefooted, though he usually wore shoes for the tournaments. Of course he flatly denied having moved the ball in the rough.

Three weeks later Sammy caddied for me in the quarter-finals for the club championship, and we were pitted against the club champ. At forty, the champion was a fine golfer and a superb gamesman. At fifteen, having been beaten badly by him the year before, I knew he had my number. But I had decided to isolate myself from his gamesmanship with utter silence. I was on edge when Sammy showed up just before we were to tee off — barefooted again, with prehensile toes, and Enoch's overalls all but covering his feet. "No, I don't have any shoes; they are in the shoeshop. No, I can't borrow Enoch's because they hurt my feet. And *besides,* I have never ever moved a ball in the rough. I certainly wouldn't today." Certainly wouldn't get caught, I thought to myself. The quarrel calmed my nerves, Nay showed up in the gallery, and we proceeded to do the only thing left under the circumstances. We hit every fairway and dropped every putt. The champ tied the old course record, and we set a new one. Cap'n Nay was as proud as my parents and I, and Sammy was ecstatic.

That was my last summer at home until I took a long vacation this year. The golf course had grown and become a club. Nay's fairways ranked with the best in the State. His boys were scattered all over the country and apparently are prosperous in industry. Nay was emaciated and jaundiced. He had not wanted to go to "Mr. Duke's Hospital". He was more frightened of an operation than of death. Yet upon the advice of his friends he went through surgery. I often wished I might have been there, that he might have had a gallstone instead of cancer, and even that he might have slipped away under anesthesia. Instead, he lay farmed out to Warrenton's new hospital. The power of his body was all gone, but the strength of his soul was still clearly in his face. "It's good to see you, Mister Billy," he said.

He fell asleep that night. In dying he was granted what so many people are denied — the capacity to be a champion to the end. Thus, one's youth becomes memory, and people like Cap'n Nay go on living.

William P. J. Peete, M.D.,
Resident in Surgery



This most interesting letter and a lovely Christmas card have come from Dr. Thip Pholpoke (gr. stud. a. S. 1952). From the Army Hospital in Bangkok, Thailand, he writes:

> What I have to say is to apologize to you for the long delayed reply to your letter.
>
> I enjoy receiving and reading The News, which you regularly send me. This sometimes takes two months to reach Bangkok from Boston.
>
> Bangkok and Thailand are no more little known to Americans these days. I understand that most of the American tourists include Bangkok in their journeys. Last spring we were privileged by the short visit of Dr. E. D. Churchill. We all hoped he could stay longer in Bangkok. I also met Dr. John Wilson, who came to work here for over a year and is now taking the chair in Surgery at the American University of Beirut.
>
> In Thailand we are rebuilding and adding more in all fields, in order to enable us to

live up with the modern materialistic world. The medical fields are included, too. We hope that when the Buddhist Era reaches 2500 years (this year is B.E. 2496), we may have something to show the world.

We are sending more students to the M.G.H. We will try, at least, to keep a student there always. At the present moment Boston and its vicinity are hosts to no less than 50 students from Thailand.

I hope that one day you might come over to see us. Please let me know if you or any MGH people have that plan in mind.

This letter has come from Dr. John W. Smillie (*E.S.* 1944):

The last three very pleasant years have been spent in Minneapolis with the Division of Ophthalmology of the University of Minnesota Hospitals and Medical School.

Our new home is to be at Ann Arbor, Michigan, as I have accepted the invitation of Dr. F. Bruce Fralick, Chairman of the Department of Ophthalmic Surgery, University of Michigan, to become Chief of the Section on Ophthalmology in the newly opened 500-bed general Veterans Hospital there.

In addition to having received a graduate degree in Ophthalmology, I have recently become a diplomate of the American Board of Ophthalmology.

Please change my mailing address for The News to Section on Ophthalmology, Veterans Hospital, Ann Arbor, Michigan.

From Lt. George B. Murphy, Jr., MC, USNR (*S.* 1952) came this note:

Your last copy of The News chased me around the world and finally caught up with me back here in the Boston area, where I am at present stationed at the Chelsea Naval Hospital.

I've enjoyed The News very much, especially when it reached me in such places as Djibouti and Bangkok. Thank you for your interest and effort in sending it to me.

I hope to be back at the M.G.H. before too long.

This brief but cordial note has arrived from Dr. Manucher Javid (r.s. *N.S.* 1952).

I have missed receiving the MGH News. Somehow, between being very busy here at the University Hospitals since our arrival in Madison, enjoying a long-awaited visit of my parents from Iran, and the arrival of our daughter, Roxane Maria, I failed to send my subscription, which is enclosed. I shall look forward to receiving The News and keeping up with "What's New?" at wonderful M.G.H.

Miss MacDonald, one of our faithfuls up there on our telephone switchboard, has passed on to us this letter from Dr. Fred Alexander (clin. & res. fel. *M.* 1949). From 125 Old Gulph Road, Wynnewood, Pennsylvania, Dr. Alexander writes:

Since our departure from Boston we have been constantly on the move. I'm quite the married man now, having three children and all that goes with them. People say they are well mannered and well behaved, but I see to it that they aren't too much so. My free and easy bachelor days are gone, and probably for the best, although when the bills come in somebody has to twist my arm to convince me.

But actually we're all having a wonderful time. At present I live in a suburb of Philadelphia, teach part time at the University of Pennsylvania, and do the cardiac work at one of the larger industrial concerns in town. The situation is tolerable, but only so, for I do miss the M.G.H., as does everyone else who has been privileged to spend some time there.

I met the husband of Mary Butler, the girl who worked with me in the Hypertension Laboratory. He is working as a Fellow in Endocrine Diseases at the University of Pennsylvania.

Haven't heard a word from my friends Cooper or Evelyn in years. Time and distance seems to make a big change.

I was distressed to learn about Dr. Smith-Petersen. Was sorry I didn't get a chance to send him a card, but I didn't know he was sick. I considered him one of my best friends.

Regards to everyone at M.G.H.

This short note has come from Dr. George A. Culver (a.r.p. *An.* 1950), whose stationery gives as an address simply P.O. Box 17039, Houston 4, Texas.

After three years with Baylor Medical, doing full-time clinical teaching of Anesthesiology, I have resigned and have gone into the private practice of Anesthesiology here in Houston. Therefore, I am no longer with the Jefferson Davis Hospital.

Here is another "singleton" letter — from Dr. Robert J. Vitt (a.r.s. *Or.* 1951), who gained that distinction when he opened an office for the practice of Orthopedic Surgery in the Beebe Building, 210 South K Street, in Tulare, California. He writes:

Yes, it is true that I am the only MGH Orthopedist within a radius of 45 miles, in a 2-county area, serving some 220,000 people. I have been in practice in Tulare, in the heart of the San Joaquin Valley of California, since February 1953, and have the nucleus of a comfortable, diversified practice. There has been an influx of specialists into the Valley recently, perhaps due in large part to our beautiful brand new District Hospital.

This is at present a farming community, with irrigation producing bountiful crops of fruit and cotton. The cattle industry is also very flourishing. Toward the east, we are 2 to 3 hours' drive from the best trout streams in the country, and toward the west, a similar distance from the ocean. This, and the fact that my office and the hospital are 2 to 3 minutes' drive from home, represent some of the big reasons for my locating here.

My practice is in large part an industrial one, but I have a polio and crippled children's clinic besides rehabilitation work. We have an up-and-coming County Hospital with six Residents, so some teaching is in order.

* * *

HAIL AND FAREWELL

We, at the Massachusetts General Hospital, had to say good-bye recently to a faithful friend, and Boston lost one of its oldest landmarks, when it became necessary to tear down the Paint Shop Building which had stood for so long on the northeast corner of Cambridge and North Grove Streets.

Soon after we came to Massachusetts General we set about to collect all available data concerning this lovely old building from various local sources. It was through help given us by the staff at the Bostonian Society, in the Old State House on Washington Street, that we secured the most information. Here are a few sentences culled from their files:

A tradition connects Bulfinch with a market, still standing, built by Samuel Parkman at the corner of Cambridge and Grove Streets in 1810. The only architectural feature discoverable today is the simple cupola set in the middle of the roof, which is interesting for its association. . . . — *Charles Bulfinch — Architect and Citizen*, by Charles A. Place, Houghton Mifflin, publishers, 1925, p. 141.

From Scrapbook M, p. 75, at the Bostonian Society, we gathered the following bits of additional information, from an article which appeared in the *Boston Globe* of October 28, 1924, written by Alexander Corbett:

. . . probably designed by Charles Bulfinch, who planned the State House. Parkman's Market was plainly modeled on Faneuil Hall as built by Peter Faneuil in 1742. The only striking difference between the two is found in an extra story in the Parkman Market, and an absence of the pilasters that adorn the exterior of Faneuil Hall.

. . . Parkman's apparently was not much needed in the West End, for it ceased to be a market a few years after it was built, and has since been in succession a piano and organ factory, a paint and blacksmith shop, a grain warehouse, and even a tenement house.

The custodian at the Bostonian told us that Mr. Corbett was a very careful historian and checked his facts thoroughly before giving them out.

Scrapbook Q, page 76, contains the following, in part, from an undated, unknown newspaper, and by an unidentified writer:

. . . Samuel Parkman died in 1827. The Market House passed by will to Dr. George Parkman, victim in one of Boston's saddest and most memorable tragedies, and with his heirs the old Cambridge Street building still stands.

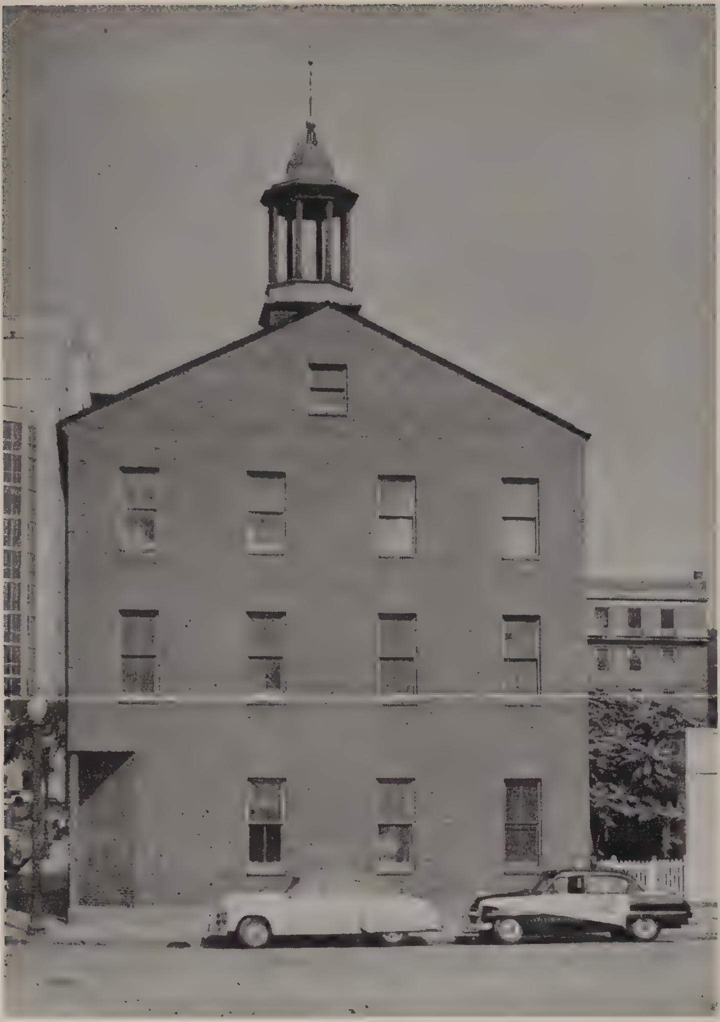
Hook & Hastings, and Plaisted & Hutchins manufactured famous church organs here. . . . The Parkman Market was designed by the same master hand [Bulfinch] . . . . seems to have had a kind of cold-storage proposition in his architectural head when he drew the plans for this building. For they say the walls of the old market are two feet in thickness.

But the most striking thing about this nonagenarian building is the cupola which surmounts the roof, a quaintly designed affair, which cannot fail to attract the attention of the passerby. . . .

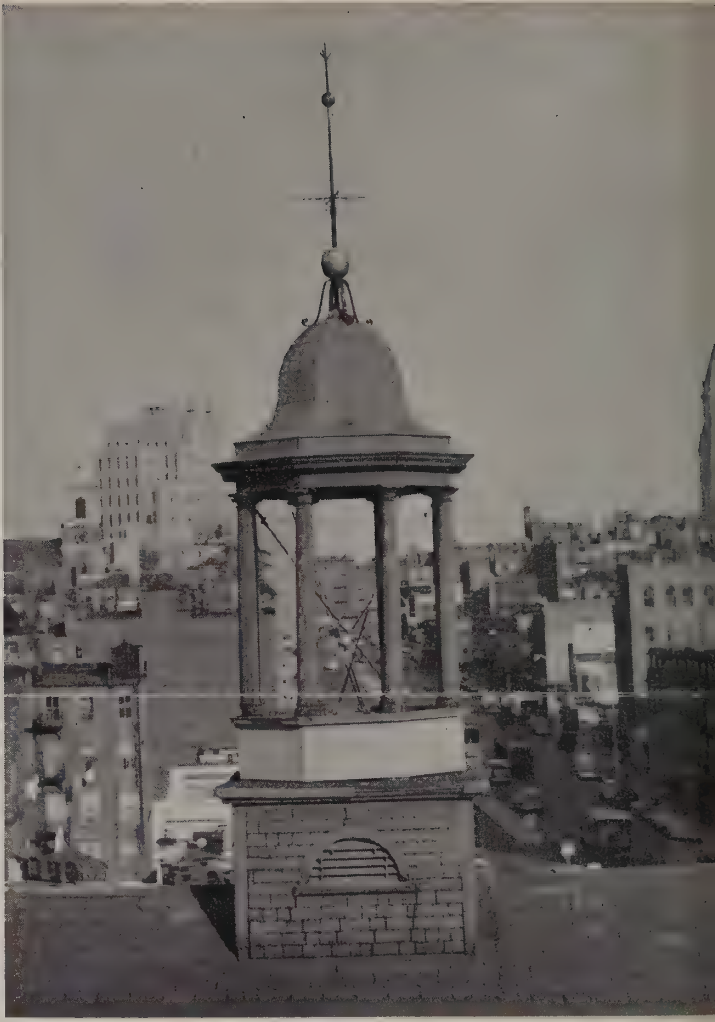
On pages 7, 50, and 58 of Dr. Washburn's history of M.G.H. we learn of the circumstances associated with the acquisition of the old Market Building by the Hospital in 1908, and the reduction in its size made necessary by the widening of Cambridge Street in 1924.

But now the old building is no more, and it would take a poet's pen to give it the epitaph it merits. Its time-mellowed bricks had taken on a soft patina that only long years can bestow; the simple dignified beauty of the cupola made an appeal that even the most indifferent could not ignore; and the wind vane which topped the cupola was in a quite literal sense our very good and trustworthy friend. On sultry summer days, when temperatures were soaring, it often brought us relief when our hopeful eyes sought out its message and could read as clearly as if it were in headlines, "Cheer up! Take heart! Boston's east wind is here!" And on lowery winter days, when we were apprehensive as to weather developments, it was no less our friend and, like a lookout atop a foremast, would give us warning that a no'theaster was heading our way.

As soon as we learned that the building was to be torn down we appealed to Mr. Donald Withee, Head of our Photographic Laboratory, and we have him to thank for the excellent picture of the building and the closer-up of the cupola. A few days after these pictures were taken we happened to discover that the wind vane was in Dr. Clark's office, disassembled and waiting to be shipped, along with the cupola, to their



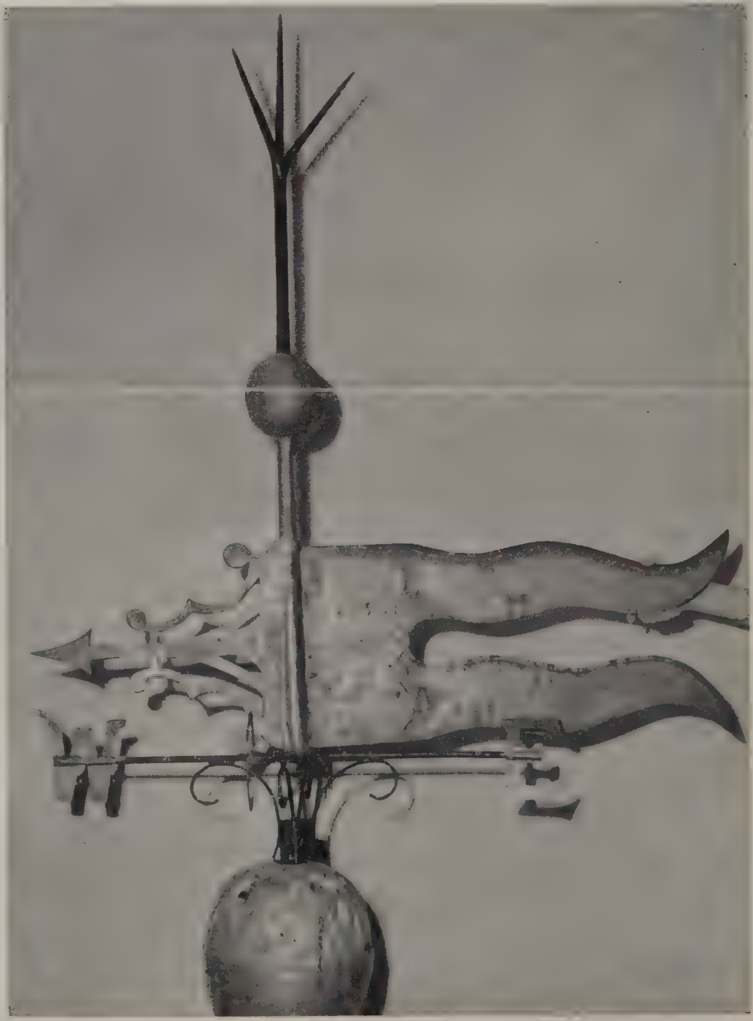
THE PAINT SHOP



THE CUPOLA

future dwelling place at the summer residence in Maine of Mr. Francis W. Hatch, a member of our Board of Trustees. As it lay there in the corner, it seemed to us like a creature of the elements, almost cruelly brought to earth by man (albeit with gentle hands), and we found ourselves loath to draw too near, lest our slightest motion might frighten this companion of the zephyr and the gale. But, as we drew nearer and studied in detail the beauty and delicacy of its design, its fluted gold-leaf wings which gave the effect of having been riffled by the very winds themselves, we resolved to capture a close-up picture of this creature before it could escape our reach. A hurried telephone call to our Photographic Laboratory brought Mr. Frank McCarthy in response to our strange request. Together, and with considerable difficulty, we managed to procure a picture of the vane which will give you some idea of its beauty. We regret that since there was no way of fastening its rather heavy and unwieldy parts together, the hint of a human hand had to intrude.

We hope and trust these two old friends of ours will be happy in their new home. As for us, the old Paint Shop with its cupola and vane will remain an enduring memory; and we know that for all time to come we shall find ourselves searching the sky toward where the cupola used to be and that there, as now, against the blue or the gray, we shall see the wraith-like outlines of the Bulfinch (?) cupola and its beautiful companion, the wind vane.



THE WIND VANE

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 131 Boston, Mass. February 1954

THE BLOOD BANK

In the May 1952 issue of THE NEWS Dr. Lamar Soutter gave a very detailed description of the history and function of the Blood Bank as it had developed during the ten years of its existence. On November 1, 1952 Dr. Soutter resigned as Director of the Blood Bank to take over the position of Associate Professor in Surgery at Boston University.

In writing another article about the MGH Blood Bank and its activities the opportunity should certainly not be missed to pay tribute to its founder and former Director, Dr. Soutter—one of the most active blood bank pioneers in this country. His enormous energy and working capacity, combined with talent as an organizer of high executive ability, have been of great value not only to the MGH Blood Bank but also to a great number of other organizations in the blood transfusion field.

The extent of Dr. Soutter's activities in blood transfusion work can be partially appreciated from the fact that when he resigned and gave up this work in order to give his full time and energy to surgery, he was holding the following positions: Director of the Blood Bank, Massachusetts General Hospital; Director of the Blood Bank, Chelsea Soldiers' Home; President of the New England Association of Blood Bank Directors; Chairman of the Blood Section, Medical and Health Division, Massachusetts Civil Defense Agency; Chairman of the Committee on the Supervision of the Massachusetts Red Cross Blood Program; and Massachusetts State Representative of the American Association of Blood Banks. All of these responsibilities are now divided among several blood bankers and, from one who had the privilege of taking over about 50% of Dr. Soutter's duties in the blood transfusion field, great admiration goes to the man who, in an excellent manner, was able to fulfill all 100% of them and still have time left for surgery.

Most of the changes and developments which have taken place in the Blood Bank during the recent years have been in the laboratory procedures. The tremendous increase in our knowledge of immunohematology, and in particular of blood group serology, has brought us closer to the day when the prediction made about 25 years ago by the Nobel Prize winner, Dr. Karl Landsteiner, will be true — namely, that "human beings have blood group patterns as distinctive and individual as fingerprints". We are already dealing with 9 well-defined blood group systems, each of them containing a number of different blood factors. Furthermore, several so-called "private" blood factors, existing only in members of the same family, have been described.

A continuous search for antibodies against all these different blood group factors is an important part of the daily routine and research work in our Blood Bank Laboratory. This work is of great clinical importance because it is the fundamental rule in all blood transfusion therapy that the blood of the recipient must contain no antibodies against the donor's red cells, and vice versa. Therefore, a series of tests, including a complete screening test for antibodies, is carried out on all blood samples from our patients in order to protect them from having hemolytic reactions in connection with blood transfusions.

To keep this work going, the cooperation of several of the Hospital employees has been needed and is still needed in order to keep available in the Blood Bank, at all times, a sizable "cell-panel" consisting of red cells of various blood group combinations which can be used for identification of blood group antibodies.

Besides being a protective mechanism against hemolytic transfusion reactions, the search for blood group antibodies and eventual stimulation of these in selected professional donors has been an important part of a Blood Procurement Program which has now for more than two years been working successfully in cooperation with commercial laboratories. Under this program the Blood Bank has been able to furnish, at a very low cost to the Hospital, testing sera of all different varieties, despite the fact that there is a constantly increasing need of these sera in our laboratory.

With the cooperation of our patients and members of the professional staff it has also been possible to obtain a considerable quantity of testing sera containing very rarely found blood group antibodies. In this connection it is worth while mentioning that the first sample of anti-Lu^a serum in the U.S.A. was found in our Blood Bank Laboratory.

Samples of these rare testing sera have been sent to blood bank laboratories all over the world in order to help these laboratories in their work of building up "cell-panels" tested for the various blood group antigens.

A great deal of time has been devoted to the teaching and training of laboratory technicians from other hospitals in the United States and doctors from other countries. This field of blood banking and blood group serology is still a relatively new specialty in medicine. It was therefore felt that, to the greatest possible extent of its ability to devote time for this purpose, our Blood Bank should incorporate this training program in its daily work. During the last half-year it has also been part of the Hospital's teaching program that doctors who are training in the Department of Pathology shall rotate for two months through the Blood Bank. The reason for this is that in smaller hospitals it is often the rule that their blood bank is supervised by their pathologist.

CIVIL DEFENSE ACTIVITIES

About two years ago a memorandum was sent to all hospitals in the State of Massachusetts from the Blood Section, Medical and Health Division, Massachusetts Civil Defense Agency, emphasizing the great importance of having all hospital transfusion services take active interest in being prepared for a major disaster in the Commonwealth. The State goal was to have a mechanism (set up by regions) capable of producing at least 100,000 pints of blood to take care of the first 24-hours' demand in case of an atomic bomb attack. During the years since this memorandum was received our Blood Bank has taken several steps to prepare itself for maximum cooperation in the program.

First, a training program of phlebotomists was started. Besides having all technicians working in the Blood Bank Laboratory trained as phlebotomists, several volunteers have been trained for this purpose, also. Many of these volunteers are employees in other departments of the Hospital which are not expected to be activated under disaster conditions.

Second, the Fenwal plastic blood pack has been tried out and is still used in limited quantities in order to keep the Blood Bank personnel, as well as the intravenous nurses and the house officers, trained in the use of this type of transfusion equipment. The reason for this is that the Fenwal plastic blood pack is the type of equipment which is being stockpiled by the Civil Defense Agency for disaster blood transfusion.

Third, all patients and donors who are being typed in the Blood Bank Laboratory receive Civil Defense cards, showing their ABO-group and Rh-type. Also, all Hospital employees are being typed and furnished with Civil Defense cards. An estimated 25,000 people have received their Civil Defense blood type cards through the MGH Blood Bank during the past two years.

Fourth, an effort has been made to stockpile plasma for a possible disaster situation. The plasma has mainly been salvaged from outdated blood. Also, in preparation of packed red cells, an attempt has always been made to remove the plasma under sterile conditions in order that it may be stored for Civil Defense purposes. The cooperation of the clinical staff and house officers in giving the Blood Bank sufficient notice (at least 24 hours) when packed red cells are wanted has greatly helped to increase the stockpile of plasma.

Artery Bank

On January 1, 1953, Dr. Robert S. Shaw was appointed Assistant Director of the Blood Bank, and very soon after his appointment he started the Artery Bank.

Vessels are secured at autopsy, sterilized by the two-million-volt cathode ray at M.I.T., and stored on dry ice according to the method developed at the Children's Medical Center by Meeker and Gross.

Thus far, 25 patients have had arterial grafts inserted which were supplied by the Artery Bank. This facility has greatly increased the scope of vascular surgery at M.G.H., enabling us, for instance, to keep pace with recent developments in the surgical treatment of segmental arteriosclerotic occlusive disease, aortic aneurysm, and coarctation of the aorta.

Surgery requiring arterial homografts is being performed with increasing frequency, and it is expected that the Artery Bank will become an increasingly important activity.

Morten Grove-Rasmussen, M.D.,
Director of the Blood Bank

In an interview with Dr. Grove-Rasmussen concerning his article, we managed to draw out the following data which he has not mentioned in his write-up: Besides being the Director of our Blood Bank, he is now the Director of the Blood Bank at Chelsea Soldiers' Home, Secretary of the New England Association of Blood Bank Directors, and Chairman of the Blood Section, Medical and Health Division, Massachusetts Civil Defense Agency.

Dr. Grove-Rasmussen was born and educated in Denmark. He is a medical graduate of the University of Copenhagen. In 1946 he began the study of blood group serology and blood banking in the United States and at the State Serum Institute in Copenhagen and the Red Cross Blood Transfusion Center in Amsterdam. He worked as a Research Fellow in our Blood Bank in 1948 and 1949. After further study in Europe he returned to the United States in 1950 to become Assistant Director of our Blood Bank, and assumed his present position as Director in 1952. Last summer he represented the Massachusetts General Hospital at the Congress of the European Society of Hematology in Amsterdam, where he addressed the group. Following these meetings he visited several of the large blood transfusion centers in England, including the Lister Institute in London.—*Editor*

The "Hamilton Award" for best parking for 1953 went to Dr. Ward I. Gregg. In the opinion of Mr. George E. Hamilton, the custodian of our doctors' parking lot, Dr. Gregg is a past master in the art of parking.

MASSACHUSETTS EYE & EAR INFIRMARY

EYE PATHOLOGY LABORATORY

The Eye Pathology Laboratory of the Massachusetts Eye and Ear Infirmary has a number of principal activities.

The first relates to an essential requirement of any first-class hospital — namely, an independent unit within the framework of the hospital to process and to report upon pathological material. This function is achieved only through departmental independence, free from other allegiances except the hospital administration. Thus is supplied a diagnostic guide for the staff and a therapeutic control.

Important activities of this Laboratory relate to teaching. The Laboratory of Pathology has numerous contacts in this field. Reports upon routine laboratory specimens given to our staff and to other hospitals of New England have much intrinsic teaching value. Follow-ups augment this. The residents, during their service at the Infirmary, spend three months in the Laboratory (full time). This time, spent either with dogged persistence or with the enthusiasm of an explorer, at least creates a lasting impression upon the resident. When this exposure helps to form a trained ophthalmologist, the result is a man whose clinical problems are attacked with a deeper and better understanding.

Another contact of the Laboratory with a teaching function is through clinical pathological conferences. These coordinate diagnosis and pathology at staff level with ophthalmologists in training, and provide a free-for-all exchange of ideas.

Informal fragmentary and probably valuable teaching experiences derive from the question-and-answer method related to the daily grist of problems provided by the clinic patients. These teaching experiences are not easy to evaluate, but nonetheless probably have substantial value.

One function of the Laboratory is research. This is best accomplished in an atmosphere of independence, free from multifarious administrative duties. Unlike the routine functions of processing-diagnosing specimens and teaching, best conducted within the hospital and clinic, research facilities can be separated from the routine laboratory work and located in another building.

These three functions of a pathologic laboratory have a fine tradition at the Infirmary. Dr. Verhoeff for more than forty years has spread the fame of this Laboratory and the Infirmary over the world. His successor, Dr. Terry, carried on the tradition until his untimely death. It is to be hoped that the future will be as fruitful as the past.

Parker Heath, M.D.,
Director, Eye Pathology Laboratory

Many distinguished guests have visited the Infirmary during the past few weeks.

Dr. Lorimer George Fison of the Institute of Ophthalmology at the University of London has been visiting here for a month, during which time he has been attached to the Retina Service under Dr. Charles L. Schepens, Director of the Service.

Dr. A. Seymour Philips of London was our guest for four days. During his stay he delivered a lecture on "The anatomy of the levator muscle and its application to ptosis surgery".

Drs. Pablo J. Nañagas and Fransico Quilala of the Philippines visited here during the month of January.

The Infirmary also played host to 26 Occupational Therapy students from the University of New Hampshire on January 7. Mrs. Patricia Huddleston, Director of Occupational Therapy at the Infirmary, gave a short talk on the department's program, and Miss Marilyn G. Myers, Executive Secretary of the Boston Eye Bank, described the purpose and functions of the Eye Bank. The students were later given a tour of the Infirmary, and tea was served in the cafeteria.

Dr. Edwin B. Dunphy recently attended a meeting of the Directors of the National Society for the Prevention of Blindness, held in New York. He later addressed the Residents and Staff of the New York Eye and Ear Infirmary on the subject "Glaucoma".

The Board of Trustees, at their meetings on December 11 and 24, and January 8, voted:

To accept the resignation of Dr. Richard W. Dwight from the position of Clinical Associate in Surgery.

To reappoint:

Dr. James J. Ferguson, Jr. as Resident in Medicine, beginning January 1, 1955;
Dr. Stephen M. Krane as Resident in Medicine for one year, beginning January 1;
Dr. Lot B. Page as Assistant Resident in Medicine for one year, beginning October 1;
Dr. Howard Rasmussen as Assistant Resident in Medicine for one year, beginning July 1;
Karl Schmid, Ph.D. as Assistant Biochemist for one year, beginning July 1, 1953;
Morris Soodak, Ph.D. as Assistant Biochemist for one year, beginning January 1.

To appoint:

Dr. Norman W. Andrew as Assistant Resident in Anesthesia, beginning August 1;
Dr. Peter R. Bally as Assistant Resident in Medicine, beginning January 1, 1955;
Dr. Joseph J. Barlow as Resident in Medicine, beginning October 1;
Dr. Roy J. Barry as Second Assistant Resident in Radiology, beginning January 1, 1955;
Dr. Benjamin D. Canlas, Jr. as First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Frederick C. Goetz as Chief Resident in Medicine, beginning January 1;
Dr. Philip H. Henneman as Assistant in Medicine, beginning January 1;
Dr. Herbert L. Kraut as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. John D. Leidholt as Assistant in Orthopedic Surgery, beginning January 1;

Dr. Richard A. Mayo as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Dr. Jerome K. Merlis as Clinical Associate in Neurology, effective as of September 1, 1953;

Dr. Jule P. Miller, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Alex F. Müller, retroactively, as Intern in Medicine for the months of June and July 1950 and for January 1 through June 30, 1951;

Dr. David B. Murray as Second Assistant Resident in Pathology for one year, beginning July 1;

Dr. John O. Strom as Resident in Neuropathology for one year, beginning July 1;

Dr. Richard H. Watson as Assistant to the Children's Medical Service, beginning July 1;

Dr. Henry deF. Webster as Assistant Resident in Neurology for one year, beginning July 1;

Dr. Setrag A. Zacarian as Assistant Resident in Dermatology for one year, beginning August 1.

At their meetings during December and on January 6, the General Executive Committee voted:

To promote:

Dr. Leland C. Brannon to the position of First Assistant Resident in Neurosurgery for one year, beginning January 1;

Dr. Beverly W. Cobbs, Jr. from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Zanvil A. Cohn from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Herschel D. Collins from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Pierre M. Dreyfus from the position of Assistant Resident to that of Resident in Neurology for one year, effective July 1;

Dr. Daniel D. Federman from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Howard S. Frazier from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Lamont W. Gaston from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Herbert B. Locksley to the position of Second Assistant Resident in Neurosurgery, for the period January 1 through June 30;

Dr. David J. L. Luck from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Robert W. Mackie to the position of Senior Resident in Neurosurgery, for the period January 1 through June 30;

Dr. William L. Morgan, Jr. from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Joseph R. Petranek from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. James A. Pittman, Jr. from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Savitri Ramcharan from the position of Intern to that of Assistant Resident on the Children's Medical Service, effective July 1;

Dr. George S. Richardson to the position of Resident in Surgery, beginning January 1;

Dr. Harvey D. Rothberg, Jr. from the position of Intern to that of Assistant Resident in Medicine, effective July 1;

Dr. Yang Wang from the position of Assistant Resident to that of Resident in Medicine, effective July 1;

Dr. Donald N. Wysham from the position of Intern to that of Assistant Resident in Medicine, effective July 1.

To extend the appointment of:

Dr. Ernst Simon as Research Fellow in Biochemistry, from January 31 through March 31.

To reappoint:

Dr. Jacques Y. Chatillon as Clinical and Research Fellow in Medicine, for the period March 1 through July 31;

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1, 1953;

Dr. Rodney H. Foss as Clinical Fellow in Radiology, for the period beginning January 1;

Dr. Joachim S. Gravenstein as Clinical and Research Fellow in Anesthesia, as of December 1, 1953;

Dr. John W. Irwin as Clinical and Research Fellow in Medicine, assigned to Allergy, beginning January 1;

Dr. Marc P. Moldawer as Clinical and Research Fellow in Medicine, beginning January 1;

Dr. Federico Mora as Second Assistant Resident in Neurosurgery, assigned to the Boston Veterans Administration Hospital, for the period January 1 through June 30;

Dr. William E. Reynolds as Clinical and Research Fellow in Medicine for one year, beginning January 1;

Dr. Bernard B. Stone as First Assistant Resident in Neurosurgery, assigned to Pathology, for the period January 1 through June 30;

Dr. Chiu-chen Wang as Clinical Fellow in Radiology, effective January 1.

To appoint:

Dr. Benjamin A. Barnes as Clinical Assistant in Surgery, as of December 1, 1953, with approval of his working in the Baker Memorial as Assistant to Dr. Robert R. Linton; it was further voted to approve the recommendation of the Tumor Clinic Committee that he be assigned as Clinical Assistant to General Surgery in the Tumor Clinic;

Dr. Leon Beauregard as Clinical Fellow in Radiology for one year, beginning July 1;

Dr. Leonard W. Cronkhite, Jr. as Clinical Assistant in Medicine, for the period of six months, beginning January 1;

Dr. Hermes C. Grillo as Clinical and Research Fellow in Surgery, beginning January 1;

Dr. John J. Hutchings as Clinical Fellow on the Children's Medical Service, beginning January 4, and as acting Out-Patient Resident, for the period March 1 through June 30;

Dr. Lowell W. Lapham as Research Fellow in Neuropathology for one year, beginning July 1;

Dr. Robert T. Long as Clinical Assistant in Psychiatry, effective January 1;

Mr. Norman M. Prentice as Research Fellow in Psychology, for the period December 1, 1953 through September 30, 1954;

Dr. John T. Sharp as Clinical and Research Fellow in Medicine, beginning December 1, 1953.

Brief bits:—

Dr. Benjamin Castleman has been appointed Professor of Clinical Pathology at the Harvard Medical School.

Dr. Edward D. Churchill has been named Chairman of the Division of Medical Services of the Armed Forces of the Hoover Commission.

Dr. T. Stewart Hamilton, past Assistant Director at M.G.H., has been named Director of Hartford Hospital, Hartford, Connecticut. Dr. Hamilton left Massachusetts General to become Director of the Newton-Wellesley Hospital, which position he has occupied until his new appointment.

Dr. Bernard M. Jacobson recently completed a series of six lectures in Postgraduate Hematology at the Greenwich Hospital, Greenwich, Connecticut.

Dr. S. William Levy (a.r.p. *D.* 1951) announces the opening of his office at 450 Sutter Building, San Francisco 8, California, for practice of diseases of the skin.

Dr. Paul D. White has been given the 1953 Scientific Award of the American Pharmaceutical Manufacturers' Association.

ORTHOPEDIC CLINIC

In previous News articles concerning the Orthopedic Service we have discussed research activities, teaching, care of patients in the Hospital, and other subjects. One problem which is receiving increasing attention and study at the M.G.H. is that of how to give the best medical service to ambulatory patients. (By the way, why don't we say walking patients? And why do we hear so frequently such solecisms as "he ought to be ambulated"? Will we live to see the day when residents are called ambulators and patients are classified as ambulatees or non-ambulatees?)

Through the doors of the Out-Patient Department there flows daily a stream of people seeking medical care. Many of them look upon the M.G.H. as though it were their physician, for this group has no family doctor. The Medical and the Children's Medical Services furnish most of the "family doctor" type of care. The physician in each of these clinics has not only the role of family doctor, but he is also a specialist in some particular field of medical care, whether it be in the uptake of radioactive iodine by the thyroid or in the interpretation of multilead electrocardiograms of the heart. It should be self-evident that all physicians are specialists, for no physician can be skilled in all aspects of diagnosis and treatment. It is time that we stopped using the word "specialist" in a derogatory sense. Limited interest, limited experience, and limited ability make specialists of all of us.

The walking patient with a disability involving the musculo-skeletal system who comes to the Admitting Desk of the O.P.D. has at his service a number of clinics. Sometimes it is difficult for the Admitting Officer to decide to which clinic the patient should be admitted. All of the OPD clinics are diagnostic clinics. Thus, a patient with a pain in the low back radiating into the leg may be referred to the Medical, the Orthopedic, the Neuromedical, or Neurosurgical Clinic. The diagnostic problem may be solved at the patient's first visit to one of these clinics, or, more likely, he will make two or more visits to several clinics and laboratories before the diagnosis is established. It becomes quite easy to decide which clinic should assume responsibility for treatment when a correct diagnosis has been reached. Patients with disabilities of the locomotor system are as a rule cared for in the Orthopedic OPD Clinic, but if there are special problems such as disabilities due to tumor, arthritis, infantile paralysis, scoliosis, or loss of limb he will be referred to the appropriate special clinic caring for these problems.

Until recent months the Orthopedic Clinic was kept open all day, every day during the week. It has always been difficult to adequately staff the clinic in the morning hours when ward rounds, operations, and other duties concerned with house patients take so much of the Resident and Visiting Staffs' time. At the suggestion of our Senior Resident, Dr. Tanner, we decided to try the experiment of seeing only emergency out patients in the morning and restricting the regular clinic to afternoon hours except for Saturday mornings. Patients are seen by the appointment system. Two visiting men and essentially all of the House Staff are present during the clinic hours. The Visiting Staff act as consultants and also see the "follow-ups" (patients operated upon while these doctors were on house service). Under the new system patients are seen more promptly, and the standards of care are perhaps better than they were previously because of the more careful supervision given by the Visiting Staff.

As a part of their Orthopedic OPD duties certain members of the Visiting Staff have accepted special assignments which enable them to study certain problems more carefully; for instance, Dr. Rowe supervises a "Shoulder Clinic" and Dr. Aufranc a "Hip Clinic".

There are two major special clinics for which the Orthopedic Service is responsible — Infantile Paralysis and Scoliosis. Patients in these clinics have long-term, even lifetime, disabilities. They need and get skilled, personalized, continued care. In addition to these clinics for which the Orthopedic Service is completely responsible we cooperate in the staffing of several other OPD clinics—the Hand Clinic, the Arthritis Clinic, the Tumor Clinic, and the Amputation Clinic.

The total number of hours which the Visiting and Resident Staffs devote annually to the care of walking patients has never been computed. It would be an interesting figure — a symbol which would inadequately suggest how much loyal service is freely given to MGH patients.

Joseph S. Barr, M.D.,
Chief of Orthopedic Service

New addresses:—

Dr. George F. Dwinell (*W.S.* 1917), 830 Beech St., Manchester, N. H.
Dr. Lawrence J. Essember (a.r.p. *C.M.* 1953), Beverly Hospital, Beverly, Mass.
Dr. Chester W. Fairlie (*W.M.* 1942), 85 Jefferson St., Hartford, Conn.
Dr. Robert G. Greene (a.r.s. *Or.* 1953), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Mr. Henry R. Guild (*Trustee* and *Treasurer of the Corporation*), 9th Floor, Old South Bldg., 294 Washington St., Boston, Mass.
Dr. James P. Hepburn (a.r.p. *An.* 1953), Milton Hospital, Milton, Mass.
Dr. Walter S. McClellan (*W.M.* 1925), University of North Carolina Medical School, Chapel Hill, N. C.
Dr. Thomas C. Peebles (*C.M.* 1952), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. William P. J. Peete (*S.* 1948), Warrenton, N. C.
Dr. Burton C. Prior (clin. fel. *R.* 1953), Toronto Western Hospital, 399 Bathurst St., Toronto, Ontario, Canada.
Dr. John W. Ratcliffe (*W.S.* 1946), 111 St. Matthews Ave., San Mateo, Calif.
Dr. Stanley Sober (a.r.s. *Or.* 1953), Shriners' Hospital for Crippled Children, 1529 Cedar Ave., Montreal, Canada.
Dr. John B. Stetson (a.r.p. *An.* 1953), Lowell General Hospital, Lowell, Mass.
Dr. Earl M. Wedrow (r.p. *Psychiat.* 1953), Judge Baker Guidance Center, 38 Beacon St., Boston, Mass.

WE NEED YOUR HELP. Mail sent to several members of the MGH family has been returned to either the Office of THE NEWS or the Secretaries' Office, bearing such notations as "Unknown", "Unclaimed", etc. Ever since your editor took over the Directory section of the Annual Report in 1951, she has concentrated on trying to track down all such elusive individuals. Now when the time to prepare the 1954 Directory is near at hand, we have added to our own list of unknown addresses all those unknown in our Secretaries' Office and are appealing to you for help. If anyone can tell us anything concerning the address of any person listed below, such information sent to Cora F. Holbrook, Archivist and Editor of THE NEWS, will be most gratefully received. Here are the names, with last known addresses:

Adams, William B. (*E.M.* 1918), 280 Longmeadow, Longmeadow, Mass.
Alston, Edwin F. (*Path.* 1944), 274 Parnassus Ave., San Francisco, Calif.
Austin, Grace L. (r.p. *D.* 1930), 25 Albert Ct., Kensington, S.W. 7, London, Eng.
Barnett, Thomas B. (*M.* 1950), Strong Memorial Hospital, Rochester, N. Y.
Bennett, Warren (*M.* 1948), New England Center Hospital, Boston, Mass.
Bliss, Harry A. (*M.* 1945), Presbyterian Hospital, New York, N. Y.
Bloomer, Earl (*E.S.* 1917), 22340 Michigan Ave., Dearborn, Mich.
Bridge, Edward M. (*C.M.* 1927), Johns Hopkins Hospital, Baltimore, Md.
Brown, Ralph G. (*Path.* 1942), 722 Prospect Ave., Winnetka, Ill.
Caufman, Grace (*An.* 1939), 2300 Auburn Ave., Cincinnati, Ohio
Clark, George O. (*E.S.* 1904), 343 Beacon, Boston, Mass.
Collins, Richard, Jr. (*E.S.* 1933), 3812 S. 9th, Arlington, Va.
Edmonds, Henry W. (r.p. *Path.* 1942), 909 University, Seattle, Wash.
Freeman, Norman E. (r.s. *W.S.* 1935), 1435 4th Ave., San Francisco, Calif.
Fuldner, Russell V. (*Or.* 1939), 85 Trumbull, New Haven, Conn.
Ginandes, Shepard C. (*C.M.* 1952), 37 Mellen, Cambridge, Mass.
Gorman, Rosemary V. (a.r.p. 1945), New York Hospital, New York, N. Y.
Greene, Daniel C., Jr. (*C.M.* 1940), 263 South Ave., Weston, Mass.
Greenhill, Maurice H. (r.p. *Psychiat.* 1939), Duke Hospital, Durham, N. C.
Groves, Laurence K. (*W.S.* 1947), 578 New P.O. Bldg., Columbus, Ohio
Harter, John S. (*W.S.* 1935), 212 Brown Bldg., Louisville, Ky.
Hatch, Floyd F. (*E.S.* 1916), 699 E. South Temple, Salt Lake City, Utah
Higgins, Robert B. (a.r.s. *U.* 1951), 41 Cypress, Newton Centre, Mass.
Hills, Oscar W. (*M.* 1943), 403 7th, N.W., Rochester, Minn.
Holt, William L., Jr. (r.p. *N.* 1937), Westboro State Hospital, Westboro, Mass.
Hopkins, Charles E. (a.r.p. *C.M.* 1948), Johns Hopkins Hospital, Baltimore, Md.
Howard, Fred H. (*C.M.* 1949), Tulane University School of Medicine, New Orleans, La.
Howard, Herbert H. (*W.S.* 1914), 270 Commonwealth Ave., Boston, Mass.
Lewis, James (*W.M.* 1935 & *C.M.* 1936), Westfield State Sanatorium, Westfield, Mass.
Maughs, Sydney B. (a.r.p. *Psychiat.* 1938), 3720 Washington, St. Louis, Mo.
Miller, Milton L. (*E.M.* 1932), 337 S. Beverly Drive, Beverly Hills, Calif.
Musgrave, Rhoda U. (r.p. *Psychiat.,* McLean, 1937), Delaware State Hospital, Farnhurst, Del.
Newman, Elliott V. (*C.M.* 1941), Johns Hopkins Hospital, Baltimore, Md.
Ogden, Ralph T. (*C.M.* 1925), 179 Allyn, Hartford, Conn.
Rauh, Albert E. (*C.M.* 1936), Lyons, N. Y.
Roth, James d'A. (*M.* 1945), Regional Hospital, SHAAF, Salvia, Kan.
Schwyzer, Marguerite (a.r.p. 1946), Bellevue Hospital, New York, N. Y.
Seelye, Ralph H. (*E.S.* 1891), The Stonehaven, Springfield, Mass.
Shaw, Henry A. (*W.S.* 1891), 121 E. 31st, New York, N. Y.
Shaw, John L. (r.s. *P.H.* 1935 & *U.* 1937), 899 Madison Ave., Memphis, Tenn.
Steele, Byron W., Jr. (*a.r.s.* 1952), 108 Plymouth Rd., Needham, Mass.
Stiff, Donald W. S. (r.p. *R.* 1950), Williston, Vt.
Trowbridge, Ellsworth H., Jr. (a.r.p. *N.* 1940), 1102 Grand Ave., Kansas City, Mo.
Ulmer, Jack L. (r.s. *N.S.* 1942), 9112 Rose, Battle Creek, Mich.
Williams, David W. (*W.S.* 1943), 4 Chestnut, Springfield, Mass.
Young, Clark (*E.S.* 1923), Medical Arts Bldg., Salt Lake City, Utah

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report as soon as possible the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone for several months the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K., Keats, A. S., Mosteller, F., and Lasagna, L.
The effectiveness of oral analgesics (morphine, codeine, acetylsalicylic acid) and the problem of placebo "reactors" and "nonreactors".
J. Pharmacol. & Exper. Therap. 109:393-400.

Brewster, W. R., Jr., Isaacs, J. P., and Waino-Andersen, T.
Depressant effect of ether on myocardium of the dog and its modification by reflex release of epinephrine and nor-epinephrine.
Am. J. Physiol. 175:399-414.

Katzman, R., and Leiderman, P. H.
Brain potassium exchange in normal adult and immature rats.
Am. J. Physiol. 175:263-270.

Leiderman, P. H., and Katzman, R.
Effect of adrenalectomy, desoxycorticosterone and cortisone on brain potassium exchange.
Am. J. Physiol. 175:271-275.

von Felsinger, J. M., Lasagna, L., and Beecher, H. K.
The persistence of mental impairment following a hypnotic dose of a barbiturate.
J. Pharmacol. & Exper. Therap. 109:284-291.

Cardiology

Curti, P. C., Cohen G., Castleman, B., Scannell, J. G., Friedlich, A. L., and Myers, G. S.
Respiratory and circulatory studies of patients with mitral stenosis.
Circulation 8:893-904.

Owen, W. R., Thomas, W. A., Castleman, B., and Bland, E. F.
Unrecognized emboli to the lungs with subsequent cor pulmonale.
New England J. Med. 249:919-926.

General Surgery

Dwight, R. W., and Maloy, J. K.
Pilonidal sinus: Experience with 449 cases.
New England J. Med. 249:926-930.

Taylor, G. W., and Rogers, W. P., Jr.
Hindquarter amputation: Experience with eighteen cases.
New England J. Med. 249:963-969.

Laboratory Science

Bessman, S. P., and Lipmann, F.
The enzymatic transacetylation between aromatic amines.
Arch. Biochem. & Biophys. 46:252-254.

Jeanloz, R. W.
Polysaccharides d'intérêt physiologique: Les mucopolysaccharides du tissu conjonctif.
Chimia 7:292-293.

Jeanloz, R. W., and Jeanloz, D. A.
Ethers méthyliques et benzyliques de la glucosamine.
Chimia 7:233.

Jencks, W. P.
Discussion.
Federation Proc. 12:703.

Jones, M. E.
Discussion.
Federation Proc. 12:708-710.

Jones, M. E., Black, S., Flynn, R. M., and Lipmann, F.
Acetyl coenzyme A synthesis through pyrophosphoryl split of adenosine triphosphate.
Biochim. et Biophys. Acta 12:141-149.

Jones, M. E., Lipmann, F., Hilz, H., and Lynen, F.
On the enzymatic mechanism of coenzyme A acetylation with adenosine triphosphate and acetate.
J. Am. Chem. Soc. 75:3285-3286.

Klein, H. P., and Lipmann, F.
The relationship of coenzyme A to lipide synthesis. I. Experiments with yeast.
J. Biol. Chem. 203:95-99.

Klein, H. P., and Lipmann, F.
The relationship of coenzyme A to lipide synthesis. II. Experiments with rat liver.
J. Biol. Chem. 203:101-108.

Lipmann, F.
Introduction: Coenzyme A, past and future.
Federation Proc. 12:673-674.

Lipmann, F., Jones, M. E., Black, S., and Flynn, R. M.
The mechanism of the ATP-CoA-acetate reaction.
J. Cell. & Comp. Physiol. 41:109-112.

Maas, W. K., Novelli, G. D., and Lipmann, F.
Acetylation of glutamic acid by extracts of *Escherichia coli.*
Proc. Nat. Acad. Sc. 39:1004-1008.

Morgan, W. S.
Cytological studies of the acinar cell of the pancreas of the mouse. Part II. The argentophil, osmiophil, and sudanophil substance.
Quart. J. Microscop. Science 94:269-279.

Novelli, G. D.
Enzymatic synthesis and structure of CoA.
Federation Proc. 12:675-681.

Novelli, G. D.
Metabolic functions of pantothenic acid.
Physiol. Rev. 33:525-543.

Novelli, G. D.
Studies concerning the structure of coenzyme A.
J. Cell. & Comp. Physiol. 41:67-87.

Scully, R. E.
An unusual ovarian tumor containing Leydig cells but associated with endometrial hyperplasia, in a postmenopausal woman.
J. Clin. Endocrinol. & Metab. 13:1254-1263.

Srere, P. A., and Lipmann, F.
An enzymatic reaction between citrate, adenosine triphosphate and coenzyme A.
J. Am. Chem. Soc. 75:4874.

Ophthalmology

Committee for the New England Ophthalmological Society and Committee for the Massachusetts Medical Society, and Committee for the Harvard School of Public Health and the Children's Medical Center.
Standards for referral of school children for an eye examination.
Sight-Saving Rev. 23:223-225.

Leahey, B. D.
Simplified ptosis surgery.
A.M.A. Arch. Ophth. 50:588-596.

Otolaryngology

Kelemen, G.
Mechanical injuries of the hearing organ.
Am. Acad. Ophth. & Otolaryng., 1953 Instruc. Sec., 9 pp.

Kelemen, G.
Tonsillar tissue: Study of its structure as a guide to clinical procedure.
Am. Acad. Ophth. & Otolaryng., 1953 Instruc. Sec., 5 pp.

Surgery—Reconstructive

Cannon, B., and Murray, J. E.
Application of plastic surgical principles to the treatment of cancer.
J. Am. Geriatrics Soc. 1:715-722.

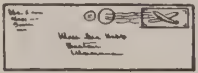
Miscellaneous

Churchill, E. D.
Panic in disaster. (Editorial)
Ann. Surg. 138:935-936.

Farnsworth, D. L.
Educational activities of the American College Health Association.
J.-Lancet 73:439-440.

Farnsworth, D. L.
Education and the Freshman.
Tech. Engineering News, Oct.: 8, 9, 11, 67.

This is the last issue in which 1953 titles will appear, unless a 1953 book or a 1953 periodical carrying a title submitted to us did not reach our shelves before January 11, the deadline date for this issue of THE NEWS.



Another "singleton" has responded to our appeal for news concerning his present activities. This letter has come from Dr. Donald Macomber (*S.S.* 1911), from Brunswick, Maine.

In anticipation of retiring I had done a lot of exploring in Maine, both by land and by sea. Eventually, in 1939 I found a beautiful salt water farm here on Prince's Point, but the war prevented my final retirement until 1946.

I no longer do any professional work, outside of delivering a grandchild or two—the last, in July, was number seventeen. People sometimes ask me whether I miss practising and what I find to do. As to the first, it certainly is a relief to be able to sleep all night and to see something of my family and friends. As to the second, my only trouble is that I have too many hobbies. The chief of these is cruising along this best of all cruising grounds. In the yawl I have at present I have been as far as St. John, New Brunswick, and then up the St. John River, through the reversing falls to Fredericton. Four years ago I cruised in a somewhat larger boat, which I have since sold, to Halifax, Nassau, Key West, Havana, and points between. Three years ago we bought a French car and toured Italy, France, Belgium, Holland, Switzerland, England, and Scotland.

In addition to cruising by water I cruise by land in my house trailer. Winters, we have been to Mexico and Key West. I have been interested in color photography and as a result have many beautiful souvenirs of our travels. Recently I have taken up painting in water colors. While I don't expect to set the world on fire, I do find great satisfaction in riding this particular hobby.

At present I am building a house, of which I am architect and contractor.

Another letter from a "singleton"—this one from Dr. George W. Holmes, past Roentgenologist at M.G.H. and now an Honorary Physician on our Staff. From Belfast, Maine, he writes:

Although it is true that I am the only MGH physician in town, I am not the only MGH trained person here. We have had two nurses at the Waldo County General Hospital — Ruby Cameron and Grace Babcock, who received their training there.

Belfast is a city of about six thousand people. It was incorporated over one hundred years ago. The first settlers were of Scotch-Irish descent, and came here from New Hampshire in the year 1770. Belfast is beautifully situated on an arm of the Penobscot Bay, surrounded by a fertile farming country. In the early days it was a lumbering and shipbuilding center. Now it is the capitol of the Maine poultry industry. It has never, like so many towns on the Maine coast, become a tourist center. However, we do have a number of summer residents, so-called. Before my retirement I was one of them; since then we have made our former summer home into a year round residence. It is what was once known as a salt water farm, the owner depending upon both the land and the sea for his livelihood. The house, a small Cape Cod type, was built about 1800 and for many years was owned by men who were both fishermen and farmers. To a limited extent, I am carrying on their tradition.

We have a community hospital of forty beds. There are eight active physicians on our staff. The Clinical Laboratory and X-ray Department are well equipped and active. I spend three busy mornings a week at the hospital. This work allows me to keep in touch with present day medical problems and helps me to feel that I am not completely on the shelf.

We often wish that old friends were nearer and less difficult to reach, but, on the whole, time has been kind to us.

Dr. Roy H. Whitham (*W.S.* 1926), another "singleton", has sent us this nice informative letter:

Your letter to the "only MGH-er in town" came a few days ago and I am happy to answer your appeal for news. I'm afraid you have asked for trouble when you suggested we be expansive; you may use as much or as little of this as you see fit.

When I was released from active duty in the Navy in 1945 because of illness, I came back to Lincoln, Nebraska, where I had practised from 1926 to 1941. I hung out the old shingle again for the practice of General Surgery. It was so nice to be back again that I moved onto a farm near the city so that I could dig my roots in deeply and live up to my vow never to move again.

Lincoln, now a city of over 100,000, is a clean mid-western city with a large trade territory, some light industry, a lot of tradition, and pride in its Capitol and State University. There are very few really poor here and fewer rich, so that medically its people use private physicians and pay for their hospital services. I used to say that this region seemed to be the last stand of private practice, but perhaps the day has been saved by insurance and good times; at any rate, it is all private here. Medicine is highly specialized,

No. 45 in a series of Staff photographs
Dr. Morten Grove-Rasmussen—Director of the Blood Bank

with careful restriction of practice by the specialists the rule and the greater part of practice within the city done by specialists. General Surgery in our hands largely excludes the surgical specialties and is a narrower field than that which the West Surgical covered when I was House Officer. With the field thus restricted and the wonderful advances made in the last few years, surgery is a joy indeed and the old worries about one's patients are almost gone. Since the war, I have acquired two younger and highly qualified associates who add greatly to my freedom from professional chores and worries.

With medical practice so well organized and my children grown up, something had to be done to fill the vacuum of responsibility. After the war it seemed inadvisable to resume my former interest in medical organizations and civic activities. So I let my farming interest grow. We live in the country and operate some four hundred acres of Nebraska farm land, raising corn, alfalfa, grass, and cattle. We have a herd of Aberdeen Angus beef cattle and a small herd of Holstein Dairy cattle to eat the products of the land and keep us busy. A Nebraska farmer rarely dies of coronary disease, so perhaps I am neutralizing the effects of being a doctor for thirty years. I hope so.

My greetings to all old friends at M.G.H.

Another "singleton" heard from. Dr. Henry C. Thacher (*C.M.* 1942) writes:

I have been practising Pediatrics in the twin cities of Lewiston and Auburn for the past six years. We cover an area of approximately one hundred miles in south central Maine. Our Pediatric Ward is a thirty-bed unit, admitting from ninety to one hundred patients a month (rural and urban). We are the only Pediatric unit in Maine, at the moment, that is qualified for Resident training. The practice here in general is varied and interesting, and is a continuous challenge.

My only outside activities have been confined to helping in the organization of a Mental Health Association which is now functioning, and we hope, in the near future, to have a special clinic for Cerebral Palsy.

The Maine air is wonderful. Hobbies include playing with a five-months-old daughter and sailing along the coast of Maine whenever I can in the summer.

Best regards to all.

This nice letter has come from Dr. Horace K. Sowles (*W.S.* 1917):

Actually, I am not a "singleton", for my residence is in the town of Falmouth, Maine, but the mail happens to come through Cumberland Centre. There is quite a group of MGH men who reside in Falmouth and practise in Portland.

My chief interest is really in my farm, where my orchards and gardens keep me well occupied. In the winter I do wood carving and make reproductions of antique furniture in my workshop.

I do maintain a mailing address and office at 131 State Street in Portland, where I see consultations by appointment, only. Just how long I shall keep an office there I do not know.

The pace of life here is very comfortable and leisurely after the drive of many years at the M.G.H.

My very best wishes, and a cordial invitation to all my old friends at the General to drop in when they are in Maine.

This letter has come from Dr. Philip P. Thompson, Jr. (*W.M.* 1942):

Since leaving the General in 1946 I have been living in South Portland, although my office and practice is in Portland at 704 Congress Street.

I have had the good fortune to start practising with my father. As he was beginning to retire, it has worked out admirably for us both. He continues to practise and we use a common office.

My practice is limited to Internal Medicine, with special interest in Rheumatology. I am a member of the Visiting Staff of the Maine General Hospital and Eye and Ear Infirmary, as well as being on the Courtesy Staff of the Mercy and Portland City Hospitals. I am chief of the Arthritis Clinic at the Maine General and am assisted by Dr. Richard S. Hawkes (*W.M.* 1933). We organized the clinic in 1950 and have an active clinic at present.

In 1951 I became certified by the Board of Internal Medicine. My other medical duties consist of being Health Officer for South Portland, a director of the County T.B. Association, a member of the Health Council, a director of the local District Nursing Association, and chairman of the Medical Committee of the Maine Arthritis and Rheumatism Foundation.

My non-medical interests consist of fishing, gardening, keeping bees, raising apples, and struggling with the problems of raising four children. My only political activity was as a delegate to the State Republican Convention to try to insure Eisenhower's nomination.

A very attractive Christmas card and this most welcome letter have come from Dr. Chiu-an Wang (*W.S.* 1944):

This is just a brief note to tell you how much I have enjoyed receiving and reading The News, and that the Wangs have enjoyed being here in Hong Kong doing a good deal of surgical work.

A few months ago John Lloyd (*E.S.* 1944) was here for a visit. He came with his French bride from Tokyo. We had a wonderful time together comparing notes.

As I read The News I find rather frequently that MGH-ites have been around in this part of the world. I hope you will not forget to tell them to drop in at our house for a cup of tea when they pass by this port. We will be most delighted to meet them.

Kindest regards to our good friends at M.G.H.

We were very glad to receive this letter from Capt. Lincoln D. Clark, MC, USAR (*M.* 1948). His address is still 10th Field Hospital, APO 800, c/o Postmaster, New York, N. Y. Although his letter is dated December 8 and was sent by air mail, it did not arrive in time for his holiday greetings to appear in The News before Christmas. They are appreciated just as much now, however, for kind thoughts have no time limitations. His letter reads:

This is just a note to keep my MGH friends up on my present activities and location.

My military duty at present is as Chief of Neuropsychiatry Service, U.S. Army Hospital, Würzburg, Germany, and Psychiatric Consultant to the Würzburg Military District, which embraces a fairly large area of the U.S. Zone of Germany, extending northwest and west of Frankfurt to the Russian Zone of Germany.

I recently visited in Frankfurt with Capt. Dorr Hallenbeck, recently of the MGH Psychiatric Service and McLean Hospital.

Please give my best wishes for a Merry Christmas and Happy New Year to my associates at M.G.H. You can be sure I am anxious to be back in Boston.

THE NEWS

No. 132 Boston, Mass. March 1954

THE VINCENT MEMORIAL HOSPITAL

The Vincent Memorial Hospital became affiliated with the Massachusetts General Hospital as a Gynecologic Service in 1941. Its new building was opened in 1948 and it is now entering its sixth year in the new quarters. It has not as yet outgrown its present bed facilities, but the need for more office space is very evident. Its laboratory space has been increased by an addition, generously paid for by the Hyams Fund. Today it is evident to all of us that due to the researches of the Laboratory Staff, by opening new avenues of approach to certain problems, the available space will soon be too small to accommodate the obvious investigations that must be carried out. It is to be expected that, if researches are fruitful, the pathways of exploration widen. This is very true of this institution, and the direction in the future is a matter of concern to those of us involved.

A very satisfactory Postgraduate Course in Gynecology, under the direction of Dr. Francis M. Ingersoll, was given in September 1953. About forty practitioners from various parts of the United States and from other countries participated. The course was given by the members of our Staff, the Staff of the Massachusetts General Hospital, and by gynecologists from other Boston hospitals. This course is now a regular part of our teaching program and will be given again next year.

The teaching of Harvard Medical students is carried out both on the wards and in the Out-Patient Department, with the Resident Staff and a member of the Visiting Staff always present. We feel our Out-Patient Clinic is a successful one.

A Department of Gynecology has always been considered to consist of those interested in the study of diseases of the female pelvic organs, but Dr. George P. Berry, Dean of the Harvard Medical School, Dr. Dean A. Clark, General Director of the Massachusetts General Hospital, Dr. Edward D. Churchill, John Homans Professor of Surgery at Harvard Medical, and especially Mr. Louis Curtis, Chairman of the Vincent Memorial Hospital Trustees, considered it their obligation to adopt a much broader viewpoint in relation to the new Vincent Memorial Hospital. The constitution of the Hospital states that its aim is the care of the diseases of women and that the object must not be directed entirely toward pelvic disease. Certainly this broad outlook will be a happy one to convey to the future Chiefs of Gynecology in the Massachusetts General Hospital. The aim of the Vincent has since its foundation been directed toward the care of women. Gynecology on the whole has obviously broadened and includes, besides pelvic surgery in women, radiology in a limited sense, endocrinology, and psychosomatic medicine. This concept is better than the former narrow field, but surely any future Chief should be expected to look even further, for there are many lesions—breast, thyroid, and adrenal, to mention only a few—that must be the concern of the broadly trained gynecologist. It is our hope that this wide point of view will always be the goal of the Chief of Gynecology of the Vincent Memorial Hospital.

As is to be expected in any institution whose duty it is to train surgeons and gynecologists, certain key members of the Staff must leave for more responsible positions. Dr. Langdon Parsons, long a member of the Surgical Staff of the Massachusetts General Hospital and of the Vincent Memorial Hospital Staff, is now Professor of Gynecology at Boston University. Dr. Somers H. Sturgis is now Associate Clinical Professor of Gynecology in the Harvard Medical School and Chief of Gynecology at the Peter Bent Brigham Hospital. Dr. John McL. Morris, a former member of the Vincent Staff, is now Associate Professor of Gynecology at Yale University.

Since the opening of the Vincent at the Massachusetts General, Dr. Sturgis and Dr. Meigs have produced volumes I and II of *Progress in Gynecology.* This book has recently been translated into Spanish. I have seen it in many doctors' offices and hospitals in many countries—evidence that it has been a valuable contribution to gynecologic literature. Within the next year it is hoped that volume III will be well under way toward publication. This year Drs. Parsons and Ulfelder have produced a real classic of gynecologic surgery. It is called *The atlas of pelvic operations* and is illustrated by Miss Mildred Codding. It is clear from its popularity that this book is a most needed guide to the surgery of the pelvis. The operations described are those accepted and used in the Vincent Memorial Hospital and in Dr. Parsons's Service at Boston University. At this writing a new book, *The surgical treatment of cancer of the cervix,* is in press, to be published by Grune and Stratton. This book—a compilation of the writings of those who know this phase of the work best—will fill a great void, for there is no such book in existence. Twenty authors—seven of them from our Hospital—have contributed. There are contributions from most parts of this country and from Holland, Austria, and India. Our Hospital has contributed greatly to the renaissance of the radical surgery of cancer of the cervix and our results bear out the value of such procedures. There are other books in preparation, and if this sort of interest means anything, we feel that we have partly justified our existence. There have been many publications from the Hospital in the various medical journals on cancer of the cervix, uterus, and ovary, and studies on endometriosis, fibromas of the ovary with fluid in the chest and abdomen, the Stein-Leventhal syndrome, sterility, and many other allied subjects. All of our Staff members are active in investigations in both laboratory and clinical research.

Dr. John B. Graham is carrying out a yeoman service with the help of volunteers. He has been classifying all tumors and looking up the end results on all of our cases of malignant disease of whatever category. Soon it will be possible for us to report the five-year results of any tumor, in any stage, treated by surgery or radiation. This should establish a basis from which we can decide for or against any new method of approach. The catalogue will go back to 1927 and will be maintained currently. Such a follow-up should please such stalwarts as Dr. Ernest Amory Codman, a pioneer in the End Result campaign, were he only here to witness it. Besides doing this most necessary piece of work, the Grahams—John B. and Ruth M.—have, as Directors of the Vincent Memorial Research Laboratory and the Cytology Laboratory, respectively, continued their extraordinary researches into radiation response, its sensitivity, and its resistance. This piece of work, going on for eight years and utilizing slides from thousands of patients and untold numbers of experimental animals, is at the point where their study of cases is acceptable to a joint committee of the Radiology and Gynecology Departments, and on February 1, 1954 a new regime was established to study patients and decide by cytologic methods whether a patient should be radiated or operated upon. Our two Departments are in complete agreement on the problem, and the choice of treatment —radiologic or surgical—will be decided upon the Grahams' researches. Their work indicates that they can determine from stained vaginal smears whether a patient is resistant or sensitive to radiation. To our great joy this is to be a combined study, and a real endeavor will be made to instruct the radiologist and the gynecologist in the proper method of treatment. It is fortunate that through the generosity of the American Cancer Society and through the helpfulness of Dr. W. Jason Mixter, Trustee of the Proctor Fund, Dr. and Mrs. Graham of our Department and Dr. Milford D. Schulz of the Radiology Department had the privilege of spending some months in 1952-1953 in Sweden, to watch the treatment methods of the Radiumhemmet under the auspices of Dr. Hans L. Kottmeier. They saw other clinics, learned other methods, but have chosen a method similar to the Stockholm approach to use in the treatment in this series of cases. It is hoped that this whole plan will be adopted by others in our city, so that a greater number of cases may be studied and a greater number of those who are interested may be instructed in the method of attack. If the Grahams' beliefs were proved there would be no necessity for this experiment. Inasmuch as there is so little choice between surgery and radiation in the treatable cases, no harm can be done by selection of patients for one or the other form of treatment. The Grahams' publications describe the method by which the selection is made. In this report it is sufficient to say that certain basal cells in the vaginal smear show dark basophilic staining and fine vacuolization in the cytoplasm. A large percent of these cells indicates a probable good response to radiation; a lack, a poor response. The finding of such cells indicates that the patients have a sensitization response, or, for short, are said to have good S.R. It has been found that by means of testosterone and alpha tocopherol the population of these cells can be raised, changing a poor response into a good one. After the first part of the treatment by radium, the smears are watched for a response in the normal vaginal cells. In response to radiation the normal cells swell, become exfoliated, and assume bizarre shapes. If this response is present in sufficient amount the patient will be continued on radiation therapy; if not, she will be operated upon. We await with great interest the beginning and outcome of this experiment to intelligently select patients for cancer therapy. This is a recognized and much-needed test.

Besides this important study, Dr. and Mrs. Graham have a full and well-rounded attack planned on the problem of cervical cancer which should later be of value in the whole cancer problem.

In our laboratory Dr. Janet W. McArthur has made a very important discovery. For the first time a satisfactory and new hormone assay for the interstitial cell-stimulating hormone of the pituitary gland can be done, utilizing the ventral prostate of pituitarectomized mice. With this definite test to use, the whole problem of ovulation can be much better attacked, and normal and abnormal menstrual cycles studied. Dr. McArthur is helped from the clinical side by Dr. Ingersoll. It is our opinion that between them many difficult menstrual problems can now be better understood, and it is within the realm of possibility that the solution of the problem of ovulation and all that that means to many women, sterile and otherwise, may be solved.

Due to the excellence of these researches and the great vistas that they open, it is clear to me that additional space may be necessary for more technicians, fellows, and laboratories. The patient space is satisfactory as of today, but what these new investigations will bring about it is not possible to state.

The residents, who in their surgical training have a year in this atmosphere, are—we hope—much better able to serve the communities with safe and solid Gynecology than ever before. We would like more ward patients and more beds, but perhaps the size of our unit is what makes it possible to accomplish all we have done. We all feel that the Vincent has proved itself.

Joe Vincent Meigs, M.D.,
Chief of Gynecology Service

THE VINCENT SHOW

Announcement comes from the Vincent Club that the members are producing their annual Show for the benefit of the Vincent Memorial Hospital this year from March 24 through 27 at 8:30 each evening, with a matinee Saturday afternoon at 2:30. The Show will be given again at New England Mutual Hall, where the many small tables and varied refreshments make the occasion so congenial.

"A fig for a fancy" is the name of the original musical story written by Mrs. C. Campbell Patterson. The locales of the different acts promise to be most varied, and the amusing plot will be spiced with a great deal of music and dancing.

The provisional members and advertising committee of the Club have already secured over $24,500-worth of advertising for the program.

Tickets will go on sale on Monday, March 8, and the box office at New England Mutual Hall will be open thereafter Mondays through Fridays from 9:30 A.M. to 5:30 P.M. and on Saturdays from 9:30 A.M. to 1 P.M. Tickets range in price from $1.25 in the balcony to $5.00 for seats at tables. The box office telephone number is COpley 7-3535.

Dr. Madelaine R. Brown, Associate Neurologist on our Staff, was one of nine women physicians recently honored by the New York Infirmary with the Elizabeth Blackwell Citations. Dr. Brown was cited "for her work in neurology".

The Board of Trustees, at their meeting on January 22, voted:

To accept the resignation of Dr. Marianne R. Johnson, Assistant Anesthetist, effective February 7;

To rescind the appointment of Dr. Bernard Loitman as Assistant Resident in Radiology, as of July 1.

To promote:

Dr. Ernest A. Sneddon from Assistant Resident to Resident and Assistant in Anesthesia, as of November 1, 1953.

To appoint:

Dr. Barbara M. Orski as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Orjan T. G. Ouchterlony as Visiting Bacteriologist pro tem, effective as of January 11.

At their meetings on January 13, 20, and 28, the General Executive Committee voted:

To rescind the appointment of Dr. William E. Gatlin as Clinical Fellow in Radiology.

To reappoint:

Billy Baggett, Ph.D. as Assistant in Biochemical Research in Medicine, effective as of November 1, 1953;

Arnold F. Brodie, Ph.D. as Research Fellow in Biochemistry, effective September 1, 1953;

Dr. Jonathan B. Gill as Clinical Assistant in Psychiatry, for the period January 1 through June 30;

Dr. Teruyoshi Hashiba as Clinical and Research Fellow in Neurosurgery, effective February 1;

Dr. Theodore F. Hueter as Research Fellow in Physics, assigned to Neurosurgery, for one year, beginning January 1;

Theodore O. Macklin, A.B. as Research Fellow in Psychology, through June 30;

Dr. Henry Neiditsch as Fellow in Anesthesia for one year, beginning September 1;

Gershen Rosenblum, M.A. as Research Fellow in Psychology, for the period January 1 through September 30;

Dr. Ruth Weiss as Clinical Fellow in Psychiatry, for the period January 1 through June 30.

To appoint:

Dr. Daphne S. Anderson as Research Fellow in Dermatology for one year, beginning December 1, 1953;

Christine T. Bothner-By, Ph.D. as Research Fellow in Medicine, effective as of January 20;

Dr. Williams Cochran as Clinical Assistant in Orthopedic Surgery, with the privilege of assisting Dr. Otto F. Aufranc in the Baker Memorial and Phillips House, effective as of January 13;

Dr. Albert Heyman as Clinical Fellow in Neurology for six months, beginning January 1;

Dr. Pierre Johannet as Clinical Fellow in Psychiatry, beginning January 1;

Dr. Vernon H. Mark as Clinical and Research Fellow in Neurosurgery, for the period January 1 through June 30;

Dr. Kalervo A. Ohela as Research Fellow in Medicine, effective January 1;

Dr. Dieter Schmid as Research Fellow in Medicine for one year, beginning February 1 or soon thereafter;

Michael C. Schotz, Ph.D. as Research Fellow in Medicine, effective as of January 4;

Dr. Heinz R. Schroeder as Research Fellow in Neurosurgery, for the term January 1 through October 31;

Dr. Gordon B. Smith as Clinical Fellow in Medicine, for the period February 1 through April 30;

Irving Wolf, Ph.D. as Research Fellow in Psychiatry, assigned to Anesthesia, beginning January 1.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Ramaiyer Gouri Shankar and Dr. Michel Neveu are among the new arrivals at the Infirmary. Dr. Shankar has come to the ENT Service from his home in India. Since his arrival on January 8 he has spent his time in the Mosher Laboratory where he is studying for three months of his three-year residency.

Dr. Neveu was appointed a Fellow in Otolaryngology in December of last year. His study here is made possible through the exchange visitors program of Harvard University and a French Government fellowship. While in Paris, Dr. Neveu was the assistant to Professor Aubry. At present, he is also attached to the Mosher Laboratory.

Two Infirmary doctors have recently completed their residencies:

Dr. Yunis M. Sa'eed specialized in Otolaryngology and ended his training on February 24. He plans to fly to his home in Iraq, but to return to the States later.

Dr. William Lincoff completed his residency in Ophthalmology on February 1. At present he is practising at 317 East 9th Street in Chester, Pennsylvania.

Dr. LeRoy A. Schall attended several sectional meetings of the American Laryngological, Rhinological, and Otological Society, of which he is president. The different sections of the meetings were held in New York City on January 8; in Louisville, Kentucky, on January 16; in St. Louis, Missouri, on January 17; and in Portland, Oregon, on February 6.

From February 21 to 25 Dr. Schall attended the Third Latin American Congress of Otolaryngology, held in Caracas, Venezuela, where he presented, by invitation, a paper on "The indications, techniques, and results of total laryngectomy".

Dr. Paul A. Chandler went to the Virgin Islands recently, to take part in a Symposium on Cataract Surgery. He was accompanied by Drs. Howard Hill from Waterville, Maine, and William B. Clark from New Orleans, Louisiana. All three were in Havana on January 15 and San Juan on January 27, to participate in the lectures sponsored by the Pan-American Society of Ophthalmology.

The Institute of Pastoral Care has already issued its folder describing the summer school courses in Clinical Pastoral Training to be given in 1954. Information concerning the locations of these schools and their courses may be procured from Rev. James H. Burns, Chaplain Supervisor of the courses given here at Massachusetts General Hospital each year.

* * *

VOLUNTEER GROUP

MGH STAFF WIVES HOSPITAL COMMITTEE

The Staff Wives Music Committee, under the able direction of Mrs. Abraham L. Finesinger, is continuing its program of concerts for patients twice monthly in the MGH Chapel.

On Wednesday, February 17, the Winchester Trio—Adelaide Crowell Felmet, violin; Barbara Segerstrom, cello; Lucy Wilcox Cushman, piano—gave a program of light classics. The February 24th program presented Frances Lawrence, soprano, and John Woodworth at the piano.

On Tuesday, March 9, Phyllis Hardy Blodgett, contralto, will offer a selection of songs, with Shirley J. Norwood her accompanist.

Gladys de Almeida, soprano, will sing for the March 24th concert, accompanied by Mrs. Seth Turner Crawford, harpist.

The first tea of the new year for visitors from abroad and their families was given in the Medical Staff Room of the Bulfinch Building on Thursday, February 4. As usual, an enthusiastic group of staff and visitors attended the tea, during which all became better acquainted with one another.

Mrs. Grant V. Rodkey asks all who may know of available apartments to please notify her. She has many requests from visitors to help them get located. Mrs. Rodkey's telephone number is BElmont 5-6310.

* * *

CHEMISTRY LABORATORY

While delving into our MGH archives for the history of the Chemistry Laboratory we found that two years ago we must have had our 100th birthday, since it was in 1852 that our first Chemist to be listed as such was appointed. He was Dr. John Bacon, and he served the Hospital as Chemist until 1863, when he was obliged to resign because of ill health and the stress of his duties at the "Medical College". He was succeeded by a Dr. James C. White, who turns out to be our own "J.C." 's grandfather. In *Sketches from my life* by the earlier Dr. White we find that the year after his graduation from Medical School he was appointed an instructor in chemistry there and later was made Chemist to the Massachusetts General Hospital. He states that he "took charge of the students who cared to study Chemistry practically, both qualitative analysis and the examination of the urine". The present-day first year student in the throes of biochemistry at the Medical School must indeed regard those as "the good old days". Dr. White served for eight years, at which time he left to study dermatology in Vienna. It is comforting to note that he lived to the good old age of eighty.

Dr. White was succeeded by Dr. Edward S. Wood, who served as consultant from 1872 to 1905 and did all his work at the Medical School.

In 1896, shortly after the opening of the Clinico-Pathological Laboratory building, the need of a chemist here at the Hospital was felt and a chemical laboratory was provided on the third floor of the new building. The laboratory was later increased in size by the addition of a room over the carpenter shop in the then new Power House. As these two buildings were adjacent, a door cut in the partition wall made the laboratory rooms continuous. In 1897 Dr. Franz Pfaff was appointed as "Chemist, Clinical Laboratory". In 1899 his title seems to have been increased to "Chemist, Clinico-Pathological Laboratory", which position he held until 1904. No comment is made as to a change of duties to go with the lengthened title.

Dated February 8, 1906, the following letter was addressed to the Trustees from Dr. Arthur T. Cabot:

> At the Massachusetts General Hospital a man thoroughly expert in biological chemistry is greatly needed. Work of the greatest interest and importance might be done there and the opportunity is now going to waste for the lack of some good man to put it to use.
>
> If it were possible to spend about $3,000 a year on the chemical laboratory at the Massachusetts Hospital, we think we could obtain a man who would do satisfactory work there. Doubtless, if he proved as good a man as we expect, he would, in a year or two, wish to enlarge the opportunities of his laboratory by having adequate assistance, and probably before a very great while it would be necessary to raise his salary somewhat to hold him.
>
> We feel that there is no direction in which money could be spent to better advantage in connection with the work at the hospital. . . .
>
> The pathological laboratory would be greatly helped and its work made more thorough and more comprehensive by the association of a first rate chemist in the same building.
>
> We earnestly recommend, therefore, the appropriation of sufficient money to justify the employment of an efficient chemist. . . .

The "efficient chemist" appointed was Dr. William F. Boos, who held the position until he resigned in 1912. At this time Dr. Walter W. Palmer, later the distinguished Professor of Medicine at Columbia University and Chief of the Medical Service at the Presbyterian Hospital in New York, and Dr. L. Harry Newburgh, who later became Professor of Medicine at the University of Michigan, "carried" the Chemical Laboratory for a while under the supervision of Prof. Lawrence J. Henderson of the Harvard Medical School.

In 1913 Dr. Otto Folin was appointed Chemist, with Dr. Willey Denis Assistant Chemist. Dr. Denis was, incidentally, the first woman elected to the Staff of the Hospital. Dr. Folin acted only in a consulting and supervisory capacity and never made his headquarters at the Hospital.

Dr. Denis resigned in 1920 and Dr. James L. Stoddard was then appointed Chemist, with Dr. Folin serving as Consulting Chemist. Dr. Stoddard did his work in the new Chemical Laboratory on the third floor of the Bulfinch Building, provided when the east wing of that building was reconstructed in 1925.

There is a note in the records under 1924 which states: "One of the important practical results of the year has been the discovery of the cause for the rather frequent, harmful, and often serious reactions from the giving of intravenous glucose, which has resulted in the almost complete abandonment of this mode of treatment. Other work, as yet unfinished, includes investigations of blood proteins, and certain problems in the distribution of physiological substances of the body. The routine work for the year comprised the study of 5,366 specimens."

And under 1927 comes this note of particular interest: "During the year a beginning was made of the study of Na, and K, in relation to normal physiology and disease, and an electrolytic method was devised for the determination of Na and K", and the present laboratory staff might well add that the study is still being vigorously pursued! Among other things, Dr. Stoddard left the laboratory an excellent method for the measurement of blood fatty acids, which method is the one still used here.

In 1922 Miss Clara Durgin, a Massachusetts Institute of Technology Graduate in Chemistry, came on and served most ably under Dr. Stoddard. The laboratory thrived and under Miss Durgin's excellent supervision, which began in 1929, passed many of the city's future researchers, including Dr. Ropes in her premedical school days.

Notes in the record then state that in 1937 the laboratory turned out almost 19,000 determinations, and in 1938 the following note is made: "The importance of the Laboratory has increased tremendously in the past 25 years. Knowledge concerning abnormal blood changes and chemical faults within the body has done much to aid the clinician in the interpretation of illness and in the correction of these disturbances." For the same year it is noted that Dr. Means asked Dr. Fuller Albright to supervise the Chemistry Laboratory at "zero salary", and the record goes on to say: "He pointed out that he was not a chemist." We don't know whether Dr. Means was doing the pointing out or whether Dr. Albright was being modest, but the record continues: "However, it turned out that what was wanted was a go-between between Miss Durgin who was a Chemist, and the clinicians who would constantly be demanding various analyses." Then, when Dr. Sulkowitch came to work on research with Dr. Albright, he "lent a hand on the supervision of some of the tests being carried out by the Chemistry Laboratory."

In 1939 Miss Durgin left to work in food analysis at M.I.T., but she returned to the Chemistry Laboratory in 1950 as Secretary, which position she now holds and, with her background, is of inestimable value.

For a couple of years following Miss Durgin, Dr. Eunice Moore took charge, but left to enter industry in 1943. Following her departure, due to an acute shortage of trained personnel, the laboratory went into a tail spin and reorganization again took place.

In 1944 Dr. Allan M. Butler, Chief of the Children's Medical Service and an excellent chemist, was appointed staff physician in charge of the Chemistry Laboratory. Two more rooms, plus some much-needed new equipment, were added to the physical set-up. Margaret Rourke, schooled for three years under Drs. Butler and James L. Gamble as Clinical Chemist at the Children's Hospital, plus seven years on the MGH Surgical Research Service and a tour of duty with the Army as added fortification, was set loose on the fourth floor of the Bulfinch. A long, hard pull followed but the laboratory grew slowly in the services it offered the Hospital, which soon included a 24-hour day, 7-day week coverage provided by the regular daytime crew, which is concomitantly making the diagnosis of diabetic acidosis an ominous one and prompting the choice of "The sugar blues" as the laboratory theme song.

The laboratory also opened its facilities to the various research groups in the Hospital, who then sent in huge numbers of determinations by contract, including several complete metabolic studies from Ward 4.

By 1950 the determination load per year had not only more than doubled its 46,000 of 1944 but had quadrupled its variety, and the walls were practically pushed out for lack of space to work in.

In the summer of 1951 Miss Rourke left in pursuit of more education, accepting a teaching fellowship in biochemistry at the Tufts Medical School, and, again, reorganization ensued. No longer did it seem advisable to have the day crew serve for 15 or 18 hours of continuous duty to cover emergencies, so adequately trained personnel were added to the group for night and Sunday coverage. Active plans were made to move the laboratory to more workable quarters in the Domestic Building, to increase the personnel, and to restore the laboratory to its previous dignity of having a physician-chemist in charge—not merely as a go-between and consultant, but as an active participator in the work of development of the laboratory activities and with his office in the laboratory suite. Dr. Charles H. DuToit was selected as being just the man, having completed the full run of duty on the Medical House Staff, plus having worked with Dr. Hastings at the Medical School and Dr. Lipmann at the M.G.H. He went on active duty in the Chemistry Laboratory in September 1952 and at the same time Miss Rourke, with her head full of chemistry, rejoined the team. The Chemistry Laboratory was then made a part of the Medical Department, under Dr. Bauer, and exactly a year later moved to its new quarters on Domestic 3, and was again bolstered up with some much-needed equipment.

A steady stream of workers from other countries continues to pass through the laboratory and will, we hope, carry a few pearls back to their native lands.

The laboratory should continue to grow and to offer increasing service to the Hospital and the physicians connected with it.

We live on Domestic 3. Come up and see us some time!

G. Margaret Rourke, M.S.,
Research Associate

Brief bits:

On February 1, Dr. Walter S. Burrage addressed the American Academy of Allergy in Houston, Texas, during its Tenth Annual Meeting. His subject was "Effects of histamine and epinephrine on the small pulmonary blood vessels of living rabbits". This paper was illustrated by a 16 mm colored motion picture film. The paper and motion picture were prepared by Drs. Burrage, J. W. Irwin, J. I. Gallemore, and D. M. K. Wang. On the same day, Dr. John W. Irwin addressed the same group on the subject "Maintenance cortisone in intractable asthma: Preliminary observations of undesirable cortisone effects". This paper was prepared by Drs. J. W. Irwin, P. H. Henneman, D. M. K. Wang, and W. S. Burrage.

Dr. Earle M. Chapman delivered two lectures during the month of February. On February 6 he addressed the Student Seminar on the Modern Therapy of Hyperthyroidism at the University of Maryland; on February 22 he gave a lecture at the Atlanta Graduate Medical Assembly in Atlanta, Georgia.

Dr. Alastair J. Gillies is now an Assistant Professor of Anesthesia. His address is Strong Memorial Hospital, Rochester, N. Y.

When Dr. Walter G. Phippen retired last year as President of the Staff of the Salem Hospital, the Trustees and Staff of that hospital presented him with an order to have his portrait painted. This was done bv Harry Sutton of Andover, and the portrait has been on exhibition at the Guild of Boston Artists.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Sprague, H. B., and Ongley, P. A.
The clinical value of phonocardiography.
Circulation 9:127-134.

Dermatology

Lever, W. F., Smith, P. A. J., and Hurley, N. A.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. I. Clinical data and analysis of the plasma lipids.
J. Invest. Dermat. 22:33-51.

Lever, W. F., Smith, P. A. J., and Hurley, N. A.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. II. Analysis of the plasma proteins and lipids by means of electrophoresis and fractionation of the plasma proteins; effects of high speed centrifugation and of extraction with ether on the plasma proteins and lipids.
J. Invest. Dermat. 22:53-69.

Lever, W. F., Smith, P. A. J., and Hurley, N .A.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. III. Effects of intravenously administered heparin on the plasma proteins and lipids.
J. Invest. Dermat. 22:71-83.

Swartz, J. H.
Classification of fungi. (Chart)
In Handbook of Tropical Dermatology and Medical Mycology, vol. 2, R. O. G. Ph. Simons, Editor, Amsterdam, Holland, Elsevier Publishing Company, p. 1014. (1953)

Swartz, J. H.
Physiology of fungi: Growth and reproduction.
In Handbook of Tropical Dermatology and Medical Mycology, vol. 2, R. O. G. Ph. Simons, Editor, Amsterdam, Holland, Elsevier Publishing Company, pp. 1028-1032. (1953)

General Medicine

Albright, F., Henneman, P., Benedict, P. H., and Forbes, A. P.
Idiopathic hypercalciuria: A preliminary report.
Proc. Roy. Soc. Med. 46:1077-1081. (1953)

General Surgery

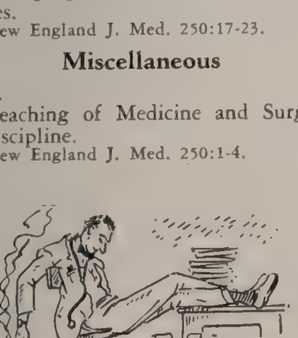
McDermott, W. V., Jr., and Adams, R. D.
Episodic stupor associated with an Eck fistula in the human with particular reference to the metabolism of ammonia.
J. Clin. Investigation 33:1-9.

Surgery—Reconstructive

Cannon, B., and Murray, J. E.
Medical progress—Plastic Surgery: Facial injuries.
New England J. Med. 250:17-23.

Miscellaneous

Cope, O.
The teaching of Medicine and Surgery as one discipline.
New England J. Med. 250:1-4.



BIOGLETS

Dr. Norman R. Bernstein, Assistant Resident in Psychiatry—born in New York City, October 12, 1927; U.S. Army: Valley Forge General Hospital, 1946-47; B.A., Cornell University; M.D., New York Medical College, 1952; Intern, Flower-5th Avenue Hospitals, 1951-52; Resident in Psychiatry, Kings County Hospital, Brooklyn, N. Y., 1952-53; married; home: New York City.

Dr. Julio Toriello, Assistant Resident in Radiology—born in Guatemala City, Guatemala, January 16, 1923; Bachelor in Sciences and Letters, National Institute, Guatemala, 1940; Bachelor in Medical Sciences, Universidad de San Carlos, Guatemala, 1944; M.D., Escuela Medicine, Universidad de San Carlos, 1951; Intern, Hospital General de Guatemala, 1951-52; Clinical Fellow in Radiology, Massachusetts General Hospital, 1952-53; military service: Assimilated Mayor to the Guatemalan Army; married; one son.

Dr. Jan Wolff, Intern in Medicine—born in Düsseldorf, Germany, April 25, 1925; school in Holland, 1935-37; came to the United States, 1937; A.B., University of California, 1945; M.A., University of California, 1946; Ph.D., University of California, 1949; M.D., Harvard Medical School, 1953; permanent address: San Anselmo, California.

♣ ♣ ♣

The new tennis court near Bartlett Hall, which was in almost constant use for tennis up to cold weather, was then flooded for skating. We wish we might have secured a motion picture, in color, of the attempted serpentines and roslos and islis circle 8's which we witnessed on a few occasions—to say nothing of some ultra-dramatically executed spills!

♣ ♣ ♣

A subject of paramount importance with some writers and speakers still continues to be "To split or not to split"—the infinitive, we mean. For more than five years we have been hoping that available space in THE NEWS would permit us to submit our credo to this ever-active symposium.

To state our stand briefly—it seems to us that the English-speaking world is sharply divided into two distinct groups: the non-splitters (which, incidentally, tend to include also the shall-ers and the that-ers—but those are separate subjects, and not for now), and the splitters (together with the will-ers and the which-ers). It matters not to the first group that many of the old arbitrary rules of writing and speaking have become outmoded. It matters not to them that all of us have extricated ourselves from most of the subjunctive mood shackles that were clamped tight round our writing hands up to a few years ago. It matters not to them that "I don't think that . . ." is not only allowable now, but is used by most careful scholars today, when only a short time ago such an expression was tantamount to grammatical heresy. We remember when, once, we stood alone before a well-known English professor, armed only with our strong conviction on this subject, and fought down to a victorious finish such futile arguments as "It is incorrect to say you 'don't think', because you *are* thinking either consciously or subconsciously every moment of your existence." He would not admit at first that there was a difference in meaning between "I don't think it will rain today" and "I think it will not rain today"—would not admit to a meaning of doubt about the outcome of the weather inferred in the first expression, but eliminated in the second by a positive statement regarding rain. Our counterattack was, "Then a whole category of similar verbs must be included in your rule. For instance, 'I don't live in Chicago' or 'I don't breathe as easily when . . .'—all such expressions are incorrect according to your argument, because I *do* live all the time (so far) and I *do* breathe all the time." Finally, to our own satisfaction and the professor's reluctant admission, that particular rhetorical ogre went down to defeat.

But back to this split infinitive subject. In all seriousness, it seems to us to be no more heinous a crime to separate a verb from its *prepositional* auxiliary than from its *verbal* auxiliary, the latter of which has always been acceptable. Who would ever quibble over "I shall promptly send you my check", with the "shall send" divided? But who among the non-splitters would subscribe to "I shall arrange to promptly send you my check", with the "to send" separated?

It is true and understandable that each of us has his own particular sensitivities concerning written or spoken expressions, and we are no exception. For instance, we writhe every time we hear or read that generally used but utterly ungrammatical phrase, "Tell us in 25 words or less why you . . .". And we are quite willing to allow the non-splitters their writhing privileges whenever they encounter a split infinitive. It is also true that we would not go out of our way, armed with a razor-edged ax, hunting for infinitives to split. But it does seem to us that a smoothly running sentence is more important than to forfeit euphony for the sake of adhering to a debatable rule in Fowler, or wherever.

This might be a good time to recall Sir Winston Churchill's delightful rejoinder to the editor who had blue-penciled one of Sir Winston's sentences which he had ended with a preposition. You may recall that his retort was something like, "This is the sort of thing with which I will not put up." In contrast to this, we remember an incident that occurred not so long ago. The writer of an article for publication had called upon three careful readers to comb his material for any possible errors, after which he gave it his own last grooming. With horror on his face and in his voice he said to us, "Just imagine it! After all that checking and rechecking, I found one split infinitive!"

However, whether you are a splitter or a non-splitter, we believe you will enjoy reading a classic on the subject that appeared in the *Saturday Review* of March 27, 1948. The letter of permission to reprint this article in THE NEWS asked us to make a note of the fact that the piece was quoted from the *Chemical Digest,* a publication of Foster D. Snell, Inc., New York City, "with apologies to the author whose name we have been unable to learn". Here is the article:

SPLITTING THE INFINITIVE

"One of the most closely guarded secrets of the era can now be told, how an anonymous group of grammarians, working in secrecy in a remote section of

No. 46 in a series of Staff photographs
Dr. Charles H. DuToit, Assistant Physician—Chief of the Chemistry Laboratory

the country, have finally succeeded in splitting the infinitive.

"The so-called 'Bronx-Project' got under way in 1943, with the installation of a huge infinitron specially constructed for the job by Cal Tech philologists. Though the exact details are still withheld for reasons of security, it is possible to describe the general process.

"From a stockpile of fissionable gerunds, encased in leaden clichés to prevent radioactivity, a suitable subject is withdrawn and placed in the infinitron together with a small amount of syntax. All this material must be handled with great care, as the slightest slip may lead to a painful solecism. Once inside the apparatus, the gerund is whirled about at a great speed, meanwhile being bombarded by small particles. A man with a Gender Counter stands always ready to warn the others if the Alpha-Betical rays are released in such high quantities as to render the scientists neuter.

"The effect of the bombardment is to dissociate the whirling parts of speech from one another until at length an infinitive splits off from its gerund and is ejected from the machine. It is picked up gingerly with a pair of hanging clauses and plunged in a bath of pleonasm. When it cools, it is ready for use.

"The question is often asked: Can other countries likewise split the infinitive? I think we can safely answer, 'No.' Though it is true that Russia, for one, is known to have large supplies of thesaurus hidden away behind the Plural Mountains, it is doubtful if the Russians possess the scientific technique. They have the infinitive but not the know-how.

"And that is something on which to congratulate our own brave pioneers in the field of grammatical research. Once it was thought that the infinitive could never be split—at least, not without terrible repercussions. We have shown that it is quite possible, given the necessary skill and courage, to unquestionably and without the slightest shadow of a doubt accomplish this modern miracle.

"See how easy, once you know how?"

New addresses:—

Dr. Leslie Corsa, Jr. (a. *C.M.* 1954), Stanford University Medical School, Stanford, Calif.
Dr. Chester C. d'Autremont (r.p. *N.* 1948), 82 Marlborough St., Boston, Mass.
Dr. James E. Fish (*E.S.* 1930), Lahey Clinic, 605 Commonwealth Ave., Boston, Mass.
Dr. Falls B. Hershey (*E.S.* 1947), Barnes Hospital, St. Louis, Mo.
Lt. James A. O'Shea, MC, USNR (a.r.p. *C.M.* 1950), *General M. B. Stewart* (T-AP-140), Military Sea Transportation Service, Atlantic Area, c/o Fleet Post Office, New York, N. Y.
Dr. Morton N. Swartz (*M.* 1948), McCollum Pratt Institute, Johns Hopkins Hospital, Baltimore, Md.
Dr. D. Vernon Thomas (a. an. 1952), Strong Memorial Hospital, Rochester, N. Y.
Dr. Paul Wilkin (clin. & res. fel. *S.* 1953), c/o Dr. Earl Engle, Presbyterian Hospital, 620 West 168th St., New York, N. Y.

We have received our first communication from Dr. Eugene Walker, Assistant Director at Massachusetts General Hospital from 1913 to 1920. His letter, giving as his new address The Rubicon, Fairyland, Pembroke, Bermuda, contains a full-page Christmas greeting which he sent to the staff and nurses of the Springfield Hospital, where he has been serving as Superintendent. The greeting is headed by a pen-and-ink drawing, showing Dr. Walker with one foot planted in Bermuda and the other leaving Springfield, and with hat doffed in farewell to the continent.

The greeting says, in substance, that Dr. Walker retired from Springfield Hospital on June 30. After a trip through New England and up to Canada, he arrived in Baltimore on August 14, to substitute for three months for the Director of the Hospital for the Women of Maryland. Dr. and Mrs. Walker left New York for Bermuda on November 14, in time to see Queen Elizabeth and the Duke of Edinburgh when they visited Bermuda.

His letter to us reads:

> To amplify, we not only saw the Queen and her Duke, but Churchill, Laniel, and Eisenhower, not to mention the Royal Welch Fusiliers with their mascot — a goat.
>
> Have moved into our house that we left in 1927 to go to Lakeside Hospital in Cleveland, Ohio. Moved to the Springfield Hospital in Massachusetts in March 1931.
>
> Now to enjoy life in Bermuda, I hope.

This note from Dr. Elizabeth F. Aub (*M.* 1952) was enclosed with her renewal to The News:

> Since I left the General I spent a year in Pediatrics at the Children's Medical Center in Boston. I am now in Psychiatry at the Boston Psychopathic Hospital.
>
> I have just become engaged to Dr. Robert C. Reid, Harvard Medical School Class of '51, who is also a resident at the Boston Psychopathic.
>
> I thoroughly enjoy reading The News and find it a good wav to keep up with what is happening to old friends.

This note has come from Dr. Joseph E. Warren (clin. fel. *M.* 1953):

> After leaving the General last year I began working here at the University of Pittsburgh in research and teaching, especially in relation to arthritis and rheumatism. Things are just getting under way, and I hope to be able to send you more information for The News a little later in the year.

THE NEWS
MASSACHUSETTS GENERAL HOSPITAL 1811
No. 133 Boston, Mass. April 1954

UROLOGICAL SERVICE

The Urological Service at the Massachusetts General Hospital was started as a special department of the Hospital in 1911. The service was inaugurated through the direct efforts of Dr. Hugh Cabot, and was the first of its kind in New England. Previous to this, the genito-urinary surgery of the Hospital was performed by such able general surgeons as Dr. Arthur Tracy Cabot, Dr. Francis B. Harrington, Dr. Franklin G. Balch, Dr. E. A. Codman, Dr. Lincoln Davis, and others. The greatest single contribution to genito-urinary surgery was made by Dr. Henry Jacob Bigelow, visiting surgeon to the Hospital from 1846 to 1886. Dr. Bigelow designed the instruments for litholapaxy or the crushing of bladder stones and evacuation of their fragments. He perfected the technique of this operation and presented it to the medical profession in 1878. His instruments and technique are used today with but minor variations.

Since these early days, the Urological Service has continued as an entity at the Hospital. Dr. Cabot was succeeded as chief of the service by Dr. J. Dellinger Barney, Dr. George Gilbert Smith, and then by the present chief in 1945. The service has grown since its early days, and for many years has graduated one resident each year who is well prepared and capable of performing any urological procedure. The close association with other services at the Hospital—medical and surgical—has provided him with a broad outlook. Clinics and conferences have stimulated an interest in teaching. Sound judgment has been acquired through responsibility.

During the past year the volume of work performed by the service has remained at about the same level as in the previous ten years. In 1953 there were 483 admissions to the house service and 426 operations were performed. The record for the year was unusually good. There were but seven operative deaths—a mortality of 1.6 percent. Over a third of the operations on the service were for prostatic obstruction. There were 160 such operations during 1953, with one death—a mortality of 0.62 percent. The death followed a suprapubic cystotomy on an elderly, feeble patient. When one considers the advanced age of many of these patients and their frequent complicating conditions, this is an excellent record, with the lowest death rate for any year over a ten-year period. It is a tribute to the ability and interest in the care of patients of our present resident, Dr. Thomas J. Mathieu.

The type of operation performed for prostatic obstruction is of some interest. With us there has been an increasing tendency to treat large benign glands by open operation rather than by transurethral resection. Emphasis has always been, however, on providing our residents with adequate experience in all of the well-recognized types of prostatic surgery. The 160 prostate operations performed during 1953 by the resident staff were distributed as follows:

TYPE OF OPERATION		
Transurethral resection	88 — 55	percent
Suprapubic prostatectomy	58 — 36.25	"
Perineal "	9 — 5.62	"
Retropubic "	5 — 3.13	"

There have been no deaths due to pulmonary embolism following prostatic surgery during the past six years. There were two patients during this period whose deaths were considered due to cardiac disease, but no autopsies were performed. Formerly, about 25 percent of our deaths were due to such emboli.

Some of the other major surgical procedures performed by the resident staff in 1953 were: nephrectomies (lumbar or thoracolumbar) 15, nephro or pyelonephrotomies 11, ureterolithotomies 17, partial nephrectomies 3, renal or adrenal explorations 9.

It has been our impression that some of the services of the Hospital have suffered from the establishment of other nearby clinics and institutions supported by private or public funds. Also, that many of the local community hospitals are now so well staffed by competent surgeons and surgical specialists that they no longer need to refer their patients to hospitals such as ours. This is doubtless true. However, the record of admissions and operations on the Urological Service over the past nine years fails to show any great variation. The number of Hospital admissions, operations, and the operative mortality on the Urological Service from 1945 through 1953 are given in the following summary:

UROLOGICAL SERVICE

	House admissions	Operations	Operative mortality	Prostate operations	Prostatic mortality
1945	437	446	15 – 3.36 percent	194	7 – 3.60 percent
1946	480	468	6 – 1.28 percent	198	3 – 1.51 percent
1947	489	459	9 – 1.96 percent	162	4 – 2.46 percent
1948	450	441	17 – 3.85 percent	168	6 – 3.57 percent
1949	512	526	21 – 3.99 percent	180	9 – 5.00 percent
1950	477	477	24 – 5.03 percent	171	7 – 4.09 percent
1951	499	398	11 – 2.76 percent	198	2 – 1.01 percent
1952	452	371	13 – 3.50 percent	181	3 – 1.65 percent
1953	483	426	7 – 1.64 percent	160	1 – 0.62 percent
Totals	4279	4012	123 – 3.06*	1612	42 – 2.60*

*Average percentage mortality

The Urological Service provides a sound residency training program for those whose surgical background is adequate. A close relationship with other services—medical and surgical—gives the resident a broad outlook. The responsibility of running the service, seeing consultations, and organizing clinics builds up confidence and sound judgment. More opportunity to stimulate an interest in investigative work is desirable, to improve and round out the resident's training.

Fletcher H. Colby, M.D.,
Chief of Urological Service

RICHARD BRUCE KING

East Medical 1927

E. M. Resident 1928

Many people, professional associates, patients, and friends are saddened by the death on March 9 of Richard Bruce King. Dr. King was both a charming gentleman and a skillful and beloved physician. His passing in the prime of life is indeed tragic. For many years, with great fortitude and courage, he endured his protracted illness and disability.

Born on December 22, 1899, his preparatory school was the Friends School in Washington, D.C. He graduated from Princeton in 1921 and from the Harvard Medical School in 1925. He was highly thought of as a fourth year student in medicine at the Massachusetts General Hospital. This led to his being chosen medical intern. His excellent performance as intern was the cause of his selection as medical resident. In those days there were but two medical residents, one on each service.

Following his house staff days he entered private practice in Boston, and for many years was associated with the late Dr. George R. Minot, E.M. 1913. He retained his visiting staff position at the Massachusetts General Hospital until a few weeks before his death. For many years, too, he served on the teaching staff of the Harvard Medical School. Recently he had become a member of the Medical Associates of the Massachusetts Memorial Hospitals, a new and interesting adventure in group practice.

He leaves his wife, Marian (Stevens); a daughter, Miss Marian S. King of Cambridge; a son, Richard B., Jr., USN; and a brother, Gilbert King of Chestnut Hill.

[J. Howard Means, M.D.] J. H. M.

The Board of Trustees, at their meetings on February 3 and 19, voted:

To accept the resignation of Dr. Richard B. King from the position of Clinical Associate in Medicine.

To appoint:

Dr. Agnes S. Burt as Assistant in Pathology;

Dr. Richard B. Cohen as Assistant in Pathology;

Dr. Majic S. Potsaid as Second Assistant Resident in Radiology, beginning July 1;

Dr. Eli C. Romberg to the Board of Consultation, as of July 1, 1953;

Dr. David Spiro as Assistant in Pathology, as of July 1;

Dr. John D. Stoeckle as Assistant Physician, as of January 11.

At their meetings during February, the General Executive Committee voted:

To reappoint Dr. George W. Geiss as Clinical Fellow in Physical Medicine for one year, beginning April 1.

To appoint:

Dr. Mary L. Bertucio as Clinical and Research Fellow on the Children's Medical Service, effective July 1;

Dr. James V. Cable as Clinical Fellow in Medicine, beginning March 1;

Dr. Aristomenis Delivanis as Clinical and Research Fellow on the Children's Medical Service, effective March 1;

Dr. Max P. Dondey as Research Fellow in Neurology, for the period February 1 through October 31;

Albert W. Frenkel, Ph.D. as Research Fellow in Biochemistry, beginning February 5;

Dr. Jeanne M. Horan as Assistant Resident on the Children's Medical Service, for the months of March and April;

Dr. Margaret A. Hunt as Clinical and Research Fellow on the Children's Medical Service, effective July 1;

Dr. Domenic G. Iezzoni as Clinical and Research Fellow on the Children's Medical Service, effective July 1;

Dr. Harrison O'Connor as Clinical Fellow in Orthopedic Surgery for one year, beginning January 1;

Dr. Andrés Rosselli as Clinical and Research Fellow in Neurology for one year, beginning February 1;

Dr. Guy Vourc'h as Senior Fellow in Anesthesia, beginning July 1.

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PERIPHERAL VASCULAR CLINIC

Since the last report on the Peripheral Vascular Clinic, published in a 1949 issue of The News, the keynote of the Clinic has been progress, both in the better care of the patients and in the field of vascular research.

From the clinical viewpoint, the Out-Patient Clinic is held on Tuesday morning of each week, when problem cases of peripheral vascular diseases are seen. Many are referred into the Hospital wards for surgical treatment, where they are again evaluated and presented at the regular Thursday morning Rounds in the Bigelow Amphitheatre. Most of the standard operative procedures are still performed for the various types of diseases, and new advances have been made —particularly in the treatment of diseases of the aorta and the major arteries. The use of blood vessel grafts in the treatment of aneurysms—even of the abdominal aorta, and of obliterative arteriosclerotic arterial disease of the lower extremity—has opened up a vast new field in vascular surgery. During the past year the treatment of aneurysms of the abdominal aorta and major arteries has been performed successfully in a number of cases by excision of these lesions, and the restoration of arterial continuity achieved by utilizing homologous aortic and arterial grafts. The immediate outlook for a patient with obliterative arteriosclerotic arterial disease of the lower extremities has been improved as a result of this new technique, by using similar vascular grafts to bypass areas of occlusion in the arteries and restore arterial continuity to the distal part of the limb. This new type of surgery has been made possible through the establishment of an Artery Bank by Dr. Robert S. Shaw.

The Peripheral Vascular Laboratory, which was under the direction of Dr. Fiorindo A. Simeone until he left in June 1950 to become Professor of Surgery at Western Reserve Medical School in Cleveland, Ohio, has been very active in the study and research of peripheral vascular diseases. After Dr. Simeone left, the Laboratory was under the direction of Dr. John J. Cranley until he moved to Cincinnati in 1952. Then, in January 1953 Dr. Robert S. Shaw was appointed to take charge. In addition to these men there has been a succession of younger men from other clinics who have come to work in our Clinic and Laboratory and learn our techniques, then returned to their institutions to carry on in this field. These include Dr. Davitt A. Felder, who came from Minneapolis in 1948 and returned there in 1950; Dr. John J. Cranley, who came from the Boston City Hospital in 1949 and remained here until 1952, when he moved to Cincinnati; Dr. James L. Buchanan, who came from Pittsburgh in 1950 and returned there in 1952; and Dr. Charles V. Menendez, who came from New Orleans in 1951 and is still with us. In addition, the Laboratory has been most fortunate in having the services of Mrs. Ida R. Gordon, who has been our technician since June 1950. Her assistance has contributed greatly to the success of the Laboratory.

Following are some of the important contributions from our Laboratory:

The perfection of the Grass digital plethysmograph for the study of arterial circulation was carried out in the Laboratory by Drs. Simeone and Cranley. This is an extremely sensitive instrument for measuring changes in blood flow, that is of special value in determining the efficacy of various methods of improving the arterial blood flow to the distal part of the limb.

Dr. James L. Buchanan studied the direct effect of cold on the arterioles and capillaries, utilizing the Grass plethysmograph, and found that the response varied greatly in different individuals but was most marked in patients with Raynaud's disease. This response was observed even following adequate sympathectomy and, it is believed, explains the failure to completely relieve some of the patients with this disease. This instrument was also used in the operating room in cooperation with Dr. Donald P. Todd, to measure the effect of various anesthetic agents on the circulation of the digits of the extremity, both before and after sympathectomy.

During the past four and one-half years, it has been possible to carry on the Laboratory and many of these studies through the aid of a yearly grant from the U.S. Public Health Service. Under this grant a carefully integrated study of immediate and late effects of an adequate lumbar sympathetic ganglionectomy is being carried out on a group of patients with obliterative arteriosclerotic arterial disease of the lower extremities.

Since Dr. Robert S. Shaw has taken over the Laboratory, he has developed a bank for the storage of blood vessels which are used to replace segments of "worn-out" arteries, due either to aneurysms or occlusive arterial diseases. These blood vessels, for the most part, are obtained at autopsies. Like the Eye Bank, we now need to request permission from relatives or patients to remove the various blood vessels—especially the aorta, and the iliac and the femoral arteries, since these are the ones which are most frequently required for replacement. The blood vessels are sterilized at the Massachusetts Institute of Technology by irradiation with the 2-million-volt cathode ray machine, and then stored in carbon dioxide ice.

The facilities in our Laboratory have been greatly improved during the past year since we moved into the new Research Building, where we now have two well-constructed temperature-control rooms where we may carry out many of the studies which are necessary in this field. As a result of all this cooperative enterprise, it has been possible to keep abreast of the newer advances in the field of vascular surgery and, we believe without question, more and better work will be forthcoming from the Clinic and the Laboratory.

Robert R. Linton, M.D.,
Head of Peripheral Vascular Clinic

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable time and trouble when you fail to include it.

Your title should be classified with respect to the subject matter and not under the Hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Medicine

Graham, J. R., and Scatterfield, A. P.
Headache problems: Some helpful suggestions.
Boston, Headache Research Foundation.

Laboratory Science

Matoltsy, A. G.
A simple microcinematographic apparatus for biological studies.
Lab. Invest. 3:66-70.

Matoltsy, A. G.
Studies on the action of p-phenylenediamine on living cells.
J. Invest. Dermat. 21:447-455. (1953)

Otolaryngology

Kelemen, G.
Symmetrical enlargement of submaxillary salivary glands in the aged.
Geriatrics 9:70-74.

Pathology

Tejada-Valenzuela, C., Toriello, J., and Thomas, W. A.
Structural changes in intrapulmonary arteries exposed to systemic pressures from birth.
A.M.A. Arch. Path. 57:51-61.

* * *

Now that spring weather is drawing near, it has occurred to us that the time has come to present the subject of an inter-hospital tennis tournament, so that those of our Visiting and House Staff who are good tennis players (and we can verify that there are several) may begin their practice of the game with a definite object in view—that of retrieving the trophy lost to the Brigham almost ten years ago.

The best way to give you the story of the trophy is to quote an article by Dr. Faxon which appeared in the November 1944 issue of THE NEWS. It reads:

> About a month ago Miss Holbrook, archivist, showed me a silver pitcher which was inscribed the "Sir Cuthbert Wallace Inter-Hospital Tennis Trophy No. 2, presented by Dr. Harvey Cushing". On it were inscriptions which showed that the Peter Bent Brigham Hospital had won this trophy twice and that the Massachusetts General Hospital had won it three times, the last being in 1929.
>
> In the spring of 1922 Sir Cuthbert Wallace of London gave a cup in order to give impetus to friendly inter-hospital tennis rivalry. To own the cup, a given hospital team should win it on three occasions. The hospitals originally included in the contest for the cup were the Peter Bent Brigham, the Massachusetts General, the Homeopathic, the Children's, the Psychopathic, and the Boston City Hospital. The tournament created much amusement. The Brigham Hospital won the cup in 1922, 1923, and 1924, thus holding it forever. Dr. Cushing, in 1925, offered the "Sir Cuthbert Wallace Inter-Hospital Tennis Trophy No. 2", to be played for until it could bear no more inscriptions.
>
> Inquiry as to why this trophy has not been played for since 1929 has brought forth a multitude of conflicting statements, from which emerges only the certainty that there is no official record that it has been played for since then.
>
> It seemed unfortunate that the friendly rivalry in sports between the hospitals, encouraged by reason of this trophy, should not be continued; and, consequently, the Brigham was asked if they desired to challenge for the trophy—a request which met with their hearty approval. Matches were arranged to be played on Sunday, September 24, 1944, on the Brigham grounds. The result was that the Brigham won three out of four singles matches and both of the doubles.
>
> It is hoped that these annual tennis matches may be continued.

It wasn't until September of that year that the trophy was uncovered. Our players had little or no time to prepare for the matches, and it was no surprise to anyone that we went down to almost complete defeat. But the situation is different now. With this proposal made so early in the season and with our fine new tennis court so conveniently at hand for practice, we should be able by tournament time to stand a good chance of bringing the trophy back to M.G.H. How 'bout it, you tennis players? Let's challenge and beat Brigham!

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary welcomes several new visitors to its clinics and laboratories. Among the recent arrivals are the following:

A. Dale McMullan came here from Seal Harbor, Maine, on February 23. Mr. McMullan is at present working with Dr. Weille as a technical assistant. He plans to spend at least eight months at the Infirmary.

Dr. Claude Dube came here from Campbellton, New Brunswick, and has just completed the Postgraduate Course in Ophthalmology. He is now observing the Ophthalmic Service for three months.

Dr. Eric M. Swanson, a Heed Fellow, is visiting the Infirmary for two months. During this time he is observing in the clinics and operating rooms.

Dr. Rameshwar Lal Pahwa is here from Delhi, India, for two weeks of concentrated training in corneal graft surgery and related techniques, under Dr. Garrett L. Sullivan. Dr. Pahwa has just completed his Postgraduate Course in Ophthalmology.

Meetings held at the Infirmary during the past month included that of the New England Ophthalmological Society on March 17 and the Alumni Meeting from March 20 to 22.

The New England Oto-Laryngological Society will meet here on April 21.

The American College of Surgeons met in Montreal, Canada, March 31 through April 2. Dr. Edwin B. Dunphy and Dr. LeRoy A. Schall were speakers. Dr. Samuel T. Adams, a graduate of the Infirmary in 1951, was also one of the speakers. Dr. Adams is now living in Montreal.

Dr. George Kelemen attended the Pan-American Congress of Otolaryngology in Mexico City, where he remained until March 14. Dr. Kelemen presented a lecture at the meeting.

Dr. Daniel E. M. Martinez, whose home is in Mexico City, also attended this meeting and then visited with his family.

Brief bits:—

Dr. Joseph S. Barr gave two lectures in February before the Mid-South Postgraduate Assembly, in Memphis, Tennessee.

Dr. Walter S. Burrage was guest speaker at a meeting of the Philadelphia Allergy Society on February 24. His subject was "The small pulmonary vessels of living mammals".

Dr. Bradford Cannon spoke on "Facial injuries", at the Sectional Meeting of the American College of Surgeons, held in Montreal on March 31.

In January, Dr. Edward D. Churchill participated in the course on Medical Care of Atomic Casualties, given at the Army Medical Service Graduate School in Washington, D.C. On February 8, at the invitation of the Yale Medical Society, through Dr. William W. L. Glenn (a.r.s. 1946), Dr. Churchill spoke on "Problems in wound healing". The address was preceded by a dinner given by the Society in Dr. Churchill's honor.

Dr. Fletcher H. Colby was elected Vice-President of the Clinical Society of Genito-Urinary Surgeons, at a meeting of the Society held in Los Angeles on February 23.

Dr. and Mrs. Nathaniel W. Faxon have returned from a six-weeks' motor trip through the South. After spending Christmas with their son who is with the U.S. Navy Air Force at Key West, they journeyed to New Orleans and then back to Palm Beach, where Dr. Faxon represented the Massachusetts General Hospital at the Society of Medical Administrators' conference. On their way home they visited with Dr. and Mrs. Joseph S. Lichty in Greensboro, North Carolina, and Dr. and Mrs. W. T. Sherman Thorndike in Germantown, Pennsylvania, all of whom sent greetings to their many friends in Boston.

Drs. Margaret M. and R. Earle Glendy (*C.M.* 1932 and a.r.p. 1934, respectively) paid a return visit to M.G.H. in early March. We learned from Dr. Earle that he has recently resumed an affiliation with the University of Virginia School of Medicine, where he finished in 1931, as Lecturer in Medicine. Dr. Margaret is Clinician for the rheumatic fever clinics in southwestern Virginia, where the rheumatic fever program has been greatly expanded in recent years. They extend a cordial welcome to MGH-ers traveling in the vicinity of Roanoke, where they live, and want you to know that they always keep their latchstring outside for you.

Dr. Herbert H. Howard (*W.S.* 1914) has sent us a card, saying that he is no longer in active practice and giving as his new permanent abode Winter Mooring, 1 Fishers Lane, Delray Beach, Florida.

Dr. Howard B. Sprague was one of the visiting lecturers at the University of Mississippi Postgraduate Course in Cardiology last February. This was the first such course ever sponsored by the University, and was given in cooperation with the Mississippi Heart Association, the Mississippi State Board of Health, and the Department of Conferences and Institutes, University Extension, University of Mississippi. The course was held in the beautiful new Alumni House of the University, and the organization of the course was outstanding under the leadership of Dr. Arthur C. Guyton (*W.S.* 1943), now Chairman of the Department of Physiology and Biophysics of the University.

New addresses:—

Dr. William B. Adams (*E.M.* 1918), Owls Head, Maine

Dr. Edwin F. Alston (*Path.* 1944), 2107 Van Ness Ave., San Francisco 9, Calif.

Dr. Frances J. Bonner (a. *Psychiat.*), 127-A Bay State Rd., Boston, Mass.

Dr. Javier Correa (clin. & res. fel. *M.* 1953), Arenales #615, Lima, Peru

Dr. Frank R. L. Egloff (r.p. *Psychiat.* 1951), 1007 Farmington Ave., West Hartford, Conn.

Dr. Rosemary V. Gorman (a.r.p. 1945), 626 Westminster Ave., Elizabeth, N. J.

Dr. Maurice H. Greenhill (r.p. *Psychiat.* 1939), Psychiatric Institute, University Hospital, Baltimore, Md.

Dr. Laurence K. Groves (*W.S.* 1947), 2020 East 93rd St., Cleveland 6, Ohio

Dr. Oscar W. Hills (*M.* 1943), 111 St. Matthews Ave., San Mateo, Calif.

Dr. William L. Kermond (a.r.s. *Or.* 1954), 51 Urquhart St., Castlemaine, Victoria, Australia

Dr. Elizabeth A. Koppel (a.r.p. *An.* 1954), 437 Cedar St., N.W., Washington 12, D.C.

Dr. James Lewis (*W.M.* 1935 & *C.M.* 1936), 281 State St., Springfield, Mass.

Dr. Robert C. Lincoln (*Dn.* 1953), Harvard Medical School, Boston, Mass.

Dr. Sydney B. Maughs (a.r.p. *Psychiat.* 1938), Psychiatric Unit, Forty-five Hundred West Pine Clinics, 4500 West Pine Blvd., St. Louis 8, Mo.

Dr. Alex F. Müller (a.r.p. 1953), Department of Medicine, Hôpital Cantonal, University of Geneva, Geneva, Switzerland

Dr. Elliot V. Newman (*C.M.* 1941), Vanderbilt University School of Medicine, Nashville 5, Tenn.

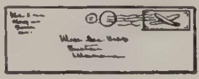
Dr. Edgar B. Phillips, II (*C.M.* 1948), 319 Longwood Ave., Boston, Mass.

Lt. Walter T. St. Goar, MC, USAFR (*M.* 1950), 4452nd Base Hospital, George A.F.B., Calif.

Dr. Ralph H. Seelye (*E.S.* 1891), 131 Crescent Rd., Longmeadow, Mass.

Dr. Byron W. Steele, Jr. (a.r.s. 1952), 1307 South Main St., Tulsa, Okla.

Dr. Jack L. Ulmer (r.s. *N.S.* 1942), McGuire Veterans Administration Hospital, Richmond 19, Va.



When Dr. George O. Clark (*E.S.* 1904) replied to our tracking-down letter and assured us that the revised address we had discovered for him is correct—"Chailey", Newburyport, Massachusetts —he gave us this additional bit of information:

> Three years ago we removed from 343 Beacon Street, Boston, and expect to use all the year round what for the past thirty years we used only during the summer months.

One of our sleuthing efforts resulted in this letter from Dr. Harry A. Bliss (*M.* 1945), whose present address is 4 West Clearfield Road, Havertown, Pennsylvania.

> Thanks for your interest. I am grateful for your skill in detection.
>
> I am doing a second stint in the Navy (by request), but am actually having quite an enjoyable stay as cardiologist at the Navy Hospital in Philadelphia. Regrettably, we have no other MGH-ers here, though there are a good many at nearby teaching institutions. I have particularly enjoyed seeing Nipper Schnabel who is finishing a Markle Fellowship at the Hospital of the University of Pennsylvania and who provided the ultimate in hospitality by taking me into his home for my first three weeks here.
>
> In case you don't have his address and to further your tracking, Wally Bedell is also in the Navy, doing research on freeze-dried arterial grafts at the Naval Medical Research Institute, Bethesda, Maryland (home address — Rockville Pike, Rockville, Maryland).

We were delighted to receive this first letter from Dr. Joseph S. Lichty, Assistant Director at M.G.H. from 1946 to 1950. Dr. Lichty left here to become the Director of the Moses H. Cone Memorial Hospital in Greensboro, North Carolina. He writes:

> This Hospital celebrated, in a quiet way, its first birthday the 25th of February. Having opened 53 beds a year ago that day and admitted 27 patients, the end of the year finds us with 174 beds open and an average census of 155. The Medical Staff includes two MGH-ers — Dr. John F. Register, an Attending Surgeon, and Dr. Eulyss R. Troxler, an Associate Surgeon — both of whom practise Orthopedics.
>
> It was with the greatest of pleasure that Mrs. Lichty and I received a visit from Dr. and Mrs. Faxon, who passed through here in February on their return from a winter in Florida. One of their delights was renewing acquaintance with our Boston terrier, Bunker Hill, who lived with them, first briefly in the Resident Physician's House and then longer at West Falmouth, and whom they gave to us in 1949.
>
> I frequently see the MGH transplants at Chapel Hill, and would be glad to have a visit here from anyone.

* * *

A few years ago Dr. Ralph H. Seelye (*E.S.* 1891) read a paper before a meeting of the Springfield Medical Club. This interesting, exciting, and intimate portrayal of conditions at Massachusetts General Hospital during Dr. Seelye's internship and the several incidents he relates concerning outstanding members of our Staff in those days give us this graphic picture of surgery as it was practised at M.G.H. sixty-three years ago.

At the risk of being classified with certain senile old gentlemen who are concerned almost entirely with the past, it has seemed that it would be amusing to me and, perhaps, of interest to my friends if I were to hark back and try to portray the conditions and picture some of the men of the Massachusetts General Hospital at the time I interned there.

The Hospital consisted at that time of the old Bulfinch Building, the operating pavilion, the Out-Patient Department, and four pavilion wards—three of private rooms, one of which was for private patients, though as far as a fee was concerned they were treated as house patients.

The successful candidates who had worked and intrigued in every possible way to rate in scholarship and personality in order to attain the most coveted hospital position in Boston were, on entering upon their duties, immediately put in their proper status. Not being considered by the staff fitting that there should be any sort of parity with them, it had long been decreed that their doctorate should not be conferred until a year after graduation. They were, therefore, always addressed as "Mister". The term "Intern" was not used. "House Officer" and occasionally the historic name of "House Pupil" were in use, or, sometimes in a slightly derogatory manner, "House Pup" was applied by the older men. There seemed to be a desire not to imperil to a perceptible degree any tendency to an inferiority complex. This may have been a wise policy. There was no familiarity on the part of the house staff with the visiting staff. Their relations were conducted with dignity and decorum. The Staff Room was a sanctum into which a house pup never penetrated except by special invitation. I never saw the inside of it. Ward visits were conducted with the utmost solemnity. The Chief, with the senior house officer followed by the junior and the extern, marched with military precision from bed to bed, the head nurse bringing up the rear. Diagnosis, prognosis, and treatment were decided upon, and with all dignity the procession moved on to the next ward.

This period was nearly at the end of the old regime of non-aseptic surgery. Antiseptics were used in moderation—chiefly bichloride of mercury and carbolic acid.

Operations were done every day during the week except Sunday, but Saturday morning was "Operating Day", with the amphitheatre filled with students and doctors.

The two surgical services, East and West, were each manned by three visiting surgeons who had four-month services. The surgical house staff—two seniors, two juniors, and two externs—was also divided into East and West services, so each of the operating crews consisted of the Chief, the senior house officer as first assistant, the junior as second assistant, and the extern as etherizer. At other times the extern served in the Out-Patient Department.

Operations started at eleven o'clock. The senior house officers had charge of the operating room on alternate Saturdays, seeing to it that everything went in an orderly manner, that the patients were brought down promptly, that the ether was started on time, that the proper instruments were selected, and so on. The instruments were put into an agateware basin by the head orderly and deprived of a certain modicum of microbes by a few minutes' lavage under the hot water faucet in the sink. There were seven two-gallon jars in an anteroom, displaying in proper order the names of the days of the week. These contained sea sponges in a solution of 1-20 carbolic acid. Sponges for the day were used from the proper jar and afterward washed and returned to the same jar, so that all sponges soaked for at least a week in 1-20 carbolic.

Red plush pincushions hung at each side of the arena, conveniently holding needles threaded with silk arranged in semi-artistic designs by the nurses. It had not seemed to anyone advisable to sterilize these sutures. Silk of the same kind was used for ligatures. Catgut was just being introduced at that time, but it was far from aseptic. Dressings were fashioned from nice clean gauze and absorbent cotton.

"Start the ether." The extern takes a sponge similar to that into which, in the same Hospital, ether was first poured for the purpose of anesthesia. The orderly holds down the scared, struggling victim; the senior house officer sticks his head in the doorway and says, "Push the ether"; the patient, deeply cyanotic, is expedited in the arms of the orderly, practically in opisthotonos, and placed upon the table, spastic in every muscle.

The surgeon wore what was the vogue at that time—a Prince Albert coat that had, perchance, served its modish purpose at his nuptial ceremony and which, after a well-rounded period of social activities, finally became relegated to the surgical dressing room. These coats were held in rather high esteem by the staff, apparently measured by the extent of lamination accumulated in the purulo-hemorrhagic by-product of their operative manipulations. A coat that would stand alone was regarded as the acme of operative regalia. (In order to dissipate this unsightly picture as quickly as possible, it is to be stated that in the early days of my service these most flagrant relics of septic days were discarded.) The surgeon, after carefully washing his hands, dipped them rather gingerly into a 1-1000 solution of bichloride. The patient, meanwhile, had quieted down and the operation was on.

Strange as it may seem, sepsis was not a common operative sequel. What was lacking in asepsis was partially compensated for in technique, dexterity, careful handling, and rapidity—clean-cut wounds and unbruised tissues being less liable to become infected.

Orthopedic, gynecological, and genito-urinary cases were all on the general service. Surgery was practically limited to the surface of the body, various tumors (notably cancer of the breast), hemorrhoids, fistulae, perinea, cervices, tuberculosis of bones and joints, and glands of neck. These tubercular conditions, which are rarely seen now, were then very common. Traumatic surgery occupied an important position in the daily routine. Amputations were common occurrences, wounds were frequent, and fractures were prevalent. The latter were managed, under the rather casual supervision of the visiting staff, by the house officers and, by virtue of tradition passed down from one service to another as to methods of splinting and bandaging, were taken care of with more than ordinary success. When one considers that these cases were treated by inexperienced house officers without the benefit of X-ray, the results obtained must be regarded as truly remarkable. The cranial cavity was not invaded except for depressed fractures; the pleura only for empyema. Herniae, unless strangulated, did not tempt the surgeon. I never saw an appendix in a living subject until I had been in practice about nine months. Appendiceal abscesses were rarely seen. They were all carefully watched by Dr. Reginald H. Fitz, who four years before had described and named the disease with which every layman is now familiar, who saw each case in consultation, watched it until it was "ripe", and finally advised operation.

During my year in the house there were twenty-eight laparotomies on the East Surgical Service, which represented about half the number done in the Hospital during that time.

I have always felt it was a matter of much interest and great educational value that the change from the old regime to the new aseptic era came during my internship. A new pavilion was built, with private rooms for about sixteen patients and an operating room which was for all practical purposes comparable with what is used today. Adequate sterilizers were supplied and all the necessary paraphernalia. This was for abdominal cases only. Aseptic technique was instituted and fairly successfully carried out. Sterile gowns, sheets, gauze sponges, instruments, sutures, ligatures, etc. were provided. The patient's skin was prepared with green soap poultice and bichloride, and the surgeon's hands with permanganate of potash and oxalic acid. It was hard for the older surgeon to refrain from adjusting his glasses or scratching his nose during an operation, and the house officer was always on the alert to repair the breaks in asepsis.

The old amphitheatre continued on in its old-time squalor, it having apparently occurred to no one that asepsis was desirable except in abdominal cases.

I stated earlier that results were, on the whole, very fair. They were, however, occasionally marred by the appearance of sepsis. On one occasion, as the result of a Saturday "Operating Day", four patients died of sepsis—a case of cancer of the breast, a fatty tumor of the back, a reamputation of the arm, and a stone in the bladder. (Renal calculus, we may say parenthetically, was quite common and Dr. Henry J. Bigelow's operation of litholapaxy was not an uncommon procedure.) This particular high Saturday morning mortality caused considerable perturbation. One ward was cleared out, scrubbed and painted—a bacteriological neophyte having reported the discovery of the streptococcus upon its walls.

We house officers learned much from each other, passing down from senior to junior valuable information that was traditional to the Hospital. From a very understanding head nurse my first contact with patients was saved from much embarrassment by her helpful suggestions at the beginning of my ward service, but our real education was absorbed from the visiting staff. These I shall always think of (as I have since my first contact with them in Medical School days) as supermen, and the privilege of knowing them, and working for and with them, cannot be measured by any standards that we know anything about. Warren, Homans, and Cabot prided themselves on notable surgical progenitors. They belonged to what has been referred to—a little unkindly, perhaps—as "the Boston legendary type with all its handicaps". Porter and Beach would share with Richardson the characterization of not having had "the alleged disadvantages of the background of a legendary Bostonian". Whether "legendary Bostonian" or natives of more rural communities, these men were pre-eminent and will go down into medical history as such. Charles A. Porter, John Homans, and Arthur T. Cabot were West Surgical; J. Collins Warren, H. H. A. Beach, and Maurice H. Richardson were my Chiefs on the East side. Although I did not come into as intimate contact with the West side men, I saw much of them and watched their work with much admiration.

Dr. Porter was a charming gentleman. His technique, outstanding in general operative procedures, excelled particularly in plastic surgery—in the closure of large wounds, for instance—and notably in his beautiful work in the restoration of hare lip. I remember a case of complete extrophy of the bladder in which, by his fine plastic work, a new anterior bladder wall produced a functioning bladder. Those who knew "Ally" Porter saw in him very many fine traits that were inherited from his father, Dr. Charles B. Porter.

Dr. Homans, somewhat in contrast to Dr. Porter, though having the artistocratic Back Bay air that all these gentlemen had, was bluff and even at times brusk. He was outstanding as the pioneer in abdominal surgery in New England. From 1872 to 1875 he operated upon five women with large ovarian cysts. They all died. Nothing daunted, he continued the work and by 1887 had performed 272 additional "ovariotomies", as he called them, with a mortality of 14%. At this time it became my privilege to assist him, during my second and third years in the Medical School, at a small private hospital on Beacon Hill where he averaged about two cases a week. "Uncle John", as we called him, employed about the same technique as that used at the M.G.H. at that time. He still used the carbolic spray, though he soon afterward abandoned it. Also, as a surgical refinement, an old-fashioned clothes wringer was brought into play for the purpose of rendering the sponges more absorbable. "Young John", Uncle John's nephew, was first assistant, and one of the two student assistants worked the wringer. Now and then, if the full quota was lacking, Uncle John's coachman was haled into the more comfortable quarters of the operating room and, without any particular attention to his toilet, was put in charge of the wringer. The atmosphere, already surcharged with carbolic spray, absorbed the aura of equine excrement with readiness, thus generating an aroma not likely to be confounded with frankincense and myrrh. To counterbalance the lack of asepsis, Dr. Homans had acquired a surgical technique that was remarkable in the ease and rapidity with which he removed large tumors, complicated as they were many times by masses of adhesions. Being with him for two years was an experience the value of which it is not easy to estimate.

Dr. Cabot was a good surgeon and was particularly adept in genito-urinary work. I shall never think of Dr. Cabot without the mental picture of a nephrectomy. After tying the renal artery, he remarked as he was severing the stump, "Gentlemen, this is the critical point of the operation." There was a geyser of blood, but, aside from a greyish tinge to his countenance, Dr. Cabot showed not the slightest evidence of nervousness or emotion.

Dr. Warren was a scholar better acquainted with medical literature and, from extensive study abroad, better versed in international surgical lore than many of his colleagues. He never unbent from his impressive dignity in his relations with the staff or the house pups. He was not entirely successful at times in concealing an innate irascibility that cropped out when things went wrong in the operating room; but house officers, often awed by the relationship, nevertheless unfailingly regarded him with admiration and respect. Dr. Warren was pre-eminent as an old-time surgeon, but did not find it easy to take up the new regime beginning at that time. At amputations, resections, and the like he was an ace. Osteoplastic resection of the upper jaw was his special joy. In this he relaxed his hauteur as, blowing micro-organisms through his moustache into the wound, he would exclaim in tense tones, "Stand by me, boys! Stand by me! He's bleeding to death!" He was particularly keen in diagnosis. For instance, a man with a very large abdominal tumor had been baffling the diagnostic acumen of the staff for several days. As he was being shown in the amphitheatre, Dr. Warren walked by and immediately said, "Pancreatic cyst." Upon being asked later how he arrived at such a quick solution of the problem, he said, "I once saw a pancreatic cyst in Paris with exactly the same contour."

Dr. Beach, also, was a gentleman impressive in his dignity—a dignity, however, tempered by a charm of manner and gracious condescension that made for pleasant association. Meticulously careful in diagnosis, he sometimes irked the house officers who were eager for operations—for example, the ovarian cyst which for about two weeks was carefully measured to rule out the possible element of malignancy that might be indicated in a rapid growth. Dr. Beach was extremely conservative in his selection of operative cases. Those which he did select were done with skill and precision, with careful attention to every detail

Dr. Arthur W. Allen, past Chief of our East Surgical Service and now a member of our Board of Consultation, being sworn in as a Trustee of Massachusetts General Hospital by Governor Christian A. Herter, with Charles J. Gabriel, the Governor's Councillor, acting as witness.

of his work. His ward visits were an education in themselves. I have a picture in my mind of one of these always impressive ceremonies during which Dr. Beach, who was very fond of music, halted the procedure to listen in rapt attention as a procession marched by outside to the solemn strains of Chopin's "Funeral March".

Dr. Richardson was of a somewhat different type from his colleagues. A man of impressive physique, he would arouse admiration at first sight. His pre-eminence as an anatomist was responsible to a degree for his remarkable technique. He was the first student in the Medical School to attain a mark of 100% in anatomy. He not only knew surgery but he made surgical knowledge, and excelled in imparting this knowledge. To demonstrate the surgical anatomy in relation to operations he was about to do, standing before the blackboard with chalk in each hand he would ambidextrously, with amazing rapidity and skill, start with the spinal column, fill in the portion of skeleton desired, lay on the muscles, trace the nerves, arteries, and veins, and so produce in a few moments a not-easily-forgotten picture. Dr. Richardson was a big man, with very large hands. The wonder was that he was so perfect in fine technique. Perhaps his skill in playing the cello was of some benefit. He deserved the title which has been applied in later years to certain aces in sports—a "natural". He had perfect coordination and made no false motions. It was in vain that we looked to see him miss when, at the end of his drawing, he would playfully toss the chalk into the box eight or ten feet away. Knife, scissors, or needles were used equally well with either hand, and his single-handed tying of ligatures and sutures incited many a student to practise that useful accomplishment during lecture hours. Dr. Richardson was more instinctive than analytical in his solution of surgical problems, more radical than conservative in his treatment of them. Brilliant, progressive, courageous—he led groping surgical aspirants into regions of dreaded surgical procedures. His famous removal of a denture from the cardiac orifice of the stomach illustrates his daring confidence and operative skill. His natural good-fellowship and bonhomie tended to a certain extent to break down the barrier between the visiting and house staffs, developing, in the more cordial relationship, our loyalty and adoration. While we house officers had a tremendous admiration and profound respect for the other Chiefs, we had a deep-seated affection and genuine fondness for Maurice Richardson.

It is interesting in looking back to note that these men, whom we regarded not exactly as old gentlemen but as men well advanced in years, ranged in age from 38 to 54, averaging 46 years. Their average span of life was 68 years.

From these men we learned not so much how to do certain operations. We learned surgical principles and how to operate. We learned by their example that surgery was a science and an art that must never be stultified by sordid considerations. We left them with a never-failing appreciation of their part in our development, and we went forth from the Massachusetts General Hospital grateful to it in our hearts for having been privileged to serve as "house pups".

The many friends of Jeannette MacDonald, our switchboard operator who has been ill for the past few weeks, will be glad to receive this report sent us by a friend of Jennie's who saw her in the O.P.D. one day early in March. The friend says:

Jennie was as peppy as ever and anxious to know how all her many friends in the M.G.H. are. But what is more important to Jennie's friends is how *she* is doing.

Well, she is now spreading her good cheer at Storrow House and she loves it out there. She is constantly improving — can even do the rhumba when in the mood — and it is good to see her "sparkle" back again. But more important than that — to Jennie — is the fact that she wants more than anything else to express her very deep gratitude to all the MGH-ers for their cards, good wishes, flowers, prayers, and all the many kindlinesses expressed during her illness. The display of affection in her direction still awes her, she says, and is something she will never forget.

What she doesn't know is that all at the M.G.H. who have had the privilege of knowing Jennie as a person or as a kind voice on the phone, are still rooting for her and remembering her in their prayers. It's wonderful seeing her up and around, with her friendly hand shake and her "How are you?"

Jennie's parting remark as she left the O.P.D. for Storrow House was: "Remember, say thanks to each and every one through The News, so they will all know how I feel. They were wonderful to me. May God love them."

THE NEWS

Massachusetts General Hospital 1811

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ENDOSCOPY

The last MGH NEWS report on this subject was three years ago, at which time graduate students from various parts of the world were being accepted for training in endoscopy. This type of graduate teaching has now been discontinued in order to permit training of our own Surgical House Staff in endoscopy. The change came about as a result of the report of the Surgical Residency Survey Committee (1951), in which "those answering the questionnaire (with regard to special fields of surgery) wished, in order of preference, greater experience in surgery of children's diseases, in endoscopy, in traumatic surgery . . . and in thoracic surgery." It was recommended that "more experience in thoracic surgery and endoscopy be arranged by better organization of our own clinical resources. . . ."

In the analysis of the general questionnaire "several men suggested that the House Staff should have a regular rotation through endoscopy. . . ." Starting in October 1952, the following members of the Surgical House Staff have rotated through endoscopy for periods varying from two to eight months: Peete, Manley, Nielsen, Shannon, Currie, Richardson, Austin, S. Gundersen, Garran, Coe, West, and Russell. Two months is much too short a time for endoscopic training. Although the manual dexterity part of it usually comes easily to those training in general surgery, the interpretation of endoscopic findings is not so easy. Fortunately, some of those who have had only two months will be assigned later for a further period. The Endoscopy Service also trains one man from the ENT Service and one from the Department of Anesthesiology.

Considering that the private and semiprivate cases are done by the Visiting Staff, there is none too much material for the teaching of four men at a time from the various House Staffs. However, it is felt that they get out of it about what they put into it, as is true throughout life, and if they are there faithfully for every endoscopy clinic they can learn much by observation.

It should be emphasized that the patient must be regarded as a whole, and not as just a subject for the passage of a diagnostic instrument. In other words, the endoscopist should know his patient beforehand and should follow his course after the endoscopic procedure.

Although there are no formal lectures in endoscopy for undergraduate students, special lectures in endoscopy are given to undergraduate groups taking courses in cancer, gastroenterology, and pulmonary disease. A lecture is also given every year to a large group of graduate students in medicine, and sometimes to a special group in surgery.

Edward B. Benedict, M.D.,
Endoscopist

* * *

At the annual meeting on April 3, Dr. Howard B. Sprague was given the Gold Heart Award by the American Heart Association, with the following citation:

American Heart Association
Gold Heart Award
Howard B. Sprague, M.D.

who has profoundly influenced the growth and development of the American Heart Association through his distinguished services in its highest councils and during his presidency in 1950-51. His humanity, vision and practical wisdom have been of great significance in the shaping of organizational policy, and in winning support of medical science and the public for the objectives of the Association.

This Award is given annually to one physician and one layman in the United States.

* * *

On March 19th last, Dr. Rosalind Pitt-Rivers received word here from London that she had been elected a Fellow of the Royal Society. This is the highest honor that can come to a scientist in Great Britain.

Dr. Pitt-Rivers was born in London in 1907. Her academic degrees, all from the University of London, were B.Sc. 1930, M.Sc. 1931, and Ph.D. (in biochemistry) 1939.

In 1937 she began working in Harington's laboratory at University College Hospital Medical School, London, on the biochemistry of thyroxine. Sir Charles Harington has long been known to the workers of our thyroid group for his outstanding work on thyroxine, which he was the first to synthesize chemically. In May of 1951 both Sir Charles and Lady Harington endeared themselves to the whole MGH family when he came to us to make the chief address at the opening of the new Research Building. In 1942 Harington was made Director of the National Institute for Medical Research, located first at Hampstead and later at Mill Hill outside London. When he went to assume this new duty he took Pitt-Rivers with him.

In the war years Pitt-Rivers worked with Harington in the field of immunochemistry, in relation to sensitization of workers to various chemicals used in manufacturing explosives. She also continued working, however, on thyroid problems which have engaged her attention to date. At first she was concerned with the biosynthesis of thyroxine, and later, with the arrival of Dr. Jack Gross at Mill Hill in 1950, she began, with him, studies of unknown compounds in the thyroid. In the course of this work the new compound triiodothyronine was identified, isolated, and assayed in rats, and later, with W. R. Trotter, in myxedematous patients. It proved to have thyroxine-like activity, and a greater speed of action than the tetraiodo acid. To workers in the field of thyroid physiology this discovery was quite startling.

Collaboration between Harington's laboratory and our thyroid laboratory began as early as 1928, when the late W. T. Salter, W.M. 1928, spent a year at the University College Hospital. Many substances derived from the thyroid by Harington have been assayed on patients with myxedema in our Thyroid Clinic, and recently Dr. Lerman of the M.G.H. has assayed triiodothyronine on patients in the Mallinckrodt Ward IV.

In view of all these things it was natural that we should want Dr. Pitt-Rivers to come to work at the M.G.H. and, happily, this has been accomplished. She arrived September 15th last, and expects to complete here the full year. She has had laboratory space in the Research Building and has worked in collaboration with Dr. John B. Stanbury and other investigators of the thyroid group. Her studies have had to do with the products of the thyroid gland to be found in the peripheral blood of humans.

Dr. Pitt-Rivers has been in great demand and has visited and lectured at nearly all the important centers of thyroid research in this country. The M.G.H. can take great satisfaction in having made it possible for her to come here. She has provided a powerful stimulus to our thinking on the thyroid, and broadened our approach to the mystery of its function.

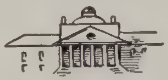
We congratulate this distinguished investigator on the high honor that has come to her. It makes us happy that this should have happened during her visit to our Hospital.

[J.H. Means, M.D.] J. H. M.

* * *

The 31st Annual New England Hospital Assembly brought some 5,000 hospital trustees, administrators, auxiliary members, and personnel together on March 29, 30, and 31 at the Hotel Statler in Boston. During the 26 sessions, 119 speakers and discussants covered all phases of hospital operation, and there were 100 outstanding exhibits of hospital equipment and supplies. The theme of the entire program was the constant improvement of hospital service in relation to better community health.

The Massachusetts General Hospital was well represented in the program. Among those participating were Dr. Dean A. Clark, General Director of the Hospital and a member of the Board of Trustees of the Assembly, who presided at the Trustee Institute for Larger Hospitals. The topic at this session was "A governing board's responsibility for medical care", and one of the speakers was Dr. James Howard Means, past Chief of our Medical Services. Dr. W. Franklin Wood, Director of McLean Hospital, extended greetings from the Assembly at the formal opening of the Annual Meeting. Miss E. Louise Seymour, R.R.L., our Record Librarian, was moderator of the panel discussion on "The Medical Record Librarian and hospital accreditation". Mr. Raymond V. Kinsman, Superintendent of Works at M.G.H., was a member of the panel on the Laundry Problems and Opinion Clinic; and Mr. William J. MacNair, our Superintendent of Housekeeping, gave a very interesting description of how a unit (or room) is completely cleaned upon discharge of a patient and made ready for the next patient in 30 minutes' time.



The Board of Trustees, at their meeting on March 12, voted to appoint:

Dr. Charles M. Fisher as Associate Neurologist, effective July 1;
Dr. Robert W. Loehning as Assistant Resident on the Anesthesia Service, beginning September 1, 1955;
Dr. Alexander S. Nadas as Assistant Physician to the Children's Medical Service, effective April 1;
Dr. Nils Normann as Assistant Anesthetist, effective March 1;
Dr. LaRue W. Owen as Senior Fellow in Anesthesia, beginning July 1.

At their meetings during March, the General Executive Committee voted:

To promote:

Dr. Richard B. Kearsley to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. John F. Radebaugh, Jr. to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Jack H. Rubinstein to the position of Assistant Resident on the Children's Medical Service, beginning July 1.

To reappoint:

Dr. David V. Mann as Clinical Fellow in Dermatology for one year, beginning January 1;
Dr. Myron H. Matz as Graduate Student Assistant and Clinical Fellow in Dermatology for one year, beginning January 1;
Dr. James F. Patterson as Clinical Fellow in Dermatology for one year, beginning January 1.

To appoint:

Dr. Daniel M. Bachman as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. George A. Hyder as Clinical Assistant in Orthopedic Surgery, beginning April 1;
Dr. Jean G. Kohn as Clinical Fellow on the Children's Medical Service, effective as of March 15;
Dr. John W. Littlefield as Clinical and Research Fellow in Medicine, effective as of March 1;
Dr. William R. MacAusland, Jr. as Clinical Assistant in Orthopedic Surgery, effective September 1;
Dr. Henning Pontoppidan as Clinical and Research Fellow in Anesthesia, in addition to his appointment as Assistant Resident;
Dr. Gillian M. Poulton as Clinical Fellow on the Children's Medical Service, effective as of the date she obtains a temporary license to practise medicine in this State;
Dr. Elliott B. Sweet as Research Fellow in Orthopedic Surgery for one year, beginning July 1;
Dr. André Tetu as Clinical Fellow in Medicine, beginning July 1;
Dr. Alejandro K. Yerkovic as Clinical and Research Fellow in Medicine, as of March 1.

* * *

MASSACHUSETTS GENERAL HOSPITAL

TRUSTEES AND GENERAL DIRECTOR
STAFF WIVES COMMITTEE
DISTAFF CLUB
are sponsoring
The First M.G.H. Spring Formal Dance
Friday, May 21, 9:00 P.M.
at The Boston Club
46 Beacon Street, Boston
Tickets: four dollars per couple

Committee:
Mrs. Charles E. Huggins, Chairman
Mrs. Robert L. Berg
Mrs. John F. Burke
Mrs. E. Stanley Crawford
Miss Betty Ann Cross
Mrs. Zanvil A. Cohn
Mrs. Howard S. Frazier
Miss Marsha Muir
Mrs. George L. Nardi
Mrs. John W. Raker
Mrs. Jack E. Tetirick
Mrs. Howard Ulfelder

* * *

PLASTIC CLINIC — 1954

Dr. Churchill is not infrequently quoted as saying that surgery began with congenital anomalies and trauma and may end with congenital anomalies and trauma. Perhaps the current attention to malformations of the heart and great vessels and the changing concepts of infection are indications of a trend. This poses a question, of where surgeons primarily concerned with congenital anomalies and trauma belong in a teaching institution such as the Massachusetts General Hospital. Among those concerned with these problems are the members of the Plastic Clinic.

The Plastic Clinic at the M.G.H., which was started over thirty years ago by Dr. Varaztad H. Kazanjian, continues to be the meeting ground of interested staff members and visitors. These sessions are always stimulating, despite the declining number of new patients referred to the Clinic and the decrease in follow-up visits. However, the activities of the members of the Clinic are not reflected in the Clinic census because of frequent formal and informal house consultations. Unfortunately, these consultations may be last-minute conversations concerning technical problems of only immediate concern. Opportunities for preliminary discussion, study, and planning with the house surgeon assigned to the operation, and opportunities for long-term follow-up and better evaluation of results are seldom possible. As a consequence, the development of a solid foundation of principles to guide the efforts of the young surgeon and the establishment and maintenance of the highest standards of accomplishment have often proved difficult. This is largely because supervision of seven different groups of residents in the several operating rooms, wards, and clinics gives little opportunity for close and helpful association with each group.

To remedy this, the patient is now followed post-operatively in the residents' clinic by the resident responsible. This plan has stimulated greater interest than if the patient were followed in the Plastic Clinic only. It is to be hoped that similar opportunities for pre-operative planning may eventually be arranged. The complicated multiple-stage reconstructive procedures offer few opportunities for planning and continuity of care because of frequent changes in the delegation of resident responsibility.

The open wound seems to be a constant problem on all services, judging by the number of requests to the members of the Plastic Clinic for advice about management. It seems unfortunate that somehow there is not a more general awareness of the current knowledge of the local and general factors influencing the condition of the wound. It is distressing to see the delays in healing and the development of avoidable complications which result from the discarding of a well-tried method in favor of a less effective substitute for the care of the wound.

In the report of the activities of the Plastic Clinic made several years ago, the following concluding statement was made: "It is the responsibility of the Plastic Clinic to see that the broad concepts and the technical details of plastic surgery are taught to the new generation of house officers." Fortunately, these efforts have borne fruit by the increasing awareness of these concepts by each new generation of house officers and residents.

Bradford Cannon, M.D.,
Head of Plastic Surgery Clinic

* * *

Brief bits:—

Dr. Benjamin Castleman gave a series of five lectures and one Clinical Pathological Conference on bone and joint pathology at the Postgraduate School of the University of Havana, Cuba, during the week of March 15. The lectures were attended, for the most part, by radiologists, orthopedic surgeons, and pathologists. Dr. and Mrs. Castleman were happy to renew friendships they had made on a previous visit three years ago and to see many former MGH fellows and visitors.

Dr. Earle M. Chapman was lecturer at the Sommer Memorial Lectures, given in April at the University of Oregon Medical School, in Portland, Oregon. His subject was "Isotopes in Medicine".

On January 18, Dr. Edward D. Churchill received word from Cuba that he had been elected Honorary President of La Asociación de Ecritores y Artistas Americanos and El Instituto Nacional de Previsión y Reformas Sociales.

Dr. Isaac V. Manly (*E.S.* 1947), announces the opening of his office for the practice of General and Thoracic Surgery, at 2021 Clark Avenue, Cameron Village, Raleigh, North Carolina.

Dr. J. Gordon Scannell, with Dr. Theodore L. Badger, spoke at the Middlesex West Course in General Medicine on March 17. Their subject was "Recent developments in the management of chronic pulmonary disease". The course was conducted by the Postgraduate Medical Institute, at the Milford Hospital in Milford, Massachusetts.

A card from Dr. David W. Williams (*W.S.* 1943) says his present address is 111 Dahl Circle, Van Horne Park, El Paso, Texas. He is enjoying a stint in the Army and is exploring the Southwest.

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary has welcomed to its staff of ophthalmic residents Dr. Raymond D. Sudarsky, who took up his duties on March 1. Dr. Sudarsky received his Bachelor of Science degree in 1946 from Yale University, and his Doctor of Medicine degree from Yale Medical School in 1949. He interned in the Medical Service at the New Haven Hospital from January 1950 to June 1951, prior to his application for residency here at the Infirmary. At the time of his appointment to our Ophthalmology Service, Dr. Sudarsky was called into the Navy, from which he was discharged last January.

On Tuesday, April 20, Dr. Frank B. Walsh, Associate Professor of Ophthalmology at the Johns Hopkins University and Hospital, delivered the Howe Lecture of Ophthalmology at the Harvard Medical School. His subject was "A clinical study of several third nerve lesions". This lecture was given under the auspices of the Howe Laboratory of the Infirmary.

The New England Ophthalmological Society held its 418th Meeting here at the Infirmary on Wednesday, March 17.

The meeting consisted of an operating clinic held for staff members from 9 A.M. to 12; a presentation of cases from 2 to 3:30 P.M. by Dr. Peter Beck, senior resident; a lecture from 3:30 to 4 by Dr. Henry F. Allen on "The selection of bacteriostats for ophthalmic collyria"; and from 4 to 5 Dr. George B. Corcoran spoke on "A procedure for cataract extraction" (routine zonular stripping). In the evening, a business meeting was held at 7:30, followed by two lectures — Dr. David H. Scott speaking on "Some observations on the problem of aphabric corrections", and Dr. Georginana Dvorak Theobald, from Oak Park, Illinois, discussing "Post-cataract complications".

The New England Oto-Laryngological Society held its Annual Meeting on April 21 in the Upper Amphitheatre of the M.G.H. The morning sessions included a Woodman operation for abductor paralyses of the vocal cords by Dr. DeGraaf Woodman of New York City, and a clinical conference with Dr. LeRoy A. Schall presiding.

Following a luncheon in the Infirmary cafeteria, Dr. John A. Murtagh, President of the Society, presided over the afternoon activities, which included a lecture by Dr. Woodman on "The functional preservation in laryngeal cancer surgery"; a motion picture on "One stage operation for radical resection of the cervical esophagus and larynx with immediate reconstruction", shown by Dr. John J. Conley of New York City; a discussion by Drs. Edgar M. Holmes and Anthony Zovickian; and lectures on "The lateral fistulae of the neck" by Drs. George F. Reed and Yunis M. Sa'eed, and on "Osteomas of the paranasal sinuses" by Drs. Joseph Lentine and Yunis M. Sa'eed.

The American Board of Otolaryngology Examinations will be held at the Infirmary, for the first time since 1934, during the week of May 17. Approximately 100 candidates from all over the United States and Canada will attend.

The oral quiz will be given at the Hotel Statler, the clinical examination at the Infirmary, and the histopathology examination at Harvard Medical School's Department of Otolaryngology.

At the Pan American Otorhinolaryngological Congress, held in Mexico City on March 2, Dr. Daniel E. Martinez presented a paper titled "Method of approach and observation on the circulation of the spiral ligament and stria vascularis of living guinea pigs". The paper was illustrated by a 16 mm. motion picture film which was prepared by Drs. Francis L. Weille, Daniel E. Martinez, and John W. Irwin.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

THE CLASSIFICATION OF MATERIAL STILL CONTINUES TO BE OMITTED IN SOME INSTANCES. It causes your editor considerable time and trouble when you fail to include that information.

Your title should be classified with respect to the subject matter and not under the Hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The January 1954 issue of *Archivos Médicos de Cuba* was dedicated to the Massachusetts General Hospital, and contains the history of the Hospital by Dr. Charles L. Clay and a series of papers from the Thyroid Clinic arranged for by Dr. John B. Stanbury. Since 1953 marked the 40th anniversary of the Thyroid Clinic, the first paper of the series was a history of the Clinic by Dr. Stanbury. The material was collected by Dr. Benjamin Castleman, who had been appointed by the General Executive Committee to act as Editor for this issue.

The articles by our staff members, submitted in English and published in Spanish, are:

Clay, C. L.
  Historia del Massachusetts General Hospital, pp. 2-5.
Stanbury, J. B.
  La Clínica Tiroidea del Massachusetts General Hospital, pp. 6-7.
Stanbury, J. B.
  El tratamiento del carcinoma del tiroides, pp. 8-12.
Maloof, F., and Stall, B. G., III.
  Algunas alteraciones endocrinas en la enfermedad de Graves, pp. 13-15.
Barzelatto, J.
  El yodo en el hipertiroidismo, pp. 16-18.
McDermott, W. V., Jr., and Morgan, W. S.
  Carcinoma a células alveolares del tiroides, pp. 19-22.
Chapman, E. M.
  Radiación interna del tiroides normal para el alivio de la insuficiencia cardíaca crónica, pp. 23-26.
Lerman, J.
  Los componentes yodados de la hormona tiroidea y sus relaciones con la actividad calorigénica, pp. 27-29.
Quinby, W. C., Jr., and Morgan, W. S.
  Clínico-Patológicos Semanales, pp. 30-33.

Other new titles received are:

General Medicine

Chapman, E. M., Maloof, F., Maisterrena, J., and Martin, J. M.
  Ten years' experience with radioactive iodine.
    J. Clin. Endocrinol. & Metab. 14:45-55.

General Surgery

Nardi, G. L.
  Urinary loss of amino acids after surgery.
    Surgery 35:378-381.
Scannell, J. G.
  Emergencies of the lung and esophagus.
    J.A.M.A. 154:903-904.

Nursing Education

Sleeper, R.
  Stretching the nurse.
    Hospitals 28:80-81; 184; 186.

Ophthalmology

Dunphy, E. B., Dreisler, K. K., Cadigan, J. B., and Sweet, W.
  The uptake of radioactive phosphorus by intraocular neoplasms.
    Am. J. Ophth. 37:45-54.

Otolaryngology

Kelemen, G.
  Fenestration of the labyrinth: A bibliography.
    Cambridge, Mass., Psycho-Acoustic Lab.
Kelemen, G.
  Histological test of tonsillar activity based on the reticuloepithelial interplay.
    A.M.A. Arch. Otolaryng. 59:263-281.

Miscellaneous

Beecher, H. K., and Ford, C.
  Some new letters of Horace Wells concerning an historic partnership.
    J. Hist. Med. & Allied Sc. 9:9-20.

REPORT ON EXAMINATIONS FOR NEW ENGLAND GAS AND ELECTRIC ASSOCIATION

A group of 53 executives of the New England Gas and Electric Association were examined by physicians on the Staff of the Massachusetts General Hospital. Fifteen internists cooperated in the procedure, which was under the general supervision of one of the senior physicians of the Staff. The plan was that each person would be the complete responsibility of a particular physician, whom he chose from the roster. If he made no choice, the physician was assigned. Accordingly, each patient was given a thorough initial examination by the selected or assigned physician, with certain routine laboratory tests, and was subsequently seen for a shorter period of time on a second occasion. The actual time spent by an examining physician with an individual patient approximated one and three-quarters to two hours. The compensation of the examining physician was $35.00 per case. A detailed report was sent in every instance to the patient's own physician if he had one. In addition, verbal advice or suggestions were given where special problems presented, and a shorter, much less technical report was given to each individual patient.

In those instances where additional laboratory tests or consultations were needed, these were arranged for. In all, 17 consultations were held with other members of the Staff of the Massachusetts General Hospital, and involved ophthalmologists, urologists, an orthopedic surgeon, dermatologists, hematologists, and a cardiologist. Routine x-ray examinations included only films of the chest and heart and were combined with an electrocardiogram in each case. Thirty-five additional x-ray examinations were made in order to further study the digestive tract, joints, chest, bones, kidneys, and teeth. These were done on the basis of special indications that became obvious to the examining physician during the initial examination. In addition, a moderate number of other laboratory examinations were made as the occasion required, for further information not originally supplied by the routine blood, urine, and stool examinations that were obtained at the time of the first interview. In all, 19 such special tests were made.

The Association assumed financial responsibility not only for cost of the routine examination and procedures but for all supplementary procedures and consultations which the examining physician might, at his discretion, order.

All of the examinations were conducted during morning hours in a section of the Baker Memorial Building and, for the most part, were conducted without undue delay or difficulty, especially after the first few individuals had been examined. An attempt was made to make each examination a careful personal procedure in which the physician discussed all the necessary matters that pertained to past history or living habits, as well as to any current complaints.

Administrative and secretarial services were provided by the M.G.H. and, except for minor deficiencies which can be corrected, were satisfactory.

The results of the examinations are of some interest. The average age of the group was 51½ years, ranging between 39 and 62 years. The average weight of the patients was 173 pounds, with a range of 125 to 232 pounds. It is quite obvious that the entire group was distinctly overweight, inasmuch as there were 27 individuals who weighed more than 175 pounds and 7 who weighed over 200 pounds. This is one important general finding. The average blood pressure for the entire group was entirely normal — 134/81, with a range from 105/70 to 205/130. There were 12 individuals who had a systolic pressure over 150, and 6 who had a diastolic pressure over 100. In the main, it can be said that there was relatively little evidence of hypertension and only 2 instances of serious hypertension. There were 5 individuals who showed abnormal electrocardiograms, and 5 additional ones whose electrocardiograms were borderline. Routine chest films showed moderate lung changes diagnosed as being consistent with emphysema in 10 of the patients. No patient showed evidence of active pulmonary disease, although in one the x-rays were rather suggestive of bronchiectasis (chronic bronchitis). Enlargement of the heart was seen in only 2 cases by x-ray.

Laboratory data indicated that there was in no case any suggestion of anemia. In fact, taking 15 grams percent as a normal level for hemoglobin for adult males, the average in this group was 15.6 grams, with 21 persons having a hemoglobin level of over 16 grams percent. A few individuals had a slight elevation of white blood count, usually in association with a recent or mild infectious process. Only 1 patient had a high blood sugar and could be classified as a diabetic. In 2, there was a suggestion of potential diabetes. In view of the average obesity of the group, it is not surprising that some moderately high blood sugars were obtained. In only 1 case was there any proven disease of the kidneys, but in 3 instances kidney stones were suggested by special x-rays.

Either by history or physical examination, or by special tests, various abnormal conditions were found of varying degrees of importance. Outstanding was the fact that 27 individuals, or one-half of the group, could definitely be classified as obese, with 10 having very moderate hypertension, probably transient in nature, and 2 having persistent hypertension. Ten patients had emphysema without any symptoms; 1 probably had mild bronchiectasis; and 4 patients had some involvement of the sinuses. Two patients had organic heart disease, and in both this had previously been recognized. Four gave a definite history of allergic disturbances related to the presence of asthma or hay fever. Five had minor skin lesions. As noted above, 1 patient was a proven diabetic, and in 2 others the suspicion was raised of mild potential diabetes. Gallstones were demonstrated in 1 individual; 1 patient had an ulcer; 1 patient had ulcerative colitis, which had already been diagnosed and was being treated; 1 patient had a hernia; 1 had a rectal polyp which was recognized for the first time and treatment was advised. Back conditions leading to orthopedic advice were noted in 3. In 1, there was a question of brain tumor; this patient, of course, is to be followed. In 1 instance, there seemed to be some enlargement of the prostate, but this was benign and proper advice was given. Varicose veins, phimosis, and labyrinthitis were noted respectively in 3 individuals. There was a question of gout noted in several cases; in 1 case there was the possibility of a mild gouty arthritis being present.

It is obvious from this analysis that certain physical abnormalities were revealed by the examinations. In many instances, these abnormalities had not previously been noted. In certain instances, disease processes had been recognized for some time and were confirmed and checked at this examination. Minor disturbances were re-evaluated. With two or three exceptions, no serious disease was encountered which required careful follow-up or immediate treatment. Where advice was indicated, this was always given and then reported to the patient's own physician. Except for individual difficulties, it would seem that the most important single finding for the entire group was that of definite overweight, probably due to overeating, with its attendant potential dangers for the future.

These general findings and conclusions were presented to the Association for its information and guidance. Naturally, no individual case was discussed.

After the examination was completed, the entire experience was discussed by the examining physicians, who at that time made suggestions for improving the program, without adding any important new methods of investigation except where special indications existed. The participating physicians voiced general satisfaction with the professional, financial, and administrative aspects of the venture and expressed their willingness to conduct repeat examinations of this group a year hence. It would be hoped that the examinations would be repeated on the same individuals by the same examining physicians in approximately a year's time, under more or less the same conditions. The second and subsequent examinations, however, should, in the main require less time, except where new symptoms might appear or where old symptoms or previously recognized abnormalities had already been discovered and had to be checked.

The Association was more than pleased with the results and have stated that they have every intention of making the program a permanent one.

A copy of the above report was sent to each member of our Visiting Staff and Board of Consultation. An accompanying letter from Dr. Dean A. Clark said, in part:

> . . . The General Executive Committee has concluded, after a review of this experience, that annual examinations can be conducted on

> a high professional level, consistent with the standards and traditions of the M.G.H. It is prepared to undertake the sponsorship of other such programs under similar supervision until such time as the Massachusetts General Staff Associates shall come into being, provided a sufficient number of the Staff wish to participate.
>
> The first program was undertaken with a group of fifteen internists. Now that the study has been successfully completed, it is appropriate to invite wider participation of interested members of the Staff in similar anticipated projects. Accordingly, this letter is being sent to every member of the Visiting Staff and the Board of Consultation, since future examinations will be conducted by internists and by consultants on the roster of the Hospital who are called in by examining physicians as indicated.
>
> . . . If you are interested, we will place your name on a roster for use in future cases.

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The Spring Meeting of the MGH Staff Wives Hospital Committee took place on Wednesday morning, May 5, in the living room of the Walcott House. All members had been cordially invited to attend. Coffee was served at 10 A.M., after which the business meeting got under way.

The Nominating Committee proposed the names of candidates for the next Executive Committee. The names of those elected will appear in a future issue of The News.

Mrs. Muriel McL. Miller addressed the group after the election of officers.

The final tea for visitors to the M.G.H. from abroad was held on Tuesday, April 6, in the Medical Staff Room of the Bulfinch Building. As usual, this popular function was very well attended. Staff Wives who would like to be present at these teas in the future should notify the Hospitality Chairman.

The date set for the annual picnic at the Cannon home in Lincoln is Saturday, May 22. Further details will be contained in the invitations, which will be mailed to visiting and house staff members, visitors from other lands, clinical and research fellows, and their respective families.

Once again we are requesting donations of recent and popular magazines, as well as books, for distribution to patients in the Hospital. The need is constant and demanding. Anyone who can contribute is asked to leave his periodicals and books at the front desk of the White Building.

Mrs. Sweet, who is in charge of the Furniture Exchange, will be out of town from April 26 to June 16. During this period Mrs. Burbank will be in charge. She may be reached at BEacon 2-1648.

Concerts in the Chapel, for ambulatory and wheel chair patients, still continue, under the able direction of Mrs. Abraham L. Finesinger.

On April 21, Miss Esther Elman of New York City, sister of the famous violin virtuoso Mischa Elman, presented a program of lovely piano music. It was highly appreciated by all her listeners.

On May 19, Margaret Reid, violinist, will present a half-hour of music.

On May 26, the New England Conservatory Musical Theatre will send a group of young performers to present for the patients' enjoyment excerpts from "Oklahoma" and other light operas.

Distaff Club

Members of the Distaff Club had a very enjoyable evening at the Museum of Fine Arts of Boston on March 30. The tour was conducted by Miss Morna Crawford, who is associated with the Educational Department of the Museum.

The Club held a food sale on April 28, in the Brick Corridor of the Hospital, to augment the present funds in the treasury. Mrs. William D. Cochran acted as chairman for the sale, and the results were most gratifying.

BIOGLETS

Dr. James L. Vanderveen, Assistant Resident in Anesthesia—born in Ravenna, Ohio, January 14, 1927; U.S. Navy: Hospital Corps, in United States, 1944-46; attended Vanderbilt University, Nashville, Tennessee, 1946-48; M.D., Harvard Medical School, 1952; Intern, George Washington University Hospital, Washington, D. C., 1952-53.

Dr. Frederick E. Whiskin, Resident in Psychiatry—born in Cupar, Saskatchewan, Canada, February 9, 1925; B.A., University of Saskatchewan, 1945; M.D. and C.M. (Master of Surgery), McGill University, 1948; Intern, rotating, Maine General Hospital, Portland, Maine, 1948-50; Resident in Psychiatry, McLean Hospital, Waverley, Massachusetts, 1950-52; Assistant Psychiatrist, McLean Hospital, 1952-53; Assistant Resident in Psychiatry, Queen Mary Veterans Hospital, Montreal, Canada, February through June 1953.

Recently we published a long list of names of MGH-ers from whom mail had been returned to us, bearing such notations as "Unclaimed", "Unknown", etc. We asked if anyone could tell us the present address of any person listed. We received several responses to our appeal, for which we are very grateful.

Six more letters (all bearing 1st class postage) have been returned to us, and we are again asking if anyone can help us locate these people. Please send such information to Cora F. Holbrook, Archivist and Editor of The News.

Here are those six names, with last known addresses:

Clapp, Stewart (*N.S.* 1939), 1926 West Superior St., Duluth, Minn.
Kind, Henry A. (*C.M.* 1935), Tilton General Hospital, Fort Dix, N. J.
Legge, Robert F. (*Or.* 1935), U.S. Naval Hospital, Great Lakes, Ill.
Salamanca, Juan J. (*An.* 1943), Carrera 15, No. 15-34, Bogotá, Colombia
Weigel, Edgar W. (*Or.* 1928), 970 Park Ave., Elizabeth, N. J.
Wies, David (r.p. *Psychiat.*, McLean, 1938), 8702 Lock Bend Drive, Towson, Md.

New addresses:—

Lt. Harry A. Bliss, MC, USNR (*M.* 1945), Philadelphia Naval Hospital, Philadelphia, Pa.
Dr. David W. Compton (r.p. *An.* 1946), 1117 Harvard Ave., Seattle, Wash.
Dr. Harold E. Elrick (*M.* 1944), 1055 Clermont St., Denver, Colo.
Dr. Joseph J. M. McGovern (a.r.p. *C.M.* 1954), Children's Medical Center, Boston, Mass.
Dr. Philip E. Meltzer (s. *Otolar.*), 285 Commonwealth Ave., Boston, Mass.
Dr. Russell M. Nelson (a.r.s. 1954), 848 20th Ave., S.E., Minneapolis 14, Minn.
Dr. John S. Robey (*C.M* 1953), Tacoma Indian Hospital, Tacoma, Wash.
Dr. Robert B. Sloane (r.p. *Psychiat.* 1953), 24 Shawville Gardens, Ilford, Essex, England
Major George H. Sweetnam (*Dn.* 1937), 5th General Hospital, APO 154, c/o Postmaster, New York, N. Y.

Our "singletons" have been very cooperative in their responses to our appeals for news from them. Here is a letter from Dr. William G. Kuhn, Jr. (a.r.s. *Or.* 1949), from New Brunswick, New Jersey:

> This is in reply from one who is very proud to bear the distinction of being the only MGH-er in my town.
>
> After leaving the Orthopedic Service of M.G.H. in 1949, I spent an additional year as chief resident of the Sixth Surgical Service at Boston City Hospital. In 1950 I returned to my own home town, feeling that the best time to find that the grass was greener on the other side of the fence would be at the beginning of my professional career.
>
> I am very happy that I made the choice to return to my home town, in spite of the fact that I am without companionship with another MGH-er. I have been in the practice of Orthopedic Surgery here in New Brunswick since 1950 and find I do miss the intellectual as well as the social advantages of Boston. Mrs. Kuhn, too, misses the Boston touch, but with four active children to care for, she has not had much time to worry about it.
>
> At the present time I am on the staffs of the two hospitals in New Brunswick, St. Peter's and Middlesex, as well as that of a Rehabilitation Hospital which has recently been started by interested professional men of this town. In addition I journey to Princeton one day a week, where I am associated with a medical group as their Orthopedist. It is strange to be with this group, since they were all trained in New York and here again I am the only MGH trained man in the area.
>
> One advantage of being a "singleton" is that you really appreciate the comradship of those from M.G.H. whenever you meet them again at conventions.
>
> I look forward to and enjoy the regular news from M.G.H. Both Mrs. Kuhn and I take great pleasure in following the progress of those we knew when I was in training at M.G.H. and of those who go out into the world to spread the gospel.

Dr. Ralph W. Walton (*W.S.* 1926), our "singleton" in Montclair, New Jersey, has sent us this nice letter:

> Though I have had to delay the reply to your recent letter, it is a privilege to comply with your request for news from an MGH "singleton". For my twenty-eight years in Montclair, I have tried to live up to that unique opportunity, although I had thought little about the "singleton" idea before your letter made the observation.
>
> Montclair is a beautiful residential city of about 40,000, lying in northern New Jersey about fifteen miles from 42nd Street and Broadway. It forms one of a community of towns such as Bloomfield, Glen Ridge, the Oranges, Verona, the Caldwells, etc. Combined, these towns form a section of Greater New York, lying just beyond the Palisades of the Hudson.
>
> Transportation facilities are excellent. Be-

NO. 47 IN A SERIES OF STAFF PHOTOGRAPHS
DR. HARRIET L. HARDY — ASSOCIATE PHYSICIAN

sides two railroads there are busses running on the hour or half hour, with a 40 to 36 minute schedule, between Montclair and the Port Authority bus terminal at 41st Street and 8th Avenue. Two super-highways also connect Montclair and vicinity with New York via the George Washington Bridge, and the Hudson and Lincoln tunnels.

Medical practice is very active here and I have found to be true the words of an old doctor whom I met on my first arrival in Montclair: "There is plenty of work here for a young man who is willing to do it." Although now surrounded by a "sea" of specialists (most of whom are very good) I always have been content with the title of "general practitioner" with an active interest in general surgery. This, however, I am gradually giving up along with obstetrics, for the somewhat less strenuous work in the office — which, by the way, I now am limiting to three days a week.

Since leaving the M.G.H. in October 1926, I have remained in Montclair — for the past twenty years at my present location. My home and office are so arranged that the office functions as a separate unit from the home.

Patients frequently inquire about the 10 by 36 inch panoramic view of the M.G.H. which hangs on the wall of my consultation room. They always seem interested in a bit of its history and like to learn about the old Ether Dome which is shown in the center of the picture.

Here is a news item which may interest some of the men of H.M.S. '24 who see THE NEWS. A friend and former patient who now lives in Tryon, North Carolina, recently met Dr. Worth Hale, former Dean of H.M.S., who has been spending the winters in Tryon. A few days ago I received a very nice letter from Dr. Hale, who seems to be well and active. He reports a home address of Antrim, New Hampshire, but states that he and his wife still go to Maine in the summer.

Our one son, Ralph, Jr., aged 22, graduated from Harvard College last June. He has been deferred by the military service for study and is now taking postgraduate work in experimental psychology at George Washington University, Washington, D. C.

My personal ambition calls for a drastic curtailment of a very active practice, to take some time out in the future for a bit of travel which I have thought much about in the past but, perhaps unwisely, have done little of.

One hobby which has given me much pleasure and which I hope to continue is the making of originally designed antique type of furniture in my basement workshop. I never make two pieces alike and never am satisfied with the amount of time available for this activity.

Gardening is another avocation which furnishes no end of interest, but with little leisure time to pursue it. In the future I hope to do more of it and perhaps may be able to grow some super-delphiniums and snapdragons. Last spring some of my Pontiac Darwin tulips measured 36 inches in height.

And so life goes on at a quickening pace, with each year appearing a bit shorter than the one before, with an increasing number of things to do and seemingly less time in which to do them.

Each month I read THE NEWS eagerly. I would like to say hello to several of my classmates who interned at the M.G.H., some of whom are still connected with it.

This letter has come from Dr. Ching Tung Liu (r.s. *N.S.* 1946):

I regret that I shall not enjoy very much longer the distinction of being the only MGHer in Canandaigua. The Veterans Administration is transferring me to a new post as Chief of the Neurosurgical Service at the Veterans Hospital in Oakland, California, in March.

Since my happy days at M.G.H., we have had two additions to our family — Linda, aged 7, and David Jason, aged 3.

Canandaigua has a climate very similar to Boston's, in that it is very cold and "snow-ful" in winter, but the summers are delightful. However, California may be even more attractive if all we hear is correct.

Best wishes to all our MGH family.

* * *

One of the year-round, day-by-day projects in the Hospital is the renovation and redecoration of different areas. For the most part, these changes are taken for granted by many, sincerely appreciated by those immediately affected by them, and unnoticed by the large majority.

Not so, however, the recent redecoration of the waiting rooms and corridors on the first floor of the Baker Memorial. For the past three months the changes taking place in this area have become the conversation piece of the entire Hospital. The pros and cons have been loudly voiced by the passers-by, beginning on the day the brilliant, modern multicolor design was painted on the end doors of the lounge, continuing during the application of the soft tones to the extensive wall space, rising violently with the introduction of furniture temporarily on loan from the Out-Patient Department, and reaching a climax at the prospect of a bamboo curtain extending the length of the room.

Over night the transformation came. The lovely broadloom rug was laid, the colorful, comfortable, permanent furniture was installed, the bamboo curtain was hung, and the pros and cons merged into expressions of surprised delight at the harmonious result.

Perhaps the greatest tribute to those responsible for the transformation is to be found in the obviously improved comfort of the patients and visitors whose moments of waiting in the lounges are usually troubled ones.

The redecoration of the large waiting room in Baker is but one part of the work presently going on; but, because its location has attracted such wide attention, it has been selected as a typical illustration of the efforts that are constantly being made to improve the atmosphere of the Hospital for the benefit of the patients.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 135 Boston, Mass. June 1954

NEUROSURGICAL SERVICE

Since the last Neurosurgical Service report appeared in the December 1951 issue of THE NEWS, Dr. William Jason Mixter has retired from practice. Although he ceased being Chief of the Service in 1941 because of the early age limit on the part-time visiting staff, he headed the Service again during much of the war period and carried on an active practice in the Phillips House and Baker Memorial until last summer. Dr. Mixter was the first to specialize in neurosurgery in this Hospital and, with the exception of Dr. Harvey Cushing at the Peter Bent Brigham Hospital, was the pioneer in neurosurgery in New England. His scientific contributions and his personality made him an outstanding figure that won the esteem and enduring affection of all who were privileged to work with him.

The Service is trying a new program for training residents — taking on two men a year for a three-year period. Instead of having three men progressing through the general and private wards of the M.G.H., we now have each man spend a year of his required training to meet the American Board standards on Dr. Drew's service at the new V.A. Hospital on South Huntington Avenue, as well as six months in neuropathology here under Drs. Raymond D. Adams and Edward P. Richardson. This supplementary training, in addition to a previous period that many of our residents spend as research fellows in the experimental laboratory, should give our graduates an unusually well-rounded training. We believe that this will be a great help to them, as good opportunities for young neurosurgeons to practise are becoming increasingly difficult to find, owing to the competition from the large number of training centres in the United States.

The development of a research laboratory on the 4th floor of the White Building was described in the last report. Still further opportunities for investigation of the nervous system have been opened up in association with the new laboratories developing in neurology under Dr. Raymond D. Adams and in physics under Dr. Gordon Brownell.

Current work of interest includes the following subjects:

Formation and absorption of spinal fluid: This is being investigated by Dr. William Sweet and Dr. Herbert Locksley by means of isotopically labelled water, electrolytes, and protein. These new methods have shown that it is necessary to revise many of the older concepts of secretion of cerebrospinal fluid by the choroid plexus and its absorption in large part by the arachnoid villi over the convexity of the hemispheres. It has become evident that the elements of the cerebrospinal fluid are exchanging with the blood stream throughout the ventricular system and the pia over the entire extent of the brain surface and spinal cord. Only the protein appears to require escape from the cerebral ventricles in order to be absorbed at a sufficiently rapid rate to maintain a balance between production and absorption.

Localization of brain tumours: The original work on localization of tumours deep in the brain by their concentration of the beta-emitting isotopes of phosphorus and potassium (Selverstone, Solomon, and Sweet) and their detection by a tiny probe Geiger counter (Robinson, Selverstone, and Solomon) has already been described in THE NEWS. As a supplement to this valuable procedure Dr. Sweet and Dr. Brownell have devised a more simplified and accurate method of extracranial localization. Previous methods used elsewhere depended upon a laborious comparison of numerical counts of gamma particle emission (radioactive I^{131}) from many areas of the head. A group of radioactive isotopes which emit positrons has been shown by animal experiments to have peculiar advantages for this purpose (Locksley, Dow, and Lepoire). These observations made in our laboratory on mice have been corroborated in our patients with tumours of the brain. Dr. Brownell has devised an efficient automatic device for scanning by which the concentration of counts is reproduced on an outline of the head. The surgeon is thus given graphic evidence of the position of a tumour within the skull comparable to an x-ray film or a pneumogram or arteriogram. On the basis of increasing confidence in the reliability of these scans, we are more frequently able to avoid the risk and discomfort of injecting air into the ventricles or opaque solutions into the carotid artery.

Treatment of brain tumours by internal radiation: Drs. Sweet, Brownell, Locksley, Aronow, Luessenhop, and Edwards have utilized the tendency of certain isotopes to concentrate within a brain tumour and then, on exposure to a beam of slow neutrons, to disintegrate with the release of highly destructive radiation. These particles travel but a few millimeters from the site of disintegration and thus confine the greater part of their lethal energy to the tumour cells. The concentration of suitable isotopes in brain tumours has been studied in our laboratories and the patients have been exposed to a beam of slow neutrons from the nuclear reactor at the Brookhaven National Laboratory by Dr. Lee Farr and his associates. The first group of patients so treated a year ago showed the need for heavier radiation, but with the nuclear reactor rebuilt to produce twenty-fold more slow neutrons the results may become really effective and open up a new method of treating these difficult lesions.

Studies on the blood-brain barrier: Here again radioactive isotopes are proving to be a more effective method of investigating the permeability of cerebral blood vessels and the penetrations of various substances from the cerebral capillaries into different portions of the brain. Dr. Louis Bakay has been working in this field, observing the penetration of isotopically labelled particles by contact exposure of slices of fresh brain tissue on sensitive photographic films. These show that, under normal circumstances, the brain is prevented by a barrier from absorbing anything but minute quantities of radioactive phosphate from the blood circulation. This barrier is probably located in the wall of cerebral capillaries. If the isotope is injected directly in the cerebrospinal fluid and the barrier is thus by-passed, large amounts of P^{32} are rapidly incorporated into the central nervous tissue. However, certain vegetative centres of the brain behave in a different fashion. Furthermore, the barrier for P^{32} is destroyed by various processes, such as trauma, haemorrhage, or tumours, and it is hoped that new information can thereby be gained regarding the disturbed cerebral metabolism in these disorders. It should also be possible to investigate the distribution of "tagged" therapeutic substances by similar methods.

Studies on the effects of ultrasonic radiation: Dr. Thomas Ballantine is presently collaborating with the Army Neurophysiological Laboratory in exploring the destructive action of high intensity ultrasound. By employing a focused beam it may be possible to destroy certain areas deep within the brain of experimental animals without affecting the tissue in the path of the beam above the focal point. If successful, this method of producing lesions in the central nervous system should be of value in neurophysiological investigations and may have some applications to patients as well, perhaps in the selective destruction of frontal lobe white matter as a refinement of modern lobotomy techniques.

Along more clinical lines the following problems are being studied:

Pressure gradients in the cerebral arteries: Following their initial study of pressures in the internal carotid artery after ligation of the common made seven years ago, Dr. Sweet and Dr. Bakay have found it possible to record the reduction in pressure in the cerebral arteries distal to the point of ligation. Information of value concerning the comparative effectiveness of ligation in the neck or intracranial clipping is being obtained by assessing the long-term results in patients after operation for intracranial aneurysm.

Production of electrolytic lesions deep in the brain without operative injury to superficial structures: In the surgical relief of abnormal movements and of persistent severe pain it is often desirable to destroy deep nuclei or fibre tracts, but it is important to minimize damage to neighbouring structures. A start toward this goal has been made elsewhere with the use of the Horsley-Clark stereotactic instrument redesigned for use in man and with various forms of electrical lesion-makers. Evaluation of those in current use by Sweet and Mark has shown that they result in lesions which may vary as much as 100 percent in extent and are therefore unsuitable for use in man. Experiments in animals have shown that with currents of higher radio-frequencies it is possible to coagulate tiny or larger areas of approximately constant size. By these means Drs. Sweet, Mark, and White are hoping to develop less hazardous and more effective measures for carrying out selective frontal lobotomy, interruption of the spinothalamic pain tract in the medulla and midbrain, and of other deep structures in the treatment of tremor and abnormal movement. An improved stereotactic instrument has been designed by Dr. Mark for accurate placement of the electrodes in such deep and vital structures as the thalamus and basal ganglia. Dr. Mark, in association with Dr. Yakovlev in the Department of Neuroanatomy at Harvard, is also making a complete cross section atlas of the brain.

Hypothermia and operation on the avascular brain: Operation on some of the arteriovenous aneurysms has carried a prohibitive risk because of exsanguinating haemorrhage. Dr. William Lougheed, here for a year from the Department of Neurosurgery in Toronto, has helped us adapt for human use the experiments made in his medical school's Department of Physiology on hypothermia in animals. In this work Dr. W. G. Bigelow showed that general cooling of the body permits shutting off the cerebral circulation for extended periods. This depends on the fact that when the temperature of the brain is reduced its metabolism and the vital need of the delicate nerve cells for oxygen is likewise decreased. Cooling two patients under anaesthesia to 25° centigrade (77° Fahrenheit) has enabled us to (1) remove successfully an entire cerebral hemisphere invaded by a vascular malignant tumour and (2) clip off an arteriovenous aneurysm in the third ventricle. These individuals appeared to have suffered no ill effects from prolonged occlusion of both carotids in the first, and the vertebrals as well as the carotids in the second. The latter unfortunately succumbed to an unforeseen late-developing vertebral thrombosis. This method to permit total circulatory arrest has been used elsewhere in operations on the open heart, and independently on the brain by Mr. Norman Dott in Edinburgh. We are much indebted to Dr. William R. Brewster, Jr., in Dr. Beecher's department, for help with the complex problems associated with anaesthesia and cardiovascular physiology.

Effect of intravenous solutions on cerebrospinal fluid pressure: Following Dr. Allan Butler's suggestion that the routine administration of 5 percent glucose in distilled water for maintenance of fluid balance in postoperative comatose neurosurgical patients might lead to an increase in intracranial pressure, Bakay and White have investigated this possibility with Dr. John Crawford of the Pediatrics Service. By catheterization of the lumbar subarachnoid space and prolonged determinations of pressure with an electronic manometer it has been found that an intravenous drip of 1500 cc. of 5 percent glucose in distilled water is followed by a rise in pressure up to double the preexisting level, whereas no appreciable rise is seen when the glucose is given in half normal saline. As such a small volume of salt solution is well tolerated, this simple observation has led to a distinct improvement in postoperative care.

Relief of chronic pain by neurosurgery: This long-range study which has been in progress since 1927 is still continuing. Observations on 420 patients after various types of denervations, followed for prolonged periods, have been incorporated in a book by White and Sweet which is soon to be published by Charles Thomas.

As noted in the previous report, the only handicap in carrying out better neurosurgery and more efficient research on the human nervous system at the M.G.H. has been the lack of a properly designed operating room. Our present theatre is too small and improperly ventilated; the construction of the viewing galleries is utterly inadequate to accommodate the necessary recording instruments and the personnel to man them. When these are crowded into the operating room itself there is a serious risk of air-borne infection in the course of prolonged procedures on the exposed brain or spinal cord. We have just been promised that this handicap will be corrected.

James C. White, M.D.,
Chief of the Neurosurgical Service

* * *

The following excerpt from the Massachusetts Memorial Hospitals' periodical of March-April has been sent to us:

> Each year the American Institute of Graphic Arts and the Society of Printers choose the 50 best books of the year. Selections are based primarily on appearance, format, typography, and other technical considerations.
>
> This year the *Atlas of pelvic operations,* by Dr. Langdon Parsons of MMH [and M.G.H.] and Dr. Howard Ulfelder [of M.G.H.], was chosen and is the first medical book to be so honored.

The book was published by W. B. Saunders Company of Philadelphia. It was exhibited with other winners at the Boston Book Binders exhibit during April and at the Boston Public Library during May.

* * *

IRA THEODORE NATHANSON

On May 3 Dr. Ira T. Nathanson spoke to the second year Harvard Medical School class on "The natural history of cancer". He completed his lecture, answered questions, and left the lecture hall. A moment later he collapsed and died of a heart attack in the anteroom. Thus ended a life devoted to a quest for the cure of cancer.

Dr. Nathanson came to the Collis P. Huntington Memorial Hospital in 1935 as Littauer Fellow in Surgery. Here in the laboratory he did pioneer work on the identification of sex hormones, and at the same time completed a classic series of clinical studies, with Dr. Claude E. Welch, on the life expectancy of patients with various types of cancer.

In 1940 he was invalided with tuberculosis—which time of enforced rest served to crystallize the form of a book published soon thereafter by Taylor and Nathanson on *Lymph node metastases.*

In the war years his efforts were joined with those of the whole Huntington Memorial group in studies on shock and traumatic infection. These investigations emphasized the role of local fluid loss in converting traumatic tissue damage into outspoken shock, and pointed to the importance of clostridial infections as a complication of severe trauma.

The then current finding of Huggins that cancer of the prostate was favorably influenced by castration or by administration of female sex hormones influenced Dr. Nathanson's thinking, and gave encouragement to his previous hope that cancer of the breast might be similarly influenced by hormones — and so, indeed, it proved to be. Following cautious treatment with female sex hormones of several patients with advanced breast cancer, he was elated to observe unmistakable evidence of regression in certain cases. In pursuit of this finding and its explanation, his life reached a feverish tempo from which it never slackened.

Dr. Nathanson served generously and in many ways in the cause of cancer. He was Cancer Teaching Coordinator of Harvard University and Associate Clinical Professor of Surgery, Associate Visiting Surgeon and Executive Secretary of the Tumor Clinic at the Massachusetts General Hospital, Chairman of the Therapeutic Trials Panel of the American Medical Association, member of the Committee on Growth and Chairman of the Committee on Cancer Diagnosis and Therapy of the National Research Council, Visiting Surgeon at Pondville Hospital, and a moving spirit in the New England Cancer Society. About him grew a laboratory staff skilled in the separation and identification of steroid compounds. On the national scene he stood nearly alone, as an example of fusion in a single individual of the two approaches to the cancer problem — the pragmatic one of the surgeon confronted by a patient with the disease, and the long-range point of view of the laboratory man searching for newer and sharper tools to use in the combat.

Few students could fail to catch the enthusiasm of his lectures. It is fitting that he should have been engaged during the last moments of his life in describing to a new medical generation the gathered experience of his lifetime work.

ul C. Zamecnik, M.D.] P. C. Z.

The Board of Trustees, at their meetings on April 2 and 16, voted:

To promote Dr. William D. Sohier, Jr. to Assistant in Medicine, effective July 1;

To grant leave of absence to Dr. Donald P. Todd because of military service, effective April 15.

To appoint:

Dr. John G. Clark, Jr. as Assistant Resident on the Psychiatric Service, beginning July 1;

Dr. Edward C. Haley as Special Intern for a mixed internship in Medicine, Pediatrics, and Psychiatry, beginning July 1;

Dr. Oscar Hirsch as Consultant in Neurosurgery;

Rev. Kendrick R. Lee as Assistant Protestant Chaplain to the Massachusetts General Hospital;

Dr. Thomas C. Peebles as Chief Resident on the Children's Medical Service for one year, beginning July 1;

Dr. E. E. Pochin of the University College Hospital Medical School, London, as a Richardson Lecturer;

Dr. Mary P. Smythe as Intern on the Children's Medical Service, from January 1 through June 30, 1955;

Dr. John D. States as Assistant Resident in Orthopedic Surgery, beginning January 1, 1955.

To appoint the following Interns for one year, beginning July 1:

MEDICAL

David W. Allen
Frank K. Austen
Gerald M. Edelman
Jan Koch-Weser
Arthur R. Kravitz
Glenn A. Langer
William E. Lassiter
Donald B. Martin
Katharine E. Spreng
Oscar E. Starobin
Pindaros R. Vagelos
Ralph C. Williams

CHILDREN'S MEDICAL

Kazuo K. Kimura
Leonard H. Plotkin
Gerold L. Schiebler

SURGICAL

Arthur E. Baue
David L. Collins, Jr.
Oscar S. DePriest, III
Gilbert Hermann
Alvan B. Judd
Walter E. Klingensmith
Eugene R. Nobles, Jr.
Stuart E. Price, Jr.

At their meetings on April 7, 14, and 21, the General Executive Committee voted to appoint:

Dr. Franca Bonotti as Clinical Fellow in Anesthesia, effective July 1;

Dr. Oswald D. Cinquegrana as Clinical Fellow in Physical Medicine, as of February 15, 1955;

Dr. Herbert C. Mansmann, Jr. as Clinical and Research Fellow in Medicine, assigned to Allergy, beginning July 1;

Dr. Norman L. Paul as Clinical Assistant in Neurology for one year, beginning July 1;

John L. Wood, Ph.D. as Research Fellow in Biochemistry, beginning April 1.

MASSACHUSETTS EYE & EAR INFIRMARY

The Infirmary chose National Hospital Day — May 12 — for the awarding of service pins, for the first time, to members of the professional staff who have served for 25 or more consecutive years on the active staff.

By vote of the Board of Managers, service pins were given to the following doctors: Dr. Paul A. Chandler, Dr. Edwin B. Dunphy, Dr. Benjamin Sachs, Dr. Carl H. Ernlund, Dr. Maurice G. Evans, Dr. Robert L. Goodale, Dr. Charles I. Johnson, Dr. Philip E. Meltzer, Dr. LeRoy A. Schall, Dr. Francis L. Weille, and Dr. Alexander S. Macmillan. The following consultants were awarded pins for 25 or more years of consecutive service on the active staff: Dr. Ralph H. Ruggles, Dr. Frederick L. Bogan, Dr. Edwards W. Herman, Dr. Moses H. Lurie, Dr. George H. Poirier, Dr. D. Harold Walker, Dr. Edmund W. Clap, Dr. Harris P. Mosher, Dr. Frederick H. Verhoeff, Dr. Lyman G. Richards, and Dr. Varaztad H. Kazanjian. Mr. Francis S. Hill, Director of the Infirmary, presented the pins.

Dr. Craig Bade of Victoria, Texas, arrived at the Infirmary on April 28, to observe the Ophthalmic Service as a Heed Fellow. Dr. Bade plans to remain here through the month of July.

The Harvard Medical School has announced postgraduate courses in Otology and Laryngology, to be held at Harvard and the Infirmary. Dr. LeRoy A. Schall, Dr. Werner Mueller, and Dr. Moses H. Lurie and associates will conduct these classes, to be offered from November 1, 1954 to March 26, 1955. Courses will include: Histopathology of the Ear, Nose, and Throat; Anatomy of the Head and Neck; Audiology; and Anatomy of the Temporal Bone.

The 58th Annual Meeting of the American Laryngological, Rhinological, and Otological Society, Incorporated, was held at the Hotel Statler, May 25-27. The three-day meetings consisted of speeches, table discussions, and question periods. Dr. Schall, as president of the Society, offered presidential remarks on the opening day. The Honorable Christian A. Herter, Governor of Massachusetts, extended greetings from the State, and Dr. Francis L. Weille addressed the Society on "An experimental study of the small blood vessels of the spiral ligament and stria vascularis of living guinea pigs during anaphylaxis".

VINCENT RESEARCH LABORATORY

In 1942, when the Vincent Memorial Hospital joined the Massachusetts General Hospital as the Gynecologic Service, there was no Vincent Laboratory. For that matter, there was no separate unit of the Hospital known as the Vincent; White 7 was used for Vincent patients. Very soon after the Vincent had joined forces with the Massachusetts General, Dr. Maurice Fremont-Smith was impressed by an article by Drs. Papanicolaou and Traut, published in the *American Journal of Obstetrics and Gynecology,* describing how it was possible to diagnose cancer of the uterus by examining the cells of a vaginal smear. It was not the fact that cancer could be diagnosed which intrigued Dr. Fremont-Smith, but rather the suggestion of the authors that cancer could be diagnosed before any symptoms had occurred. Here, perhaps, was a chance to diagnose one type of cancer earlier than had ever been done in the past. Dr. Meigs, the Chief of the then new Gynecologic Service, agreed that the problem certainly was worthy of investigation. The third member to join the group was Ruth Graham, who was to do the microscopic and technical work associated with it.

Thus, very early in the association of the Vincent and the Massachusetts General Hospitals, a specific laboratory problem arose. Space was needed and, since the anticipated Vincent Building could not be built for years, it was necessary to rely upon the generosity of the M.G.H. for space. Dr. Means kindly offered a corner of one of the thyroid laboratories which were then located on the 4th floor of the Bulfinch Building, and there a start was made in attempting to confirm Papanicolaou's findings.

During that first year, vaginal smears from 220 cases were examined. The laboratory was extremely fortunate in receiving smears, not only from the M.G.H. but from the Pondville Hospital as well, through the courtesy of Dr. Meigs and Dr. I. Kapnick. It soon became apparent that the method was worth while, since over 95% of the 62 cases with cancer of the uterus had been reported as positive by vaginal smear. This series of cases was reported in *Surgery, Gynecology, and Obstetrics* in 1943, and was the first paper to confirm Papanicolaou's earlier work.

Perhaps at this point it is pertinent to digress for a moment and discuss the basis for the cytologic diagnosis of cancer. Cells are shed from any epithelial surface. If, for example, a specimen of saliva is looked at microscopically it will show cells which have been shed from the lining of the mouth. Sputum contains cells which are discarded from the upper surfaces of the lining of the respiratory tract. Normal cells are continually falling off and they may be identified as normal, even though they are free single cells, just as the free cells in the blood can be identified. If a tumor is present, the cells from its surface will be shed just as are the normal cells, and if material is collected, fixed, and stained properly, these cells can be identified as cancer cells. The great advantage of this method is that a very small early tumor will desquamate cells, and by examination of single cells a diagnosis may be arrived at much earlier, in many instances. During a nine-year period, 57 cases of unsuspected uterine cancer have been discovered by the use of the vaginal smear, or 8% of our total cases. An unsuspected case is one where no symptoms are present and physical examination is considered negative by the gynecologist.

At first the cytologic diagnosis of cancer was confined to cancer of the female genital tract. However, as its value in that field became more firmly established, it was a natural course of events that it be applied to other types of cancer. The variety of specimens examined in the laboratory at the present time would have been unbelievable ten years ago. In an ordinary day, specimens of sputum, gastric secretion, nasal aspiration, rectal washings, pleural and abdominal fluids, and vaginal smears may all be examined. The field of cytology has expanded rapidly to include almost every type of specimen.

With such an expansion of material, it is obvious that expansion in space had to be found. The Vincent Laboratory has occupied many different places in the Hospital. The first separate laboratory was in the basement of the Bulfinch Building, near the Photography Laboratory. Soon, this became too small and the laboratory was moved to the House Staff Laboratory on White 9. There it remained until the new Vincent Building was complete in 1947. It appeared then that the space problem had been settled, but not for long. In 1953 the laboratory had an addition built, through the generosity of the Hyams Trust Fund.

The accuracy of the cytologic diagnosis will vary with the type of specimen examined, and below are listed the various types of fluids and the comparative accuracy as of 1953:

Specimen	Cancer cases	%Cancer cases diagnosed	%Positive reports confirmed
Vaginal smear	72	95%	95%
Sputum	77	71%	100%
Urine	17	65%	92%
Gastric	23	70%	94%

The reports from the Vincent Laboratory fall into four categories: negative, doubtful, positive, and unsatisfactory. A negative report means that all cells seen were considered benign; a positive report, that the cells seen were considered to be malignant; an unsatisfactory report means merely that not enough cells were present, or that those present were too poorly preserved to allow any diagnosis. These three types of reports are fairly clear, but there seems occasionally to have been some difficulty in the interpretation of the "doubtful" reports. The doubtful report does not mean that cancer cells are present. It means exactly what it says — cells are present about which the laboratory is in doubt, and more material is required before any definite decision can be made.

The accuracy of the method varies for a number of reasons — such as anatomical location of the tumor, as in cancer of the prostate and digestion of cells in an acid-gastric medium. Although the examination of all specimens does not equal the accuracy of the vaginal smear, in any fluid examined the positive reports are over 90% accurate. Such specificity as this makes the cytologic method valuable in the diagnosis of cancer.

From our interest in improving the accuracy of the vaginal smear came our first research project. Vaginal smears have always been done on all patients seen in the Gynecologic Tumor Clinic. A great many of these patients had been treated by radiation. We often found it difficult to distinguish between a normal cell showing radiation effect and cancer cells. In an attempt to resolve this problem, the vaginal smears of patients were studied throughout their radiation treatment. We found that not all patients showed the same amount of radiation effect in their cells, even though they may have received similar amounts of radiation. The amount of radiation response in the cells of the vaginal smear has become useful as a prognostic guide in cancer of the cervix treated by radiation. If there is little change in normal cells — and "little" is less than 65% normal cells showing radiation — the case is called a poor response to radiation. If the cellular response is greater than 75%, the case is considered a good response to radiation. In 140 cases of cancer of the cervix followed for 5 years, 66% of the good response group survived, and only 8% of the poor response group.

Since the normal cells appeared to be of such importance in the "cure" of patients treated by radiation, our next step was to attempt to change the poor response to a good response.

Before this could be done in patients, it was necessary to test various compounds in mice to find those which would make the animals more susceptible to radiation. After testing nearly 2,000 mice with a variety of compounds, testosterone propionate and alpha tocopherol were found to be the most effective in making mice more sensitive to radiation.

Then we were able to try these compounds on patients with poor cytologic response. Of the 7 patients considered poor responses and given additional medication, 6 were changed to good responses, as judged by their vaginal smears, and 3 of these patients are alive and well after two and a half years.

In the winter of 1952-53, one hundred cases were studied in this manner at the Radiumhemmet in Stockholm, Sweden. Vaginal smears were examined, and if the patient had a spontaneous good response, no additional medication was given. If, however, she had a poor cytologic response after the first radium application, either testosterone propionate or alpha tocopherol was given. It was possible to change 86% of the poor responses to good responses cytologically. Only time will tell if this will result in a higher survival rate.

The research of the laboratory at the present time is directed toward two main interests. The first is an attempt to clarify tumor-host relationships. Desoxynucleoprotein is being extracted from human tumors. It is then used as an antigen to test that patient's serum for antibodies against the tumor. Preliminary studies indicate that a few patients do react to their tumors by producing specific antibodies.

The second main research interest is that of why radiation helps people who have cancer. Patients receiving radiation are carefully studied. In addition, a fair amount of animal work is being conducted, both in rabbits and in tumor mice.

Other investigations are being developed in the laboratory, but this brief résumé applies only to the work being done on cancer. Dr. Janet McArthur and Dr. Frank Ingersoll are conducting experiments on the luteinizing hormone, which deserve a separate report.

No discussion of the Vincent Laboratory would be complete without some reference to our students. Since this laboratory was one of the pioneers in the cytologic diagnosis of cancer, it has always had numbers of students learning the technique. Last summer alone, there were students here from Sweden, the Philippines, France, Guatemala, Virginia, and Maryland. We have been particularly pleased to have so many foreign students.

The Vincent Laboratory's main interest in research is a clinical one. Its close association with the Gynecologic Service has made such research both feasible and profitable. This is due in no small part to the encouragement and direction the laboratory has always received from Dr. Joe V. Meigs, the Chief of the Gynecologic Service.

Ruth M. Graham, B.S.,
Director, Vincent Cytology Laboratory
John B. Graham, M.D.,
Director, Vincent Research Laboratory

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ALLERGY LABORATORY NOTES

On April 7, Mr. Samuel R. Gargano spoke before the 67th Annual Session of the American Association of Anatomists at the University of Texas, in Galveston. He showed a motion picture entitled "A cinematographic record of microscopical observations of the small blood vessels of the spiral ligament and stria vascularis of living guinea pigs". Mr. Gargano is a third year medical student at Tufts. During summer vacations he developed a method of fenestrating the turns of the cochlea of living guinea pigs while working in the Allergy Laboratory.

Dr. Walter S. Burrage was chairman of the April 8 morning session of the 1st Conference on Microcirculatory Physiology and Pathology, held at the University of Texas, April 8-9. This meeting was held in conjunction with the 67th Annual Session of the American Association of Anatomists.

Dr. John W. Irwin was a member of the committee of the 1st Conference on Microcirculatory Physiology and Pathology.

Dr. Henry S. Forbes spoke at the Conference on Microcirculatory Physiology and Pathology. His subject was "Study of blood vessels on the cortex of living mammalian brain".

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. We are very grateful that, this month, every title submitted included the classification.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Schaaf, R. S., with editorial assistance of Bland, E. F.
Cardiovascular diseases: A review of some significant publications (July 1949-June 1952).
A.M.A. Arch. Int. Med. 93:254-298; 407-463.

General Medicine

Benedict, E. B., and Gillespie, J. E. O'N.
Medical progress: Esophageal stenosis caused by peptic esophagitis or ulceration.
New England J. Med. 250:642-651.

Benedict, E. B., and Gillespie, J. E. O'N.
Peptic stenosis of the esophagus.
Surg., Gynec. & Obst. 98:494-502.

Histology

Odland, G. F.
Skin and the epidermal derivatives.
In Histology, R. O. Greep, Editor, New York, The Blackiston Company, pp. 428-457.

Laboratory Science

Griesemer, R. D., and Gould, E.
A method for the study of the intermediary carbohydrate metabolism of epidermis. I. Oxidation of acids of the citric acid cycle.
J. Invest. Dermat. 22:299-315.

Jeanloz, R. W.
4, 6-di-*O*-methyl-D-glucosamine hydrochloride (2-amino-2-deoxy-4, 6-di-*O*-methyl-D-glucose hydrochloride).
J. Am. Chem. Soc. 76:555-558.

Jeanloz, R. W.
6-*O*-methyl-D-glucosamine hydrochloride (2-amino-2-deoxy-6-*O*-methyl-D-glucose hydrochloride).
J. Am. Chem. Soc. 76:558-560.

Stoffyn, P. J., and Jeanloz, R. W.
3-*O*-methyl-D-galactosamine hydrochloride (2-amino-2-deoxy-3-*O*-methyl-D-galactose hydrochloride).
J. Am. Chem. Soc. 76:561-562.

Stoffyn, P. J., and Jeanloz, R. W.
4, 6-di-*O*-methyl-D-galactosamine hydrochloride (2-amino-2-deoxy-4, 6-di-*O*-methyl-D-galactose hydrochloride).
J. Am. Chem. Soc. 76:563-564.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E.
The Dandy-Walker syndrome or the so-called atresia of the foramen Magendie.
J. Neuropath. & Exper. Neurol. 13:14-29.

Ophthalmology

Allen, H. F., and Mangiaracine, A. B.
Sterilization of sharp instruments for use in eye surgery.
A.M.A. Arch. Ophth. 51:311-314.

Otolaryngology

Kelemen, G.
Maxillary empyema and obesity.
Pract. oto-rhino-laryng. 16:91-95.

Surgery - Research

Nardi, G. L., McDermott, W. V., Jr., and Dobson, E.
The effect of portal caval shunts on liver blood flow as measured by radioactive colloid.
In Surgical forum 1953, Philadelphia, W. B. Saunders Company, pp. 376-380.

Books

Lever, W. F.
Histopathology of the skin, edition 2.
Philadelphia, J. B. Lippincott.

* * *

Brief bits: —

Dr. Edward B. Benedict recently attended the meeting in Montreal of the American Association for Thoracic Surgery and discussed "The conservative and surgical management of benign strictures of the esophagus", by Paul H. Holinger, Kenneth C. Johnston, Willis J. Potts, and Fernando DaCunha, and "Palliation of esophageal obstruction due to carcinoma with a permanent intra-luminal tube", by S. Mackler and Roland Mayer.

Dr. Walter S. Burrage was a guest speaker at the Annual Meeting of the Rhode Island Medical Society in Providence, on May 5. His subject was "Cortisone and hydrocortisone in the treatment of allergic disease".

Dr. Bradford Cannon recently attended the meeting in Galveston, Texas, of the American Board of Plastic Surgery, of which he is secretary-treasurer.

Dr. Benjamin Castleman addressed the Tri-State Spring Clinical Meeting of the Academies of General Practice of Maine, New Hampshire, and Vermont, which was held in Manchester, New Hampshire, on April 14. The subject was "Carcinoma in situ".

Dr. Edwin F. Cave spoke at the American College of Surgeons Sectional Meeting at Montreal in March on "Fractures and dislocations of the carpal bones". On May 17 he spoke in London at the combined meeting of the American College of Surgeons and the Royal College of Surgeons on "The present status of metallic internal fixation of long bone fractures in the United States".

At the recent meeting of the American Association for Thoracic Surgery held in Montreal, May 2-5, the Surgical Department of Massachusetts General was represented by the following people: Drs. J. Gordon Scannell, William R. Waddell, Hermes C. Grillo, E. Stanley Crawford, Paul S. Russell, Jr., and Edward B. Benedict. Two of our members of the Association presented papers: Dr. Scannell — "Surgical reconstruction of the superior vena cava" — co-author, Dr. Robert S. Shaw; Dr. Waddell — "The etiology of chronic interstitial pneumonitis associated with lipid deposition: An experimental study" —co-authors, Drs. Ronald C. Sniffen and Lawrence L. Whytehead.

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The following officers for the year 1954-55 were elected at the May 5 meeting of the Committee:

Chairman—Mrs. Oliver Cope
Vice-Chairman—Mrs. Howard Ulfelder
Secretary to the Board—Mrs. Grant V. Rodkey
Corresponding and Recording Secretary—Mrs. E. Peirson Richardson, Jr.
Treasurer—Mrs. Charles L. Short
Hospitality—Mrs. Raymond D. Adams
Hospital Interests, Special Projects—Mrs. Richard H. Sweet
Volunteers—Mrs. Charles B. Burbank
Publicity—Mrs. John W. Raker

* * *

A unique observance of National Hospital Day, May 12, was made at the Massachusetts General Hospital. Invitations had been extended to friends of the Hospital to observe a typical and interesting Medical-Social Service Conference in the Moseley Rotunda at 2.30. Dr. Walter Bauer, Chief of our Medical Services, was the leader of the Conference. Other participants were members of the medical, nursing, and social service staffs. They demonstrated how all the services and resources of the Massachusetts General are brought together to provide the best possible care for a patient while he is in the Hospital and, also, to plan with appropriate community agencies to provide for his convalescence and rehabilitation as it affects him and his family.

Our Coordinating Committee, made up of representatives of the several volunteer women's groups in the Hospital, arranged the program, which included refreshments and optional tours for the guests. The members of the committee in charge of the National Hospital Day program were: Mrs. Augustus Thorndike, Chairman, Miss Josephine C. Barbour, Mrs. Edward D. Churchill, Mrs. Erwin N. Griswold, Mrs. Reginald Jenney, Mrs. Thomas H. Lanman, Miss Mary Quinlan, Miss Jessie Stewart, and Mrs. William R. Waddell.

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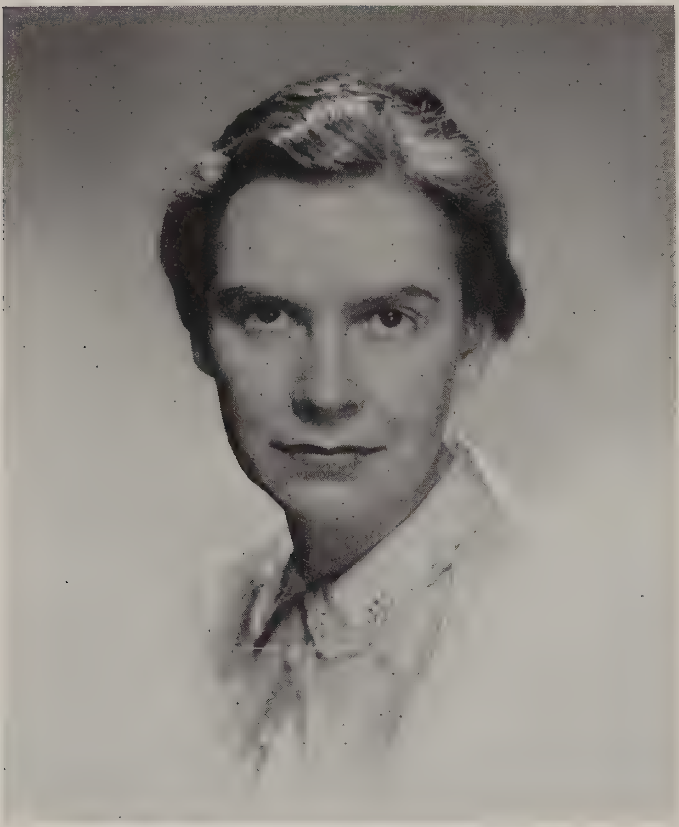
WORK SIMPLIFICATION

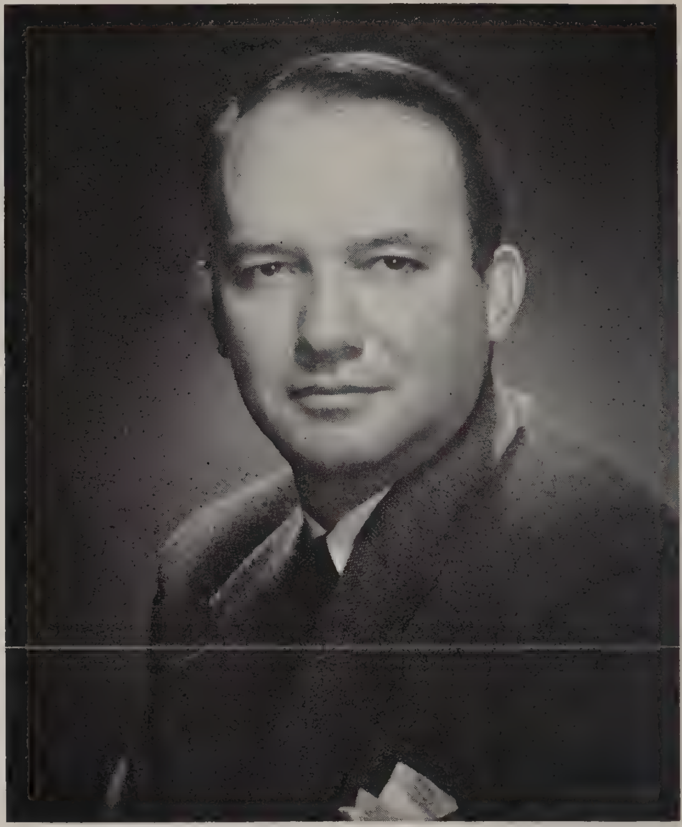
A new feature in administration has been inaugurated at Massachusetts General Hospital as a result of a course which Mr. Mattos and Mr. Murphy, two of our assistant directors, took at Lake Placid last summer. Mr. Mattos is conducting one phase of the program, with a series of conferences. Groups, kept to an ideally workable size by limiting the number of participants, are already meeting under Mr. Mattos's direction. Mr. Murphy will work jointly with department heads and the line organization in general, in the solution of technical problems as they may occur during the installation of new methods in connection with the program.

Mr. Mattos has given us this outline of the plan:

Work Simplification is the organized use of common sense aimed at finding easier and better ways of doing work on the part of everyone concerned. Work Simplification, or methods improvement, is an approach to better management and



NO. 48 IN A SERIES OF STAFF PHOTOGRAPHS
RUTH M. GRAHAM, B.S. — CLINICAL CYTOLOGIST



NO. 49 IN A SERIES OF STAFF PHOTOGRAPHS
JOHN B. GRAHAM, M.D. — ASSISTANT IN SURGERY

is of concern to top management as well as to the individual worker. The responsibility for creating or developing ideas which make for more effective service is shifted from top management (the efficiency expert, the industrial engineer) to the worker who, in the last analysis, knows his job better than anyone else. Top management, in the light of this change in thinking, must provide an atmosphere conducive to creativeness, and it must guarantee security to the worker whose objective is to eliminate waste—the elimination of which might ultimately mean the loss of his job if that should be in the interest of the organization. Obviously, management cannot guarantee any worker his job, but it must guarantee him employment if the objective of Work Simplification (to render service at the right time at a price the public can afford—an objective common to both management and worker) is to be attained.

Work Simplification is not a new idea. Frank and Lillian Gilbreth and Frederick W. Taylor, early exponents of time and motion in connection with work in various factories, developed the idea in the early 1900's as part of the scientific management movement. However, the approach or change of emphasis in Work Simplification from top management to the worker *is* new. It is new in that the human problem in applying any change is dealt with first, before the technical aspects of job improvement are tackled. We accept the fact that people resist change and resent criticism. We know that people prefer to be told they are right. In the light of this behavior which is accepted as natural in all of us, isn't it, then, common sense to emphasize the human relations aspect of methods improvement over and above the tools and technique of industrial engineering? To be sure, the latter are important, but only after the question of employment security has been settled in the worker's mind.

We must present the program to the worker in the light of these and other attitudes that are part of human nature. It is not deemed practical to present the program on the basis of time and motion studies and time clocks. Rather, it is offered on the basis of "working smarter and not harder". The average worker is not *primarily* interested in what management is going to get out of such a program, but rather in terms of what he is going to gain personally, or what he is going to avoid losing, by accepting Work Simplification. We can deal more effectively with the human problem and, indeed, do a better job of methods improvement if we keep in mind that many people do things for two reasons only: because they desire 1) to gain something, 2) to avoid losing something.

Work Simplification is ultimately not only a new approach to top management but also to personnel management. It appears as a two-pronged attack, as it were, upon the solution of our production problems, whether the production involves goods or service, as well as the solution of some of our more tenacious morale or human relations problems.

Here at M.G.H. a group of twenty dietitians has already taken the first Work Simplification sessions to be offered. Currently, three new groups have begun the series. The sessions are being offered first to those in managerial posts (department heads, supervisors, foremen, etc.), then to the operators or workers. This particular approach is not only desirable but essential. We are told that we all have a natural desire to improve our effectiveness if we are uninhibited. We must remove the inhibiting circumstances in terms of attitudes. In other words, we must open minds, instill the attitude of inquiry, and arouse the desire for the better way. Before we can open the minds of workers, before we can stimulate them out of complacency, we must condition management's own attitude toward this new philosophy.

* * *

New addresses: —

Dr. James L. Buchanan (clin. & res. fel. *S.* 1951), Mercy Hospital, Pittsburgh, Pa.
Dr. Leslie Corsa, Jr. (a. *C.M.* 1954), Chief, Bureau of Maternal and Child Health, California Department of Public Health, 760 Market St., San Francisco 2, Calif.
Dr. Albert G. Engelbach (a. dir. 1937), 911 Saint Joseph St., Dallas 10, Tex.
Dr. Arvil J. Hinshaw (*E.S.* 1947), 701 Goodhue Bldg., Beaumont, Tex.
Dr. Fred H. Howard (*C.M.* 1949), 140 West Spruce St., Sault Sainte Marie, Mich.
Dr. William J. Kerr (*W.M.* 1916), Maple Creek Rd., Korbel, Humboldt County, Calif.
Dr. Russell M. Nelson (a.r.s. 1954), University Hospitals, Minneapolis 14, Minn.
Dr. William D. Shorey (*E.S.* 1946), c/o American Embassy, Damascus, Syria
Lt. Donald P. Todd, MC, USNR (r.p. *An.* 1947), U. S. Naval Medical Center, Bethesda, Md.

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A sure way to inflict an unbearable case of nostalgia upon all MGH-ers who are now living at a distance from the Hospital is to tell you that the sturdy old chestnut tree in the Bulfinch yard is again in resplendent full-bloom as we send this issue off to press.

THE NEWS

No. 136 Boston, Mass. July and August 1954

PSYCHIATRY SERVICE

On July first Dr. Erich Lindemann takes over the Psychiatry Service of the Massachusetts General Hospital, as Chief of Service, and becomes Professor of Psychiatry at the Harvard Medical School. By training he is both a psychologist and psychiatrist, having taken his Ph.D. in psychology at the Universities of Marburg and Giessen in 1922, and his medical degree at the Universities of Cologne and Giessen in 1926. He is versed in the theories and techniques in both fields. In recent years he has held important teaching positions in the Department of Social Relations at Harvard University and in the Harvard School of Public Health. His varied activities in psychiatry attest to the breadth of his interests and his versatility. Before coming to Harvard in 1935 he was actively engaged in the diagnosis and management of psychotic patients at the Medical School of the University of Iowa. It was during this period that he discovered the effect of sodium amytal on the mental functions of the depressed and schizophrenic patient; the now widespread use of barbiturates in the technique known as narcosynthesis stems from this research work. At this time he carried on several studies of the psychological effects of other pharmacological agents. For many years, at the Massachusetts General Hospital, Dr. Lindemann was in charge of the Psychiatric Out-Patient Department and also supervised the consultation services. His pioneering studies of patients with ulcerative colitis and his observations on the somatic effects of grief were conducted at this time. He also published papers on the emotional reactions following hysterectomy and on hysteria and other neuroses. In recent years Dr. Lindemann has turned his attention to the sociological aspects of psychiatry. The Human Relations Service of Wellesley, Incorporated, which he organized and administered, is now well known as a highly original approach to the understanding of mental disease in an American community.

Dr. Lindemann comes to us at a time when psychology, sociology, and medicine are beginning to cooperate in important investigations. The well substantiated sciences in the Medical School will continue to be basic, but the behavioral sciences are bringing new techniques to the physician. It can hardly be doubted that in the next decades these will improve not only the treatment of the individual patient, but the relation of the general hospital to the community in which it functions. We welcome Dr. Lindemann with enthusiasm!

At this point the retiring Chief may be pardoned for taking a look backward over the twenty years of his incumbency. Our Psychiatry Service was one of the first psychiatry units in a general hospital. The idea was initiated by Dr. Means and supported by the Rockefeller Foundation as a demonstration. Since then, many such units have been founded, some directly affected by our experience. Thus we have aided in an important trend in modern psychiatry — to get it out of the isolated, special hospital and integrate it with general medicine.

The task was to bring psychiatry to a great general hospital and make the physicians and surgeons of the staff realize that psychiatric problems occur in almost all patients with chronic, and many with acute, illness. Psychiatry is not confined to crazy people; far from it; we now regularly get consultations and patients to treat from every service in the Hospital. A great many of the staff members in departments other than psychiatry are truly interested in our work and cooperate to a most gratifying degree. They realize that much of psychiatry is the understanding of human motivation, and that such knowledge is of benefit to practically all people who suffer illness. Our recent studies on the psychiatric aspects of patients with cancer, low-back pain, and coronary disease are examples that show to what extent we have succeeded.

Another aspect of our work has been more controversial. We have tried to make psychiatry dynamic in every way:

(1) By supporting and teaching a psychology of personality based on considering each patient as a person with goals, motives, and strivings. These in turn are conditioned by his particular genic, developmental, and historical past. Many of the postulates upon which such a psychology is based originated with Freud, but others came from Meyer, Thorndike, Pavlov, and many contemporary psychiatrists. This point of view is eclectic, and is criticized both by the orthodox Freudian and by the anti-Freudian. Nevertheless, we have pursued it with some measure of equanimity and therapeutic success.

(2) By developing and teaching a theory of mind. This holds that mind is a function of the living brain in action. Therefore it is important for psychologists and psychiatrists to know as much as possible about the anatomy and physiology of the brain. This point of view has brought us into close and fruitful collaboration with the neurosurgeons and neurologists, and has led to some interesting research concerning pain, consciousness, and leucotomy.

(3) By supporting the thesis that all function is organic, i.e., no cell or tissue can perform its function without physical and chemical change. Having rid ourselves of the anachronistic dichotomy, "either functional or organic", we can see that not only do lesions produce symptoms (observable dysfunction), but prolonged dysfunction produces lesions (visible tissue changes). This is the basis of "psychosomatic medicine" — that ancient attitude toward medicine which has had a revivication in the last twenty years, and is basically nothing but comprehensive medicine. We have published many papers in this field, and three books; some opinions have been speculative and controversy has been aroused, but on the whole our constructive effort has been to show how emotions affect physiology and what the processes are that cause pathological changes.

(4) By studying lesions of the brain and their effect on personality. Some of the relationships of neuropathology to psychiatry are so obvious that they need no emphasis; others are more tenuous; but we believe that the brain is the organ of the mind and that an understanding of human behavior is impossible without neurology. For example, our series of papers on language show that certain cerebral lesions, formerly thought to be without psychological effect, do significantly change the patient's patterns of speech behavior. The lesions interrupt certain pathways and apparently change the dynamic possibilities of the neuronal patterns.

I believe our Service has been useful in the last twenty years. Many patients have been helped. We have given training to fifty residents and at least as many fellows who have gone far and wide to practise and teach. Our investigations have made contributions here and there. Perhaps they have added a few stones to the growing mosaic which will eventually give a picture of mental disease. To my successor I leave the development of a bigger and better Psychiatry Service. For several years it has been evident that Ward B 8 (our small disturbed ward) needed to be greatly enlarged to serve the needs of the Hospital. I believe there should be another ward where disturbed and severely ill psychiatric patients can be investigated and treated with the aid of all the staff and facilities of this great general hospital. Child Psychiatry should be given a permanent place in our system of treatment, training, and research. Its importance to the understanding of adult psychiatry is rapidly becoming recognized. It will not be long before experience in child psychiatry is considered essential to the training of all psychiatrists. Ward B 7 and the Out-Patient Psychiatry Clinic are functioning and developing satisfactorily, but with new leadership will doubtless expand in new directions.

I cannot close without expressing my thanks to my interns, residents, and colleagues on the staff, and my deep appreciation of their loyalty and help. From my intimate work with all these men and women I have gained immensely. They helped me to make diagnoses, to carry responsibility, to think critically, and to stay young in interest. To work in a small unit in a great institution seems to me the ideal professional life. This opportunity the Massachusetts General Hospital has given me in full.

Stanley Cobb, M.D.,
Retiring Chief of Psychiatry Service

The Board of Trustees, at their meetings on May 14 and 28, voted:

To accept with regret the resignation of Dr. Leon R. Lezer from the position of Assistant Director, effective July 31;

To promote Dr. Chester M. Jones to the position of Consulting Visiting Physician, effective July 1;

To extend the appointment of Dr. William N. Jones, Assistant Resident in Orthopedic Surgery, through December 31;

To grant leave of absence to Dr. Raymond D. Adams for the months of August, September, and October.

To appoint:

Dr. Irving P. Ackerman as Resident in Medicine, effective January 1, 1955;

Dr. Stanley Cobb to the Board of Consultation upon his retirement, June 30;

Dr. Philip S. Gordon as Dental Intern, as of July 1;

Dr. Charles S. Kubik to the Board of Consultation;

Dr. Wyland F. Leadbetter as Chief of the Urological Service, effective September 1;

Dr. Erich Lindemann as Chief of Psychiatry at the Hospital, effective July 1;

Dr. Malcolm K. Sykes as Fellow in Anesthesia, effective October 1;

Dr. Norman Trieger as Dental Intern, as of July 1;

Dr. Mark McN. Walter, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1.

At their meetings during May, the General Executive Committee voted:

To accept the resignation of Irving Wolf, Ph.D. as Research Fellow in Psychiatry, effective June 1;

To extend the appointment of Dr. Warren B. Weil as Clinical Fellow in Medicine, for a period of two months, ending June 30;

That the title of Dr. Norman L. Paul be changed from Clinical Assistant in Neurology to that of Clinical Fellow in Neurology, effective as of July 1;

To rescind the appointment of Dr. André Tetu as Clinical Fellow in Medicine, beginning July 1.

To reappoint:

Dr. George Eisenman as Research Fellow in Anesthesia for one year, beginning June 1;

Dr. Betsy A. Ledbetter as Assistant Resident in Anesthesia for one year, beginning July 15;

Dr. John F. McGinty as Clinical Fellow in Medicine, assigned to Cardiology, effective May 27;

Dr. Donald O. Rudin as Research Fellow in Anesthesia for one year, beginning July 1.

To appoint:

Lt. Col. Jesse F. Brown as Clinical Fellow in Anesthesia, for approximately forty-five days, beginning May 21, or as soon thereafter as he can report for duty;

Dr. John W. Donoghue as Clinical Fellow in Psychiatry for one year, beginning July 1;

Charles P. Gansser, Ph.D. as Research Fellow in Medicine, effective as of June 1;

Dr. Robert S. Grier as Clinical and Research Fellow in Medicine, effective as of May 17;

Dr. Cornelius Lansing as Clinical Fellow in Psychiatry, from September 1, 1954 through June 30, 1955;

Dr. Martin B. Levene as Clinical Assistant in the Department of Radiology for one year, beginning July 1;

Dr. Kurt F. Schmidt as Clinical Fellow in Anesthesia for one year, beginning June 4;

Dr. Arnold D. Schwartz as Clinical Fellow in Psychiatry, beginning July 1.

* * *

One of the high lights of the 173d Annual Meeting of the Massachusetts Medical Society on May 20 was the telecasting of Grand Rounds, carried by telephone lines over a closed circuit from the Ether Dome of the Massachusetts General Hospital to the Georgian Room of the Hotel Statler.

Dr. Richard Warren, chairman of the program committee for the Annual Meeting of the Society, conceived the idea and, with the assistance of Dr. Archie Abrams and Dr. H. Thomas Ballantine, Jr., explored the possibilities of presenting such a program. As a result, Wyeth, Incorporated, sponsored the televised program, which was produced by the Radio Corporation of America, under the direction of Mr. Walter Lawrence.

Dr. Benjamin Castleman was the chairman of the committee in charge of setting up the program here in the Hospital. The presentation included Medical Grand Rounds, Surgical Grand Rounds, and a Clinical Pathological Conference, exactly as they are held each week, except for the fact that it was necessary to hold the latter two in the Ether Dome instead of in their usual locations.

Three days before the presentation, cameras and equipment began to roll into the Ether Dome. The smooth installation that followed was nothing short of miraculous and was due in large measure to the cooperation given to the technical experts by the Hospital personnel.

The Grand Rounds were projected on a 12′ x 16′ screen in the Georgian Room at the Statler. The effect of the unusually large image, plus the clear intercommunication hookup between the Statler and the Ether Dome created the startling impression that the two audiences were together in the Ether Dome. It is noteworthy that the audience at the Statler numbered between four and five hundred — a record attendance for a morning session of an Annual Meeting of the Massachusetts Medical Society.

In addition to the audiences in the Ether Dome and at the Statler, people at the Hospital gathered in the Medical Staff Room, the East Cafeteria, and the Pharmacy, where television sets had been installed. This provided an opportunity for many of the personnel of the Hospital to "view" Grand Rounds for the first time.

During the three-hour program, it was necessary to break in with short intermissions, to allow people to leave and enter the Ether Dome as the different Rounds were introduced. There was, however, no break in the continuity of the program, for during these intermissions interesting remarks pertinent to the occasion were made by Dr. Frederick Hagler, President of the Massachusetts Medical Society, Dr. Dean A. Clark, General Director of the Hospital, Dr. Walter Bauer, Chief of our Medical Services, Dr. Edward D. Churchill, Chief of our Surgical Services, and Dr. George Farrar, Medical Director of Wyeth Laboratories.

When asked to comment on the value of this type of program as a teaching device, Dr. Clark said, "This medium may have important possibilities in certain types of exercises, particularly those where it is desirable to bring a large audience closer to the event than would be possible in a small amphitheatre."

* * *

Brief bits:—

Dr. Clemens E. Benda was made an Honorary Member of the Pediatric Society of Uruguay at its last general meeting, in recognition of his valuable contribution to pediatric research.

Dr. Edward B. Benedict attended the meetings of the American Broncho-Esophagological Association on May 25 and 26, at the Hotel Statler in Boston, and discussed the following papers: "Postoperative esophageal stenosis", by Drs. Daniel C. Baker, Jr., Charles A. Flood, and Jose M. Ferrer, Jr.; "A thirty-one-year hospital experience with the bronchoscopic approach to bronchial adenoma", by Dr. Lamar Soutter; and "Recent trends in management of esophageal strictures", by Dr. Claude C. Cody.

Dr. Bradford Cannon has been appointed Secretary of the Committee on Development of the Boston Medical Library. It is the purpose of this committee to investigate ways of increasing the support of the Library, whose function is so important to the professional and lay people of New England.

Dr. Fletcher H. Colby was elected President of the American Association of Genito-Urinary Surgeons, at a recent meeting of the Association held at Shawnee-on-Delaware.

Dr. James H. Currens attended the Minnesota State Medical Meeting, held in Duluth on June 7. He spoke on the use of protoveratrine in the treatment of hypertension, and participated in a panel discussion on the medical treatment of hypertension.

Dr. Harriet L. Hardy presented a scientific exhibit at the Fiftieth Anniversary Meeting of the National Tuberculosis Association in Atlantic City, May 17-21. This exhibit was entitled "Problems in the differential diagnosis of occupational lung disease", and was a demonstration of the work of the Occupational Medical Clinic at this Hospital.

Dr. Reed Harwood has been elected President of the New England Diabetes Association, and a member of the Board of Governors of the American Diabetes Association.

Dr. Grantley W. Taylor spoke on "Principles and problems of neck surgery" at a meeting of the American Laryngological Association, held at the Hotel Statler in Boston on May 28.

Dr. William R. Waddell presented a paper at the American Proctologic Society meeting, held in Los Angeles on June 5. His subject was "The treatment of malnutrition, with particular reference to the surgical patient". Co-authors of the paper were Drs. Robert P. Geyer, Hermes C. Grillo, and Frederick J. Stare.

Dr. Richard C. Webster and three associates announce the formation of the Webster Clinic for Plastic and Reconstructive Surgery, located at 1101 Beacon Street, Brookline, Massachusetts.

MASSACHUSETTS EYE & EAR INFIRMARY

Three members of the Infirmary's staff retired as of June 30, Mr. Henry Hixon Meyer, President of the Board of Managers, announced. Dr. Parker Heath, Director of the Pathology Laboratory, Dr. Merrill J. King and Dr. Benjamin Sachs, both Ophthalmic Surgeons, have left the active staff. At a meeting of the Board of Managers and the Corporation on May 5, it was voted to accept the resignations of Drs. Heath, King, and Sachs "with gratitude for their many services to the hospital". A dinner was held at the Harvard Club on June 4 in honor of these retiring staff members.

Dr. Francis J. West, Assistant in Ophthalmology, addressed a psychiatry seminar at Boston State Hospital on May 26. His subject was "What the psychiatrist needs to know about eye disorders". The seminar was under the auspices of the Postgraduate Institute.

The Infirmary was honored to have two distinguished guests during the month of June.

Dr. David E. S. Wishart, a 1922 graduate of the Infirmary's Aural and Laryngological Service, who was recently elected president of the American Otological, Rhinological, and Laryngological Society, visited and observed in the ENT Service for a few days.

Dr. Antonio Raul Bergara, Professor of Otolaryngology at the University of Buenos Aires, spent two weeks at the Infirmary, observing in the Department of Otolaryngology. During his stay here, Dr. Bergara lectured and showed slides to the staff on his method of radical operation of the frontal sinus.

The Infirmary has welcomed to its staff Dr. Samuel C. Doyle, who will receive resident training in Otolaryngology. Dr. Doyle was graduated from Dartmouth College with a Bachelor of Arts degree in 1948, studied for two years at Dartmouth Medical School, and was graduated with a Doctor of Medicine degree from the University of Pennsylvania in 1952. He served a rotating internship at the Mary Hitchcock Hospital in Hanover, New Hampshire, before receiving notice of his acceptance in the Infirmary's Otolaryngological Service.

A high top shelf in a long-undisturbed closet here at the Hospital recently revealed several articles whose ownership we have managed to determine. These articles have either been sent to their rightful owners or are waiting here in the office of The News to be picked up — with the exception of one item. It is a metal trophy in the shape of a cup, bearing the inscription "Baraca Bowling League, 1912-13 — First Team Prize".

If anyone can furnish us with information concerning this trophy we would be most grateful.

* * *

DIGESTIVE TRACT DISEASE

Organized study of digestive tract disease in this Hospital falls into two categories. The first concerns direct observation of in patients and those seen in the ambulatory clinic. The second concerns actual investigation of various physiological problems related to individual disease states.

Inasmuch as there is no strict separation of patients suffering from gastrointestinal, hepatic, or pancreatic diseases on a special service, routine problems, either on the wards or in the ambulatory clinic, are handled primarily by the members of the House Staff on the Medical and Surgical Services. The more important or difficult cases are given particular consideration by consultation with members of the group working directly under the supervision of Dr. Chester M. Jones. Thanks to the cooperation of the Medical and Surgical House Staff, members of this group have the opportunity to see and discuss the more important problems in this field by consultation with the ward staff and under the direct supervision of Dr. Myles Baker, Dr. Daniel Ellis, and Dr. Perry Culver.

In addition, ambulatory patients are seen, either as consultation cases or for the purpose of careful follow-up, in the Gastro-Intestinal Clinic, which meets every Tuesday afternoon throughout the year. This clinic is a combined medical and surgical clinic, of which the acting head at the present time is Dr. Ellis. In this clinic is followed a variety of disease conditions, including peptic ulcer, esophageal disease (with the aid of Dr. Edward Benedict), chronic enteritis, chronic ulcerative colitis and diverticulitis of the colon, various forms of subacute and chronic liver and biliary tract disease, and certain cases of pancreatic disease. In addition, postoperative cases involving neoplasia of the digestive tract are also seen. Inasmuch as both medical and surgical problems of diagnosis and management are present, there is close correlation of the efforts of the two major services in the Hospital, from the point of view of both the management of cases and of the preparation of long follow-up studies. A rather unique feature of the Gastro-Intestinal Clinic is the special meeting, held on the first Tuesday in each month, of a large group of patients with ileostomy after surgery on the large bowel. This group in particular is followed by Dr. Ellis and Dr. Richard Warren. The unusual aspect of this clinic group lies in the fact that problems arising after ileostomy are discussed before the entire group of patients, who, in fact, make very real contributions based on their own individual experiences.

Investigative work concerning physiological abnormalities related to the digestive tract is being carried out by a group of research and clinical fellows under the supervision of Dr. Jones and Dr. Culver. During the past few years the attention of this group has been primarily focused on the problems of absorption of food material from the intestinal tract. In the last year this work has been carried out by Dr. Stuart Ragland, Dr. Howard Spiro, Dr. Geoffrey Chandler of Leeds, England, and Dr. Jacques Gagnon of Montreal. These efforts include careful balance studies of the absorption of fat and proteins under control conditions on the metabolic ward, with particular relation to diseases such as sprue, Whipple's disease, and the steatorrheas following subtotal gastrectomy. Particular attention has been paid to the demonstration of the effects of corticosteroid therapy in sprue and allied conditions. Striking clinical improvement has been noted in all cases of sprue and in one case of Whipple's disease following appropriate treatment with corticosteroids, and clinical improvement has been matched by equally striking percental increases in food absorption.

As an important corollary to such observations, the "G.I. Group" has been attempting to develop and utilize procedures which will permit estimations of fundamental changes in cell work involved in the process of intestinal absorption. From sections of human and animal intestinal mucosa removed at operation, studies have been carried out, particularly by Dr. Ragland (with the aid and advice of Dr. Morris Soodak), in order to determine normal levels of phosphorylating activity and possibly dephosphorylation, as a means of clarifying what is commonly called food absorption across the intestinal membrane. These observations promise the possibility of studying at a very fundamental level alterations in food absorption as they are mediated by the intestinal cell under varying conditions, including the stimulus of corticosteroid therapy. It is becoming obvious that the chapter on food absorption must be largely rewritten, and the development of tools directed at searching out fundamental mechanisms is of the greatest importance.

In addition, Dr. Chandler and Dr. Gagnon are carrying out studies initiated a year ago by Dr. John Benson and Dr. Firmin Vansteenhuyse, in an attempt to determine the site of maximum absorption in animals of tagged lipids. It is of interest that repeated experiments have demonstrated what appears to be an area of maximum absorption in rats at or near the junction of the jejunum and ileum. Such a finding has obvious value in any consideration of necessary surgical operation on the small bowel. It is expected that similar studies will be undertaken in relation to other tagged substances, such as albumin, carbohydrates, and possibly vitamins.

Dr. Spiro is working particularly on various phases of gastric secretion, especially related to hydrochloric acid and pepsin and with especial reference to the level of pepsin in the blood. The latter may well provide a means of obtaining a very satisfactory estimate of gastric secretory activity. Further studies are projected on similar digestive enzymes secreted at a level below the pylorus.

Attempts to evaluate the nature of nutritional disturbances connected with subtotal gastrectomy and the fundamental basis of "dumping" symptoms are being continued. Studies on the effects of certain of the newer antispasmodic blocking agents on gastric and intestinal motility are also being continued by Dr. William Chapman, with the assistance of Dr. Gagnon. Finally, Dr. Gagnon, in cooperation with the Department of Radiology, is currently working with Dr. Martin Levene of that department in testing the diagnostic value of intravenous cholangiography and cholecystography by means of the new dye, Cholografin (Biligrafin).

In addition to the interests noted above, special mention should be made of Gastro-Intestinal Rounds, which are held every Wednesday morning for members of the Medical and Surgical Staff and for outside physicians. At these meetings, unusual or important problems arising in the diagnosis and management of diseases of the digestive tract are presented in detail by members of the "G.I. Group" and are discussed freely by Staff members of both Medical and Surgical Services and occasionally by those of the Children's Medical Service. Furthermore, x-ray interpretations are contributed by a representative of the Department of Radiology. These Rounds afford a very complete review of a large variety of conditions during the year and are of inestimable value in providing the clinical background for investigative work and for guidance in the treatment of disease conditions that are encountered throughout the Hospital. They also help to nourish and maintain a very healthy attitude of cooperation and friendly criticism between members of the various services in the Hospital.

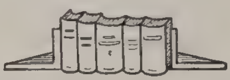
A Research Meeting is held once a week by the group doing investigative work, and to these meetings are invited men from other hospitals who are interested in particular phases of the conditions under discussion. This arrangement has provided a very excellent source for free discussion of many of the clinical and technical difficulties arising in diseases of the alimentary tract and the added stimulus of an exchange of ideas with men working in other teaching and research units.

Chester M. Jones, M.D.,
Consulting Visiting Physician

* * *

New addresses:—

Dr. Edward V. Johnston (*W.S.* 1947), Waterloo Savings Bank Bldg., Waterloo, Iowa
Dr. Charles L. Schepens (a. *Oph.*), 327 Charles St., Boston 14, Mass.
Dr. Edgar J. Schoen (a.r.p. *C.M.* 1954), Kaiser Foundation Hospital, Broadway and MacArthur Blvd., Oakland, Calif.
Dr. Milton V. Veldee (*E.M.* 1920), Stanford Research Institute, Stanford, Calif.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Eisenman, G., and Rudin, D. O.
Further studies on the functional properties of spinal axons in vivo.
J. Gen. Physiol. 37:495-503.

Lasagna, L.
A comparison of hypnotic agents.
J. Pharmacol. & Exper. Therap. 111:9-20.

Dermatology

LeDonne, J. E.
Mycosis fungoides: Report of a case terminating in myelogenous leukemia.
New England J. Med. 250:240-242.

Endocrinology

Munson, P. L., Goetz, F. C., Laidlaw, J. C., Harrison, J. H., and Thorn, G. W.
Effect of adrenocortical steroids on androgen excretion by adrenalectomized orchidectomized men.
J. Clin. Endocrinol. & Metab. 14:495-508.

General Medicine

Irwin, J. W., Henneman, P. H., Wang, D. M. K., and Burrage, W. S.
Maintenance cortisone in intractable asthma: Preliminary observations of undesirable cortisone effects.
J. Allergy 25:201-209.

General Surgery

Waddell, W. R., Geyer, R. P., Clarke, E., and Stare, F. J.
Function of the reticuloendothelial system in removal of emulsified fat from blood.
Am. J. Physiol. 177:90-94.

Laboratory Science

Bacq, Z. M., Baddiley, J., Eldjarn, L., Lipmann, F., and Lynen, F.
Nomenclature of the amines derived by decarboxylation of cysteine and cystine.
Science 119:163-164.

Brodie, A. F., and Lipmann, F.
The enzymatic formation and hydrolysis of D-gluconolactone.
Bact. Proc., 1954, 107-108.

Graham, R. M., and Rheault, M. H.
Characteristic cellular changes in epithelial cells in pernicious anemia.
J. Lab. & Clin. Med. 43:235-245.

Hoagland, M. B., and Novelli, G. D.
Biosynthesis of coenzyme A from phosphopantetheine and of pantetheine from pantothenate.
J. Biol. Chem. 207:767-773.

Levintow, L., and Novelli, G. D.
The synthesis of coenzyme A from pantetheine: Preparation and properties of pantetheine kinase.
J. Biol. Chem. 207:761-765.

Lipmann, F.
On the mechanism of some ATP-linked reactions and certain aspects of protein synthesis.
In The mechanism of enzyme action, William D. McElroy and Bentley Glass, Editors, Baltimore, The Johns Hopkins Press, pp. 599-604.

Novelli, G. D., Schmetz, F. J., Jr., and Kaplan, N. O.
Enzymatic degradation and resynthesis of coenzyme A.
J. Biol. Chem. 206:533-545.

Occupational Medicine

Hardy, H. L., Elkins, H. B., Ruotolo, B. P. W., Quinby, J., and Baker, W. H.
The use of monocalcium disodium ethylene diamine tetra-acetate in lead poisoning.
J.A.M.A. 154:1171-1175.

Miscellaneous

Garland, J.
The function of a general medical journal.
World Med. J. 1:151-153.

Books

Garland, J.
All creatures here below.
Boston, Houghton Mifflin Company.

BIOGLET

Dr. Edwin W. Salzman, Assistant Resident in Surgery—born in St. Louis, Missouri, December 11, 1928; A.B., Washington University, St. Louis, 1950; M.D., Washington University School of Medicine, 1953; home: Springfield, Illinois.

In January 1951, a number of men on the House Staff were beginning to be just a bit restless. Sig Gundersen was already in Japan, several others had just been called, and a few more of us were expecting to be heading toward the Far East at almost any time. The Marines had been surrounded at the Chosen Reservoir and had fought their way out. Hungnam had been evacuated. The headlines were filled with reports of frozen feet in Korea and a frozen woman in Chicago. Berlin was being supplied by air. When Bob Shaw cornered me one morning in the E W (where I was unraveling some G U problem) and asked if I'd like to take a trip to the Far North for a month, I pounced upon the opportunity.

The air base which has been built in Thule, Greenland, has been well publicized by now, but at that time it was only "Project Blue Jay" — still on the planning board and shrouded with secrecy. A small preliminary survey party was to go up to look over the area, and a doctor was needed to go with them. The work would be done in a month and I would be home, I expected, just in time to receive Navy orders. I stayed for five months instead of one, however, and instead of some 20 men I had planned to look after, there were about 1600 by the time reinforcements had arrived. It turned out to be a far more fascinating (and much more lucrative) venture than I'd anticipated.

We actually got under way in the middle of March. Eighteen men from the North Atlantic Constructors, the Army Area Engineer from the Corps of Engineers, and I met at Westover Field. A survey party of 16 was to follow shortly. On the evening of March 17 we took off on the first flight of an airlift which was eventually to rival in many respects the one in Berlin. It was an unseasonable 60 degrees in Chicopee Falls the night we left, but we had no trouble cooling off at 10 below zero the next morning when we landed for fuel and breakfast at Frobisher Bay on Baffin Island. After a pleasant respite at this halfway point, we took off again on our last leg of the flight.

When we came over Thule we found it to be very difficult to spot. When we looked down, all we could see was a wide barren expanse of white frozen ocean and a wide barren expanse of white frozen ground. The few snow-covered shacks of the Weather Station were scarcely visible. Occasional rocky cliffs projected from the coast line, but there were no trees or other growth to add variety to the monotonous landscape.

When we settled on the ground we were rather surprised to find three quite separate and distinct communities. About two miles from the spot where we landed, across the North Star Bay, was the Danish village of Thule. Mr. Krogh, the Manager of Northern Greenland for the Danish Government, resided here. Here, also, were a Danish radio station and a small hospital run by Laege Hack Busch, who later became one of my good friends. The Danish population of Thule was about 30. Near by was the Eskimo (more properly, North Greenlander) village, with a variable, somewhat nomadic population ranging up to 100. At a site near our landing spot was the joint Danish-U.S. Weather Station, where from 4 to 6 Americans lived, including one American wife. This area was called by the natives "Petugfik" — the "place of the dead dogs". Here, in bygone days, the Eskimos' rather considerate dogs used to wander off to die. Many a "Blue Jay" man was disappointed to find that bones he suspected to be of some archeological import belonged to a former North Greenland work horse. Visions of some prehistoric mastodon were frequently inspired by a few old whale's bones which had been disposed of in Petugfik after the digestible (?) material had been removed by earlier North Greenlanders.

The Eskimos in this area might be considered among the few remaining northern peoples who have not as yet been largely absorbed by Western Civilization. Livelihood is still almost entirely dependent upon ability to hunt and fish, and the acknowledged leader of any community is always the best hunter. A few dietary tidbits may be obtained at the local Danish trading post, but this is purposely limited by the Danish Government to avoid indiscretions and illness which a "civilized" diet might encourage. There has been ample evidence, especially in Alaska and Northern Canada, that a partial change of diet to our foods is detrimental to Eskimo health and welfare. Therefore, North Greenlanders subsist almost entirely on what they can catch — seals, fish, birds, whales, etc. In front of their huts you'll find high racks on which a seal or walrus can be safely stored out of reach of the dogs. Along with them will usually be found a few delicacies, such as washed and dried (but not cooked) seal intestine, which, in addition to being unusually tasty, provides most of their vitamin C intake. In the summer, when temperatures are above freezing, you'll find a few small Arctic terns seasoning on the racks. When these small birds have rotted sufficiently, they become a North Greenland gourmet's delight. "Candy" for these people consists of "matak" — a bit of thick, gristly skin of a whale, which, when chewed, has a sort of nutty flavor and is not really bad at all.

From an epidemiological point of view, the Eskimos in their isolated state are quite interesting. Their chief scourge is tuberculosis, which they think (perhaps rightly so) was introduced by the white man long ago. It was quite definitely present in Greenland before colonization by Europeans in the early 1700's, but there had been many prior sailing expeditions to the island during the 16th and 17th centuries and earlier, when the organism may have been donated to the inhabitants. Regardless of its origin, it has thus far been almost impossible to deal successfully with the tuberculosis problem. If and when the disease is found, the victim may be packed off into one of the hospitals scattered round the island; but, after three or four weeks, he becomes much too homesick and, if he is physically able, he walks out of the hospital and back to his 6′ x 8′ family home, where he may share his disease freely with relatives and friends. It is really quite surprising that tuberculosis is not far more widespread than it is, although a conservative estimate indicates that from 10% to 20% of the population have the disease. Ingestion of the organisms makes extrapulmonary tuberculosis common.

Ordinary communicable diseases among the Eskimos usually present no problem. Complete isolation means complete freedom from colds and other infectious diseases. On the other hand, when organisms like pertussis, rubeola, influenza, and such are brought in by visitors from the outside world, the results are frequently devastating. Smallpox has wiped out several entire communities. Whooping cough may carry a mortality rate reaching as high as 40%; and measles, mumps, and chickenpox each exacts its death toll. There was a wide epidemic of upper respiratory infections among the Thule Eskimos while we were there, but our only real scare — when an infant developed a pneumococcal pneumonia — failed to materialize. Our general good luck was doubtless due, in part, to the fact that the local Eskimo and Danish villages were strictly off limits to all but a very few.

The perils of the rigorous Arctic life, however, generally exceed that of disease among the Eskimos. The winter storms, with winds up to 100 miles an hour and blinding snow, may overcome the hunter. The treacherous Arctic sea and ice sometimes prove too much for the flimsy kayaks and take their toll each year. Only a few of the hunters live to a ripe old age. Ootak, who accompanied Peary to the Pole some 45 years ago, is among the very few patriarchs of the race and is a very respected and privileged person among the Greenlanders of Thule.

Since I left the area in the summer of 1951, the Eskimo village at Thule has disappeared. The large outpost of Western Civilization there, with its thundering jets and roaring transports, has driven away the seal and the ptarmigan and the hare. Encouraged wisely in the preservation of their normal way of life by the Danish Government, the North Greenlanders have pursued the game further north. By now they have found another and, I hope, equally prosperous fjord; but I wonder how long it will be before they are overtaken in their new community by the expanding perimeter of Western Defense.

Robert W. Hopkins, M.D.,
First Assistant Resident in Surgery

By devious or direct methods we manage to pick up valuable bits of information concerning addresses of our alumni and other matters. This letter from Dr. Oscar Swineford, Jr. (*W.M.* 1927) is an illustration:

> I was rather surprised to receive a "singleton" letter from you, because Dr. J. Edwin Wood, Jr. and Dr. William Parson are both colleagues of mine here in the Department of Internal Medicine at the School of Medicine, University of Virginia, Charlottesville, Virginia. Dr. Parson is Chairman of the Department of Internal Medicine. Dr. Wood and I are Professors of Internal Medicine. He is in charge of the Cardiology Division and I am in charge of the Allergy-Arthritis Division. Dr. Wood and I have been full-time members of the Department of Internal Medicine since our MGH days.

In explanation of why Dr. Swineford is listed in the Directory section of our Annual Report as being the only MGHer in Charlottesville: We inherited Dr. Wood's professional address as being the town of University, Virginia, when we took over the Directory in 1951. Dr. Parson sent us the same address (Univer-

No. 50 in a series of Staff photographs
Dr. Erich Lindemann — newly appointed Chief of Psychiatry Service

sity) in 1953. It appeared in the May 1953 issue of The News. We are grateful to Dr. Swineford for setting us right.

A letter has come from Lt. Col. SIGC Wilbour C. Lown, who was Head of our Photography Laboratory from 1930 to 1946. Col. Lown's present address is 278th Medical Detachment (Illustration), 406 Medical General Laboratory, APO 500, c/o Postmaster, San Francisco, California. He writes:

> Enclosed is a check for a subscription to The News. A short chat with Dr. F. D. Adams on his recent inspection trip reminded me that I knew entirely too little of what is going on in Boston and of those who might be over here whom I know.
>
> Where is here? It's a wet steamy day in Tokyo. The Japanese geta is better footgear than leather soles.
>
> How come? In July when the Army discovered that a promotion was due me, they also discovered that Lown should have some overseas duty. Both were remedied quickly. Arrived here in October; due back in 1956.
>
> What do I do? With nine darn good men I run a photographic unit, whose mission is to service the Far East Command. (?) It's fun being directly in photography again and, of course, in the basement. Everything I learned at the M.G.H. fits directly into the work here—an Army man in exactly the right spot—a miracle!
>
> My regards to everyone there.

Dr. Frank A. Mantz, Jr. (res. fel. *Path.* 1950) has sent us a change of address and information regarding his future plans. His letter reads:

> Since I have just resigned from the Regular Army, would you kindly direct future issues of The News to me at my permanent civilian address—2912 West 73d Street, Prairie Hills 13, Kansas.
>
> May I hasten to add that my separation from the Service has not been undertaken as a malcontent, since I have been more than favorably impressed with the excellence of medical practice in the Army and of the men who direct it. It is an interesting and challenging career, with many rewards, and we leave it with regret in order to establish a more stable environment for our growing daughter.
>
> I shall become associated with the Department of Pathology and Oncology of the University of Kansas Medical School, and with the Kansas City Veterans Administration Hospital where I shall be with Harlan Firminger, who is well remembered at M.G.H.
>
> We have enjoyed The News and the feeling of participation in MGH activities which it provides.

This letter has come from Dr. Sam M. Powell (a.r.p. *C.M.* 1947). His address is 301 Palmero, Corpus Christi, Texas.

> I should have sent you my correct address long ago, for I have been in private practice (Pediatrics) here since leaving the Massachusetts General in 1947.
>
> I suppose one would call my practice a successful one, judging from the number of patients I see and the hours I work!
>
> My family still consists of Polly, Peggy, and Sam III, and our home address is 3636 Ocean Drive.
>
> My professional appointments may be found in the *Directory of American Specialists.*
>
> I have had little time for vacations, aside from three or four week-long trips to Mexico each year to play in golf tournaments. I seem to be luckier south of the Rio Grande, and have won the Torreon, the Monterrey, and have been runner-up in the Tampico.
>
> Regards to all.

This letter from Dr. F. Dennette Adams gives us a roster of MGH-ers who are in the Far East:

> While on a mission to the Far East Command for the Surgeon General of the Army, it was my good fortune to encounter the following members of the MGH family:
>
> 1. Capt. Warren Bennett (*M.* 1948) — Medical Service, 382nd Army Hospital, Kanaoka
> 2. Capt. Herbert Giller (formerly an Eye and Ear resident) — Osaka Army Hospital, Osaka
> 3. Mrs. Eugene White (formerly a nurse at the Baker) — wife of Colonel White, Commanding Officer, 382nd General Hospital, Kanaoka
> 4. Lt. W. Allan Tisdale (*M.* 1952) — 34th Medical Battalion in the Eighth Army area
> 5. Capt. Austin L. Vickery, Jr. (a. path.) and Capt. Robert E. Scully (a. path.) — 406th Laboratory, Tokyo
> 6. Lt. Constance Ferebee (formerly a supervisor in the Bulfinch Building) — Tripler Army Hospital, Honolulu
> 7. Capt. Ann Jones (formerly staff nurse at the Phillips House) — Tokyo Army Hospital, Tokyo
> 8. Lt. Col. Wilbour C. Lown (formerly in charge of the Photographic Laboratory at M.G.H.) — in charge of the Photographic Department at the 406th Laboratory, Tokyo
>
> All of them seemed to be in good health; all of them were doing extremely creditable work and were very highly thought of by their colleagues and their superior officers; all expressed willingness to come home at any time.

With Dr. William H. Mathis, Jr. (r.p. *R.* 1948) it is a case of once an MGH "singleton" always an MGH "singleton". He writes:

> I am no longer in Greenville, South Carolina, having been dislocated by a two-year tour of duty in the Army.
>
> I am now Radiologist at Kennestone Hospital, Marietta, Georgia, and am still the only MGH-er in town, although there are a few in nearby Atlanta.
>
> For the benefit of those who don't know the location of Marietta — it is 18 miles north of Atlanta and is best known for its large aircraft plant that is producing B 47's. Of historical interest are the nearby battlefields of the Civil War.
>
> I have been here a year and am well pleased with the set-up. Kennestone is a new Hill-Burton hospital. It is already adding 50 beds and enlarging the X-ray Department.
>
> My wife is a former secretary of the MGH X-ray Department, so we will probably be up there this summer for a visit.

THE NEWS

No. 137 Boston, Mass. September 1954

PHYSICAL MEDICINE DEPARTMENT

This report covers progress over the two-year period since we last appeared in THE NEWS. The department has not changed in location or size, but for the first time in fourteen years it has been thoroughly redecorated and, in the case of Occupational Therapy, it has been redesigned to give it more functional use of the space for a greater variety of activities—including a small therapeutic kitchen for testing patients in the activities of daily living and helping them bridge the gap from hospital to home. There also has been established a new Occupational Therapy Section for the children in Burnham Memorial, realizing that Occupational Therapy plays an important therapeutic role in helping children adjust to hospitalization. The enlargement of this section of Occupational Therapy will make it possible to train student therapists there, and thus increase service to patients.

The changes in Physical Therapy have been largely in the skillful use of color and interesting decorative patterns, to make attractive a formerly very dull architectural area.

The department continues on a consultation basis, to provide diagnostic services consisting of electrodiagnostic tests, strength tests, and evaluation of functional abilities and prevocational analysis; Physical and Occupational Therapy are medically prescribed and directed for hospitalized and ambulatory patients. The total daily treatment load has not materially changed in this interval. The techniques employed have not been radically altered—the emphasis being on therapeutic exercises or kinetic and energic Occupational Therapy to improve functional achievement of patients, usually in relation to some disorder of the skeletal or neuromuscular systems, or in the training in the use of prosthetic devices in the case of amputees.

There has been a new physical procedure under clinical investigation—namely, ultrasound energy. This has been cautiously investigated with the help of Dr. Heuter of the Acoustic Laboratory at Massachusetts Institute of Technology. This form of energy has been found to be a useful therapeutic adjunct where deep localized heat is indicated. There has been some suggestion that it has unusual effectiveness in the treatment of painful amputation neuromata. What therapeutic value it may have in addition to heat, because of the mechanical action of this energy, is still under investigation.

During the last two years the Bay State Medical Rehabilitation Clinic has become a successfully functioning organization. Its relation to the Physical Medicine Department has been the subject of some question on the part of the Hospital staff—particularly the resident staff—as to the proper place for referral. It will accordingly be reiterated that the Physical Medicine Department of the Massachusetts General Hospital is set up to take care of diagnostic studies lying within the field of Physical Medicine, the prescription of Physical and Occupational Therapy, and the medical supervision of the same. The treatments in this department are on the whole for the more acutely ill, hospitalized patient, such as the patient with rheumatoid arthritis or early poliomyelitis who must be either treated in the bed on the ward or given only a short period of treatment in the Physical Medicine Department. This applies to both Physical and Occupational Therapy. Electromyography, electrodiagnostic testing, hydrotherapy, and ultraviolet treatments are available only through this department. Gait training is supervised, particularly for patients in for shorter periods of time and before they are able to tolerate a full-day treatment. In the Rehabilitation Clinic the in patients here are usually those with more static conditions, such as those with paraplegia when they are ready for ambulation training, some of the amputees who are ready for full-day treatments, and also hemiplegics in a similar category. Those patients in the Clinic receive treatment of from one to five hours a day. More emphasis is placed on prevocational analysis. There are also facilities available for psychometric testing and supportive therapy of psychological nature if needed, and investigation of social and economic factors as related to rehabilitation. There is also more emphasis on group therapy, rather than individual therapy which is true in the Physical Medicine Department. There are no fundamental differences as far as financial matters are concerned between the two departments, and they should not affect decisions as to referrals. The final decision as to acceptance in the one unit or the other rests in the hands of the medical directors of the two departments, who must determine where the patient is to receive the best medical care.

Although the term "Rehabilitation" is not included in the title of the Physical Medicine Department, the department does not lack interest in this aspect of Physical Medicine. Evaluation as to rehabilitation goals is possible in the Physical Medicine Department through examinations by the visiting staff and residents and the Physical and Occupational Therapy staffs.

In addition to service to patients, the Physical Medicine Department has continued to function extensively along educational lines. This has been primarily directed toward student therapists affiliated with the department, who have come from local schools connected with Boston University, Tufts College and Simmons College in Physical Therapy, Boston School of Occupational Therapy, and numerous out-of-State schools of Occupational Therapy. This training is primarily clinical in nature, but the staff is called upon to give many didactic lectures in both Physical and Occupational Therapy. The training school is also interested in receiving instructions from the department for the nurses at the Hospital. The department and staff frequently participate in postgraduate courses given at the Hospital, and to some extent in the training of undergraduate medical students. We continue to run a clinical fellowship program which receives no support from the Hospital, but the fellows have received grants from the National Foundation of Infantile Paralysis and the U.S. Public Health Service in recent years, whereas previously they received support from a grant from the Baruch Committee on Physical Medicine and Rehabilitation.

There have been numerous changes in the technical staff in both Physical and Occupational Therapy. This rather rapid turnover has usually been due to changes in family status of the personnel, all of whom are women. Miss Mary E. Nesbitt, our chief physical therapist, has remained with us and continues to receive additional honors. She was chosen to make an extensive trip as a guest of the U.S. Navy—an honor to her and to the Hospital. This has been reported in some detail in *The World* of the M.G.H. In the spring of this year she took a leave of absence to study a new technique in muscle re-education at the Kabat-Kaiser Clinic at Vallejo in California, and now returns to us eager to contribute new knowledge gained on what appears to be a definite advance in the technique of muscle re-education. We are looking forward to studying this in the future and we hope thereby to improve the results of Physical Therapy. We are pleased to report that while she was in California, attending the annual meeting of the American Physical Therapy Association, she was elected President of this national organization for the coming year—the highest honor a physical therapist can receive.

All have been impressed by the rapid strides made in our Occupational Therapy Department since it was taken over by Mrs. Cohen. In addition to the obvious changes in appearance and functional organization, plans have been well organized to improve it as a therapeutic service and teaching unit in the Hospital.

Research: Our research program has not been as active as in some previous years, as our fellows have devoted their time almost exclusively to clinical training. There have been some clinical investigations completed, including the study of the effects of glycocyamine in poliomyelitis. Clinical studies are also being continued in ultrasound, electromyography, and strain gauge measurements of strength. Several clinical papers have been published on these subjects.

The next logical step in the future development of the department would seem to be the establishment of a rehabilitation bed service, as experience has indicated that the best plan for coordinating the numerous medical services needed for rehabilitation is under the direction of a single physician or service specializing in coordination and employment of Physical Medicine and Rehabilitation procedures. This type of service has been successfully in operation in the Baker Memorial, particularly with the special arrangements for taking care of United Mine Workers' seriously disabled patients. A more efficient use of beds, nursing service, and Physical Medicine Rehabilitation services, as well as medical care of the patients, would appear to be inevitable with the development of such facilities.

The organization of such a department might make it possible to utilize it to better advantage in the orientation and training of the resident staff of the Hospital. The present department, although centrally located, is somewhat isolated from the ward services; and, as the resident staff is not obligated to visit or spend time in the department, except for special instances, the resident staff learns nothing of Physical Medicine and Rehabilitation procedures by direct observation or by means of clinical responsibilities which reside entirely in the department. There would seem to be a definite need for further education of the resident staff and, indirectly, the visiting staff through closer coordination of Physical Medicine services with other areas of medical care in the Hospital. This education should continue along its natural course, to include follow-through of patients who continue on in the Bay State Medical Rehabilitation Clinic to conclude their treatment before referral for vocational training or placement by established outside agencies.

Massachusetts General Hospital friends are invited to visit the Physical Medicine Department, inspect the "new look", and watch it function in both Physical and Occupational Therapy.

Arthur L. Watkins, M.D.,
Chief of Physical Medicine

* * *

The Edward Peirson Richardson Lecture, in Clinical Science, was presented on June 28 by Douglas M. Jackson, M.A., M.D., F.R.C.S., Surgeon to the Medical Research Council Burns Unit of Birmingham, England. Dr. Jackson's subject was "Investigation and treatment of burns".

* * *

A memorial fund to continue the work of Dr. Ira T. Nathanson has been started by some of his friends. All those who wish to subscribe should make their checks out to the Massachusetts General Hospital, marked Ira T. Nathanson Memorial Fund. Such contributions are deductible for income tax purposes. The fund will be used to continue the work on the relation of the internal secretions to cancer—the problem to which Dr. Nathanson was so ardently dedicated.

* * *

Dr. Fiorindo A. Simeone, one of our well-known former staff members and now Professor of Surgery at Western Reserve University and Director of Surgery at Cleveland City Hospital, was awarded an honorary degree of Doctor of Science from Brown University on June 7. The citation from Dr. Henry M. Wriston, President of Brown University, reads:

> Brilliant throughout your formal education, filled with the insistent desire to investigate which characterizes research leaders, in the hospital and on the battlefield, with ingenuity and persistence, you sought the answers to questions accurately described as vital. As a teacher you have led important curricular reforms, as an administrator you have organized an extraordinary surgical service. Because of your manifold contributions to mankind, we welcome you home. . . .

The Board of Trustees, at their meetings during June and on July 23, voted:

To accept with regret the resignations of:

Dr. Henry H. Brewster as Assistant Psychiatrist, effective June 30;

Dr. Richard R. Evans as Assistant in Medicine, effective June 30;

Dr. Robert H. Fennell, Jr. as Assistant Pathologist, effective June 30;

Dr. Ivan D. Frantz, Jr. as Assistant Physician, effective June 30;

Dr. John W. Raker as Assistant in Surgery, effective September 30.

To grant leave of absence to:

Dr. Edward D. Churchill, from June 15 through September 15;

Dr. Anne P. Forbes for one year, beginning September 1;

Dr. George L. Nardi, because of military service, effective July 1.

To appoint:

Dr. Kenneth T. Bird as Assistant in Medicine, beginning August 1;

Dr. Bertil Bjorklund as Visiting Assistant Bacteriologist, assigned to Gynecology, for the period June 15 through August 30;

Dr. Charles S. Keuper as Assistant in Dermatology, effective July 1;

Dr. Zwi Laron as Out-Patient Resident on the Children's Medical Service, beginning September 1;

Dr. Cesare T. Lombroso as Assistant Resident in Neurology, beginning July 1;

Dr. Alfred J. Luessenhop as Second Assistant Resident in Neurosurgery, beginning July 1;

Dr. Colin M. MacLeod to the Scientific Advisory Committee;

Dr. Vernon H. Mark as Senior Resident in Neurosurgery for one year, beginning July 1;

Dr. Demetrios A. Papadopoulos as Assistant Resident in Urology, beginning July 1;

Dr. Murray Rabinowitz as Assistant Resident in Medicine, effective July 1;

Dr. Leon Reznick as Assistant in Dermatology, effective July 1;

Dr. Richard L. Rovit as Second Assistant Resident in Neurosurgery, beginning July 1;

George A. Talland, Ph.D. as Assistant Psychologist, beginning July 1;

Dr. William M. Thurlbeck as Third Assistant Resident in Pathology for one year, beginning July 1, 1955;

Dr. Alexander B. Timm, Jr. as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Shen K. Wang as Assistant Resident in Orthopedic Surgery, beginning April 1, 1955.

The Trustees also voted that the appointment of Dr. James V. Cable be that of Visiting Physician pro tempore rather than Clinical Fellow in Medicine, retroactive to March 1.

At their meetings during June and on July 21, the General Executive Committee voted:

To promote:

Dr. Leonard Atkins to the position of Resident in Pathology for one year, beginning July 1;

Dr. Richard C. Austin to the position of First Assistant Resident in Surgery, effective July 1;

Dr. Charles R. Campbell to the position of Resident in Pathology for one year, beginning July 1;

Dr. Edwin L. Carter to the position of Third Assistant Resident in Surgery, effective July 1;

Dr. Robert C. Coe to the position of First Assistant Resident in Surgery, effective July 1;

Dr. John D. Constable to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Richard R. Curtin to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Harry B. Ditmore, Jr. to the position of Third Assistant Resident in Surgery, effective July 1;

Dr. Hugh R. Dudley, Jr. from the position of Assistant Resident to that of Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Edward L. Ferguson to the position of Third Assistant Resident in Surgery, effective July 1;

Dr. Ira A. Ferguson, Jr. to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Frank W. Garran, Jr. to the position of First Assistant Resident in Surgery, effective July 1;

Dr. John Gergely to the position of Associate Biochemist in Medicine, retroactive to October 1, 1953;

Dr. Donald J. Glotzer to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Fairfield Goodale, Jr. from the position of Assistant Resident to that of Clinical Fellow in Pathology for one year, beginning July 1;

J. Delafield Gregory, Ph.D. to the position of Associate Biochemist in Research Chemistry, retroactive to August 1, 1953;

Dr. Hermes C. Grillo to the position of Resident in Surgery, effective July 1;

Dr. John M. Head to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. William H. Hendren, III, to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Mahlon B. Hoagland to the position of Associate Biochemist in Medicine, retroactive to September 1, 1953;

Dr. Benjamin B. Jackson to the position of Second Assistant Resident in Surgery, effective July 1;

Dr. Raymond A. Justi to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. Robert B. Loftfield to the position of Associate Biochemist in Medicine, retroactive

to September 1, 1953;
Dr. John A. Malcolm to the position of Second Assistant Resident in Surgery, effective July 1;
Dr. Harold L. May to the position of Third Assistant Resident in Surgery, effective July 1;
Dr. Federico Mora to the position of First Assistant Resident in Neurosurgery, effective July 1;
Dr. George F. Odland to the position of Resident in Dermatology for one year, beginning July 1;
Dr. James A. Petersen to the position of First Assistant Resident in Radiology, effective July 1;
Dr. Jens G. Rosenkrantz to the position of Third Assistant Resident in Surgery, effective July 1;
Dr. Edwin W. Salzman to the position of Third Assistant Resident in Surgery, effective July 1;
Dr. David B. Sheldon to the position of First Assistant Resident in Surgery, effective July 1;
Dr. Eji Suyama to the position of First Assistant Resident in Surgery, effective July 1;
Dr. Julio Toriello to the position of Resident in Radiology, beginning July 1;
Dr. Roger E. Wilcox to the position of First Assistant Resident in Surgery, effective July 1;
Dr. George D. Zuidema to the position of Third Assistant Resident in Surgery, effective July 1.

To reappoint:

Dr. Saul Aronow as Research Fellow in Physics for one year, beginning July 20;
Dr. John S. Barlow as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Mandel E. Cohen as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Allan St. John Dixon as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Jacques O. Gagnon as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Ruth C. Haynes as Assistant Resident in Anesthesia for one year, beginning August 1;
Dr. Sholem Postel as Clinical and Research Fellow in Medicine for one year, beginning July 15;
Dr. Paul S. Russell as First Assistant Resident in Surgery, for the period July 1 through July 31;
Karl Schmid, Ph.D. as Assistant Biochemist in Medicine for one year, beginning July 1;
Dr. James M. Shannon as First Assistant Resident in Surgery, effective August 4;
Dr. Raymond D. Sphire as Assistant Resident in Anesthesia for one year, beginning August 1;
Dr. James L. Vanderveen as Assistant Resident in Anesthesia for one year, beginning August 15;
Dr. Oscar B. Williams, Jr. as Assistant Resident in Anesthesia for one year, beginning July 27.

To extend the appointments of:

Dr. Alexander C. Ritchie as Assistant Resident in Pathology, from June 30 through August 31;
Dr. Guillermo C. Sanchez as Clinical Fellow in Medicine, assigned to Cardiology, through September 30;
Dr. Ming K. Wang as Clinical and Research Fellow in Medicine, assigned to Allergy, through December 31.

To appoint:

Dr. Robert S. Adams as Clinical Fellow in Psychiatry, for a period of six months, beginning July 1;
Dr. Gregory Bard as Clinical Fellow in Physical Medicine, for the period August 15 through September 2;
Dr. Norman R. Bernstein as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. David Bowsher as Clinical and Research Fellow in Neurosurgery for one year, beginning September 1;
Dr. Michael Cooke as Fellow in Anesthesia for one year, beginning February 1, 1955;
Dr. John C. Dalton as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. Nathaniel J. Ehrenkranz as Clinical and Research Fellow in Medicine, for the period July 1 through December 31;
Dr. Leon Goldberg as Research Fellow in Anesthesia, effective as of June 14;
Dr. Salomon Hakim as Research Fellow in Neuropathology, for a period of six months, beginning July 1;
Dr. William K. McClelland as Clinical Fellow in Surgery, for the period July 1 through December 31;
Dr. Clare K. Marshall as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. John A. Scholl as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;
Dr. Mary L. Scholl as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Madan M. Singh as Clinical and Research Fellow in Medicine, effective October 15;
Dr. Joseph Stokes, III, as Clinical Assistant in Medicine, beginning July 1;
Dr. Peter M. Tow as Research Fellow in Psychiatry, assigned to a project under Dr. J. C. White, for a term of six months, beginning July 1;
Dr. Clarival doP. Valladares as Graduate Student Assistant in Pathology, effective as of December 1, 1953;
Dr. Bryan Williams, Jr. as Clinical Fellow in Medicine, assigned to Cardiology, for one year, effective July 1.

To change the titles of:

Dr. Morris E. Chafetz from that of Clinical and Research Fellow to that of Clinical Assistant in Psychiatry;
Dr. James F. Patterson from Clinical Fellow to that of Clinical Assistant in Dermatology.

* * *

ACTIVITIES OF THE HEMATOLOGY LABORATORY

The Hematology Laboratory (or, as it is officially entitled, Dr. Jacobson's Laboratory) has been carrying on for several years with a number of functions. These can be classified as: teaching, rendition of consultative services, and research.

The teaching functions have continued as previously, and include formal instruction in a session every two months with each new batch of Clinical Clerks on the Medical Service, and fourth year students during a one-month full-time course entitled "Medicine XIV, Hematology, Massachusetts General Hospital", as well as lectures in the summer course in Internal Medicine. Probably more important are the numerous opportunities for informal teaching to Clinical Clerks and members of the House Staff through consultative services rendered to help solve hematological problems in all parts of the Hospital. The members of the House Staff call on us frequently (over 100 times a year) and the Visiting Staff at the Baker Memorial, Phillips House, and Eye and Ear Infirmary also enlist our interest and sometimes our help to an increasing extent (over 200 times a year). The efficiency of our consultative service has been augmented by the moving of our laboratory to its new quarters on the fifth floor of the Domestic Building. The Clinical Clerks, House Staff, and also Visiting Staff are always invited to the laboratory to share our observations of the blood and of the bone marrow and to discuss hematological problems. Our laboratory tries to stress what we consider simple but good hematological techniques. At this point I would like to note the tremendous expansion of frequency of bone marrow examinations in patients in whom the clinical findings and the observations of the peripheral blood do not suffice for an exact diagnosis. With each contingent of new Clinical Clerks and House Officers the teaching is obviously a continuing process. In addition, during the past year and one-half there has been assigned to us for a period of several months a Resident from the Pathology Department for training in clinical hematology. This training program has worked out well for both our laboratory and for the man who wants to obtain training that will fit him for all types of clinical-pathological activities.

Our investigative activities have been limited by several factors, but notably by the lack of full-time professional personnel. This situation, we hope, will soon change for the better. Our interests include various aspects of the pathogenesis and of the diagnosis of pernicious anemia, the hemolytic anemias, and multiple myeloma, but our major interest is in the field of hemorrhagic disorders.

Nothing is more dramatic in the practice of medicine than confrontation with the problem of why the patient bleeds spontaneously from any source, or bleeds abnormally after trauma, or after operative intervention. When one is confronted with a bleeding problem one should try to analyze the disturbance as being caused by one of three different mechanisms: defects in capillary permeability, defects in the coagulation mechanism, or defects in platelets.

To date, this laboratory has touched only lightly on investigation of defects in the coagulation mechanism, but we have concentrated on the other two bleeding mechanisms. During the past few years we have considerably expanded our previous finding that in many individuals with chronic idiopathic thrombopenic purpura the administration of corticosteroids is followed by a sharp rise of platelets to near normal or normal levels, and this therapeutic procedure has had much practical application, in either preparing the patient for splenectomy, or in tiding over a bleeding episode the patient who is again in thrombopenic relapse, despite previous splenectomy. It might be well at this point to summarize our results as follows, describing the responses of the platelets to short-term corticosteroid therapy:

NO. OF CASES	NONE	FAIR	GOOD
16	7	1	8

It should be brought out that of those individuals who did not respond to corticosteroids, approximately one-half did respond to splenectomy; on the other hand, every individual who responded to corticosteroids also responded to splenectomy.

The defects in capillary permeability have continued to constitute our main investigative interest, and more particularly the type of hemorrhagic disorder that we have classified as idiopathic bleeding time defect (IBTD). This term is quite analogous to the purely descriptive diagnostic term idiopathic thrombopenic purpura (ITP). This disorder (IBTD) has been variously described in the literature as "pseudohemophilia", "hereditary hemorrhagic thrombasthenia", "purpura hemorrhagica without thrombopenia", "hereditary hemorrhagic diathesis", "atypical hereditary hemorrhagic syndrome", and by still other terms. That we are encountering this disorder more and more frequently is illustrated by the following data on the diagnosis of major hemorrhagic states in this Hospital during the years 1951 and 1952:

	NO. OF CASES
Hemophilia	8
ITP	13
IBTD	24

Since the above table was constructed the incidence has continued to grow and at this writing totals approximately 65 cases. In fact, during just the month of July 1954 six such individuals have been in the Hospital as in patients.

Patients with this bleeding disorder include individuals in whom there is no pertinent organic disease, such as severe sepsis, renal or hepatic insufficiency, or neoplasm, and in whom the platelets, coagulation time, and prothrombin time are normal. The one defect among all these patients is a prolonged bleeding time, and the apparent increase in the frequency of these cases in this Hospital can probably be ascribed to our improved method of determining the bleeding time. This method involves a 3 mm. deep and 3 mm. long incision on the volar aspect of the forearm, under certain standardized conditions, and by this method the upper border of normal is 6½ minutes. The conventional method of determining the bleeding time consists of a needle puncture of an ear lobe, with the usual normal range quoted as 1 to 3 minutes. A comparison of the results of the two methods among six unselected patients in our series is illustrated by the following data:

PATIENT NUMBER	ROUTINE METHOD (min.)	AUTHOR'S METHOD (min.)
1	4, 2½	14½
2	3½	10
3	12, 8½	30
4	2½	15½, 12
5	1½	9½
6	3½	11½, 8½

It is thus apparent that only one of the above individuals could be picked up as a bleeder by the routine method.

It must be emphasized that the classification of patients under this heading remains a tentative one, and very possibly further investigation of the physiological defects in these individuals will more accurately break up this group into subdivisions under different pathogenic mechanisms. This is actually happening at present to what has been called from time immemorial "hemophilia", and which is now being subclassified as "hemophilioid states", "anti-hemophilic globulin deficiency", "plasma thromboplastin component deficiency", and "plasma thromboplastin antecedent deficiency".

Some of the clinical aspects of the individuals with IBTD deserve mention. These individuals are about evenly divided between the sexes. In about one-half of the cases there is a definite family history of bleeders in either sex. This disorder may be congenital or acquired. The sites of spontaneous bleeding, in contrast to the sites of bleeding in hemophilia, are predominantly from the nose, the uterus, and in the skin, and only rarely in the central nervous system, the retina, the gastro-intestinal tract, or in the urinary tract. Bleeding into the muscles and joints following trauma, so common in hemophilia, has not been noted in any of our patients. Abnormal bleeding, of course, occurs at the site of any laceration and from any operative trauma. It is also of interest to note that despite the high incidence of meno-metrorrhagia, hemorrhage during pregnancy or postpartum hemorrhage are very unusual (only 2 of 14 deliveries among 7 women).

Up until recently the treatment of patients with this bleeding tendency has been very unsatisfactory. Unlike hemophilia, fresh blood appears to have no influence on the bleeding or on the bleeding time, nor is there any effect from massive doses of ascorbic acid or of vitamin P preparations (Rutin, Hesperidin). Some four years ago we began observations on the effects of corticosteroids on both the bleeding time and the bleeding tendency. To date, we have run approximately 45 trials of corticosteroids among approximately 35 patients. In two patients there was no effect whatever on either the bleeding tendency or the bleeding time, but in the remainder the bleeding time fell significantly after two days of treatment and reached a normal value after three to four days of treatment and remained at that level as long as an adequate dose of the corticosteroids was maintained. In many instances the bleeding time fell to a normal range within 24 to 36 hours after beginning treatment. This therapeutic tool has proved of great value in tiding a patient over a bleeding episode, and in the preparation of a known bleeder for surgery. The reader who is interested in further details is referred to our paper, "Effects of cortisone and of corticosteroids on prolonged bleeding time: Treatment in certain hemorrhagic states (pseudohemophilia)", A.M.A. Archives of Internal Medicine, *92*: 471-477, October 1953.

What our laboratory lacks in space is counterbalanced by the curiosity and enthusiasm of our investigative personnel, and we hope that the activities of the Hematology Laboratory will continue at a productive level.

Bernard M. Jacobson, M.D.,
Head of the Hematology Laboratory

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

On Saturday, September 25, Dr. and Mrs. Oliver Cope together with Dr. and Mrs. Walter Bauer will give an outdoor supper party for the surgical and medical house staff and clinical fellows who have recently started appointments at the Hospital. The party for these doctors and their wives will be given on the adjoining grounds of the Bauers and Copes in Cambridge.

* * *

Dr. Leon R. Lezer, Assistant Director at M.G.H. from 1950 through July 31, 1954, is now Assistant Professor of Preventive Medicine at the College of Medicine, Burlington, Vermont. Just before he departed from the Hospital, he sent us this letter, which will be much appreciated by all who knew Dr. Lezer.

To have been asked by the editor of The News to write a "swan song" was an unexpected invitation that I hastened to accept. However, it is indeed difficult to put into appropriate words an adequate expression of what my association with the Massachusetts General Hospital has meant to me.

To have had responsibility in an institution like the M.G.H. is a unique privilege. I am confident there is only one medical institution that can give all the variety and richness of experience in such abundance as may be gained at the Massachusetts General. As gratifying, delightful, and rewarding as that experience is, it is at the same time sobering when one reflects upon the great history in medicine created by MGH men and women of magnanimity, courage, and foresight. To sense the challenge of contributing to that glorious record, in however small a way, is to pause in humility at the magnitude of the obligation.

With deep appreciation of the assistance and cooperation of the Chiefs of Services, Visiting Staff, and House Staff, I fully realize that without this assistance and cooperation the mutual aim and ever-present task of providing a better place where sick patients may become well cannot be realized. After half a dozen years of hospital administration, I am convinced that it is the Department Head who, in the last analysis, "makes the difference". It has been a pleasure to have had the experience of working with the Department Heads at the M.G.H. It is rewarding to have had the opportunity to associate and work with those who, because of their special knowledge, sound judgment, and sincere interest in the welfare of mankind, are in demand far beyond the walls of the Hospital.

Although it is not possible in as large an institution as this for many to come to know the Trustees well, it is everywhere apparent that the governing body of the M.G.H. is devoted and dedicated to the tremendous task which they execute so well. It was indeed inspiring to see these citizens come so regularly to the Hospital, with such steadfastness of purpose, carrying the heavy burden quietly, efficiently, and behind the scenes of the every-day Hospital activities. Their remuneration must be a deep sense of satisfaction in making such a magnificent contribution to the world—because the M.G.H. is a hospital whose community *is* the world.

It is certain that the hospital of tomorrow will be an even greater community force than it is today, solving the problems of both the sick and the well. It is equally certain that the M.G.H. will be in the foreground of this great panorama of total community care in health and sickness.

With gratitude to Dr. Dean Clark and the Trustees of the Hospital, I leave for work in my home State, better prepared for the tasks ahead and gratefully taking with me some of the spirit of the Massachusetts General that over the years has made her a fountain of knowledge for those who seek knowledge, an arsenal of learning for those who seek answers to unsolved problems, a source of help and healing to the pain-stricken and diseased body, and an inspiration to men and women from all over the earth. As the Massachusetts General Hospital continues to lead the ranks in this changing world, may the men and women who will have the privilege of sharing its glory in the future be blessed with the insight, courage, and foresight with which their predecessors were so richly endowed.

MASSACHUSETTS EYE & EAR INFIRMARY

During the summer months, the Infirmary welcomed two new residents to its staff.

Dr. Neil F. Thorlakson joined the Ophthalmology Service for resident training. He received his undergraduate training at the University of Washington and was graduated with a B.S. degree in 1949. He received his M.D. from Harvard Medical School in 1952, after which he served a rotating internship at the King County Hospital System in Seattle, Washington, from July 1952 to July 1953.

Dr. Alfred L. Hurst arrived at the Infirmary on July 1 to receive residency training in Otolaryngology. Dr. Hurst is a graduate of Brown University, from which he received his B.S. degree in 1949, and of Tufts Medical School, which awarded him his M.D. degree in 1953. He served as a junior intern at the Cape Cod Hospital in Hyannis during the summer of 1952, and acted as surgical intern at the New England Medical Center from July 1953 to July 1954.

At a meeting of the Executive Committee of the Infirmary on June 21, it was voted to promote Drs. Joseph M. Clough, W. Morton Grant, Charles H. MacLaughlin, and Francis J. West from Assistants to Assistant Surgeons in Ophthalmology.

At the same meeting, Drs. Irving Pavlo and Knud K. Dreisler were appointed Assistants in Ophthalmology.

Four members of the Infirmary's Consulting Staff died during the summer months. Dr. Edmund W. Clap and Dr. Hugo B. C. Riemer were former Consultants in Ophthalmology—Dr. Clap having been on the staff since 1901, and Dr. Riemer since 1929. Dr. Harry A. Barnes and Dr. Josiah E. Quincy were members of the Otolaryngology Consulting Staff. Dr. Barnes served the Infirmary for 43 years as a staff member, and Dr. Quincy for 28 years.

Three doctors completed their residencies this summer. Drs. Peter Beck and Bernard Zeavin both ended their training in Ophthalmology on August 1. Dr. Beck has accepted a position at the U.S. Naval Hospital in Portsmouth, New Hampshire.

Dr. Edmundo T. L. Spinola completed his residency in Otolaryngology on July 15, and is now touring the United States before returning to his home in Brazil to practise.

A staff meeting, arranged by the Postgraduate Medical Institute, was held at the Cambridge City Hospital on June 24. At this meeting, Dr. Arthur M. Morrissey, Assistant in Ophthalmology at the Infirmary, presented his paper on "Pathophysical variants of retina in medical diseases".

Three visiting physicians are observing and studying in different departments of the Infirmary. Dr. Silvio Pirquet is observing in the Retina Service for six months. Dr. Pirquet comes to us through a fellowship from Zurich, Switzerland.

Dr. Wallis Friedman, a Heed Fellow, is currently studying retinal pathology and retinal detachment in the Howe Laboratory. He expects to be with the Laboratory for six months.

Dr. Joseph Dowling is participating in a study of the eyes of twins, in the Howe Laboratory. He has come to us through a Public Health Grant and will remain until the end of September.

Dr. Herman J. Sternstein, of the Otolaryngology Service, recently received special recognition from the American Triological Society for his paper, "Combined use of antibiotic and vasodilator therapy in ozena". Dr. Sternstein's paper was submitted as a thesis in his candidacy for membership in the Society, and because of its excellence and value was rated among the first three of the many submitted by the large field of candidates.

A note concerning Dr. David E. S. Wishart (*Aural* & *L.* 1922) was included in the material sent to THE NEWS for the Eye and Ear column which appeared in our July-August issue. As a result, THE NEWS has received this letter from Dr. Wishart:

> Thank you very much for sending me the July and August copy of THE NEWS. It was very kind of you to mention my name.
>
> Unfortunately, there is a serious error. I was not elected President of the American Otological, Rhinological and Laryngological Society, but I had the honour to be elected President of the much older Society—the American Otological Society. I am very proud that I received my stimulus and early training in ear work at the Massachusetts Eye and Ear Infirmary.
>
> I also would be glad if you would see that my address is listed as 526 Medical Arts Building, 170 St. George Street, Toronto 5, Canada. I have not had my office at 47 Grosvenor Street for many years.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Anesthesia.
In Commemorative volume: Seventy-five years of medical progress, Philadelphia, Lea & Febiger, pp. 13-28.

Beecher, H. K.
A note on spinal anesthesia and its relationship to a larger problem. (Editorial)
Surgery 35:820-821.

Lasagna, L., Mosteller, F., von Felsinger, J. M., and Beecher, H. K.
A study of the placebo response.
Am. J. Med. 16:770-779.

Rudin, D. O., and Eisenman, G.
The action potential of spinal axons in vitro.
J. Gen. Physiol. 37:505-538.

Laboratory Science

Burrage, W. S., Irwin, J. W., Gallemore, J. I., and Wang, D. M. K.
Effects of histamine and epinephrine on the small pulmonary blood vessels of living rabbits.
J. Allergy 25:293-301.

Waksman, B. H., and Bocking, D.
A comparison of leukocyte lysis with certain other immunologic phenomena demonstrable in sera of tuberculous rabbits.
Am. Rev. Tuberc. 69:1002-1015.

Neurology, Neurosurgery, and Psychiatry

Badal, D. W.
Psychiatric observations in neurocirculatory asthenia.
J.A.M.A. 154:1054-1058.

Bakay, L.
Studies on blood-brain barrier with radioactive phosphorus. IV. Spatial aspects of phosphate exchange between plasma and brain.
A.M.A. Arch. Neurol. & Psychiat. 71:673-683.

Bakay, L., Crawford, J. D., and White, J. C.
The effects of intravenous fluids on cerebrospinal fluid pressure.
Surg., Gynec. & Obst. 99:48-52.

Cobb, S., Quarton, G. C., and Clark, L. D.
Mental symptoms of endocrine disorders.
In Medical uses of cortisone, New York, The Blakiston Company, pp. 506-518.

Cobb, S., and Sloane, R. B. (Editors)
Depersonalization simulating epilepsy.
Am. Pract. & Digest Treat. 5:425-429.

Neurophysiology

Barlow, J. S., and Brazier, M. A. B.
A note on a correlator for electroencephalographic work.
EEG & Clin. Neurophysiol. 6:321-325.

Brazier, M. A. B.
The Laurentian syndrome on the electrical activity of the cortex as affected by the brain stem reticular system in relation to states of consciousness.
EEG & Clin. Neurophysiol. 6:355-359.

Otolaryngology

Weille, F. L., Gargano, S. R., Pfister, R., Mar-

tinez, D., and Irwin, J. W.
Circulation of the spiral ligament and stria vascularis of living guinea pig.
A.M.A. Arch. Otolaryng. 59:731-738.

Pathology

Morgan, W. S.
The probable systemic nature of Mikulicz's disease and its relation to Sjögren's syndrome.
New England J. Med. 251:5-10.

Sterility

Simmons, F. A.
The diagnosis and treatment of the infertile female: A monograph in American Lectures in Endocrinology.
Springfield, Ill., Charles C. Thomas.

Simmons, F. A.
Diagnostic value of testicular biopsy.
In Modern Medicine Annual, Minneapolis, Modern Medicine, pp. 52-56.

Simmons, F. A.
The hypogonadal male. (Editorial)
Fertil. & Steril. 5:201-204.

Simmons, F. A.
Routine diagnostic studies of the infertile female.
In Sociedade Brasileira de Esterilidade, Rio de Janeiro, Brasil, p. 381.

Simmons, F. A.
Sterility, female.
In Current therapy, 1954, Howard F. Conn, Editor, Philadelphia, W. B. Saunders Company, pp. 798-801.

Miscellaneous

Barr, J. S., et al.
Report of the joint committee for the study of surgical materials.
J. Bone & Joint Surg. 36-A:411-424.

Books

Gertler, M. M., and White, P. D.
Coronary heart disease in young adults: A multidisciplinary study.
Cambridge, Massachusetts, Harvard University Press.

* * *

Dr. Joe V. Meigs has been invited to deliver the principal address at the One Hundredth Anniversary of Touro Infirmary in New Orleans, on October 15. Dr. Meigs is going as a representative of Massachusetts General because Touro Infirmary wishes to remind us and them of our special relationship, due to the fact that both institutions received handsome gifts from the Touro brothers many years ago. In that connection, it is interesting to note the following from our Hospital records:

On March 19, 1854, our Trustees received a communication from the executors of the estate of the late Judah Touro of New Orleans, announcing a legacy in his will of $10,000 to the Hospital. The following preamble and vote were unanimously adopted:

> More than thirty years ago there died in this city one, of Jewish faith and parentage, who bequeathed to this institution the sum of $10,000. The name of Abraham Touro has thenceforth been familiar to us as that of one of our chief benefactors. And now another of the same name and lineage, an eminent merchant, who for fifty years has resided in the distant city of New Orleans, has, by like liberal bequests, remembered the home of his own youth and its various charitable institutions which were the objects of his brother's bounty; therefore—
>
> *Voted,* That the Trustees, in accepting the legacy of the late Judah Touro, recognize in it an act prompted by fraternal love and a philanthropy not confined within the narrow bounds of time, place, or sect."

A valuable portrait of Abraham Touro, painted by Gilbert Stuart, hangs in the corridor leading to our Trustees' Room. An interesting *Life of Judah Touro, 1775-1854,* by L. Huhner, was published in 1946.

* * *

How often we call a building or a department by its particular name without remembering or, perhaps, even knowing why its title was bestowed upon it. This thought came to our mind while we were working along on a chronology of outstanding events in the history of the Massachusetts General Hospital. It concerns the name of our nurses' library — the Palmer-Davis Library, in the Moseley Building.

The Annual Report of the Hospital for 1940 gives information about Miss Palmer and Miss Davis which, in our estimation, is worthy of being quoted here, in case some of the details regarding the careers of these two women may have been forgotten. On page 69 of the Annual Report for 1940, in the section on the School of Nursing, is the following:

"The greatest single accomplishment of the year is the new school library. It is named the Palmer-Davis Library, in memory of two of our outstanding alumnae, members of the class of 1878. Miss Sophia Palmer was the first Editor of the American Journal of Nursing; Miss [Mary] Davis was the first business manager of the American Journal of Nursing. Together they founded our Alumnae Association. Miss Palmer was Superintendent of St. Luke's Hospital in New Bedford, then of the Garfield Hospital in Washington, D. C., and next of the Rochester General Hospital in Rochester, New York. She was a member of the committee that organized the oldest organization of nurses in the country, the American Society of Superintendents of Training Schools for Nurses. She was also a member of the committee that organized the American Nurses Association, the second oldest organization of nurses in this country. Miss Davis was Superintendent of the University of Pennsylvania Hospital in Philadelphia. She, too, was a member of that committee which founded the American Society of Superintendents of Training Schools for Nurses. She was one of the first to recommend the teaching of the preliminary course of a hospital school of nursing in a college or university and was one of those who recommended the preliminary course which is still given at Simmons College. It is interesting to know that both Miss Palmer and Miss Davis were pupils of Linda Richards, 'The First Trained Nurse in America'."

BIOGLETS

Dr. David W. Allen, Intern in Medicine—born in Johnson City, N. Y., April 16, 1927; U.S. Army: Technician, 5th Grade, Germany, 1946-47; A.B., Harvard College, 1950; M.D., Harvard Medical School, 1954; married; home: Boston, Massachusetts.

Dr. Arthur E. Baue, Intern in Surgery—born in St. Louis, Missouri, October 7, 1929; A.B., Westminster College, Fulton, Missouri, 1950; M.D., Harvard Medical School, 1954; permanent address: St. Charles, Missouri.

Dr. Benjamin D. Canlas, Jr., Assistant Resident in Pathology—born in Bacolor, Pampanga, Philippine Islands, June 27, 1925; A.A., College of Liberal Arts, University of the Philippines, 1946; M.D., College of Medicine, University of the Philippines, 1951; Intern, Philippine General Hospital, Manila, 1951; Instructor in Pathology and Bacteriology, College of Medicine, University of the Philippines, 1951-52; Assistant Resident in Pathology, Maimonides Hospital, Brooklyn, N. Y., 1952-54; permanent address: Bacolor, Pampanga, Philippine Islands.

Dr. David L. Collins, Jr., Intern in Surgery—born in South Boston, Virginia, August 22, 1928; B.S., University of North Carolina, 1951; 2 years at University of North Carolina Medical School; M.D., Harvard Medical School, 1954; home: Wilson, North Carolina.

Dr. Julie S. Crocker, Assistant Resident in Anesthesia—born in Detroit, Michigan, October 5, 1927; A.B., Vassar College, 1948; M.A., Columbia University, 1949; M.D., College of Physicians and Surgeons, Columbia University, 1953; Intern, Mary Hitchcock Memorial Hospital, Hanover, New Hampshire, 1953-54; married; home: Jamaica Plain, Massachusetts.

Dr. Gerald M. Edelman, Intern in Medicine—born in New York City, July 1, 1929; B.S., Ursinus College, Collegeville, Pennsylvania, 1950; M.D., University of Pennsylvania, 1954; married; home: Long Beach, N. Y.

Dr. James A. Flagg, Assistant Resident in Anesthesia—born in New York City, June 29, 1924; Fordham Preparatory School, 1938-42; Fordham University, 1942-43; Cornell University, 1943-44; Columbia Midshipman School, July-October 1944; U.S. Navy: Ensign, LST 826, Pacific Theatre, including Iwo Jima, Okinawa, and Japan, 1944-46; M.D., Temple University School of Medicine, 1951; Intern, U.S. Naval Hospital, St. Albans, N. Y., 1951-52; Aviation School of Medicine, July-December 1952; Flight Surgeon with the U.S. Marines at Cherry Point, North Carolina, 1953-54.

Dr. Philip S. Gordon, Intern in Dentistry—born in New Haven, Connecticut, March 17, 1926; U.S. Army: Air Force, 1944-45; A.B., Yale University, 1948; D.M.D., Harvard School of Dental Medicine, 1954; married; one son; temporary home: Boston, Massachusetts.

Dr. Gilbert Hermann, Intern in Surgery—born in Jersey City, New Jersey, May 1, 1929; A.B., Columbia University, 1950; M.D., Washington University, St. Louis, Missouri, 1954; home: North Bergen, New Jersey.

Dr. Fleming McConnell, Assistant Resident in Radiology—born in Winnipeg, Manitoba, Canada, September 13, 1925; military service: Lance Corporal, Royal Canadian Armored Corps, in England, Holland, and Germany, 1944-46; B.A., University of British Columbia, Vancouver, Canada, 1948; M.D., University of Toronto, 1952; Intern, Toronto General Hospital, 1952-53; Senior Intern in Medicine, Shaughnessy Military Hospital, Vancouver, 1953; home: Vancouver, British Columbia, Canada.

Dr. Norman Trieger, Intern in Oral Surgery—born in New York City, March 3, 1929; New York University, 1945-46 and 1947-48; A.B., Emory University, Emory, Georgia, 1950; D.M.D., Harvard School of Dental Medicine, 1954; married.

Dr. Henry deF. Webster, Assistant Resident in Neurology—born in New York City, April 22, 1927; Amherst College, 1944-45; U.S. Navy: Pharmacist's Mate 3d Class, St. Albans Hospital, 1945-46; B.A., Amherst College, 1948; M.D., Harvard Medical School, 1952; Intern and Assistant Resident in Medicine, Boston City Hospital, 1952-54; married; one child; home: Wellesley Hills, Massachusetts.

Dr. Ralph C. Williams, Jr., Intern in Medicine—born in Washington, D. C., February

17, 1928; A.B., Cornell University, 1950; M.D., Cornell University Medical College, 1954; married; one daughter, one son; home: Chevy Chase, Maryland.

Dr. Alexander L. Zaoussis, Assistant Resident in Orthopedic Surgery—born in Athens, Greece, April 13, 1923; M.D., Medical School, Athens University, 1948; Intern and Assistant Resident in General Surgery, Hellenic Red Cross Hospital, Athens, 1948-50; Ph.D., for thesis in General Surgery, Medical School, Athens University, 1951; Army Service: Member of the Greek Resistance Movement against German Occupation Forces, 1941-43; Liaison to National Democratic Guerrilla Army, 1944; captured by Communist Guerrilla Forces, August 1944; 2d Lieutenant, M.C., Regular Greek Army, 8th Mountaineer Infantry Division in north and northwestern Greece and Chief Resident for 3 years in the Fracture Service, 430th Military Hospital, Athens, 1950-53; unmarried; home: Athens, Greece.

New addresses:—

Dr. Betty Q. Banker (a.r.p. *N.P.* 1954), Grace-New Haven Community Hospital, New Haven, Conn.
Dr. Charles G. Barnett (*M.* 1954), 2506 Green St., San Francisco, Calif.
Dr. Stanley Berlow (*C.M.* 1951), 1513 East Capitol Drive, Milwaukee, Wis.
Dr. Lester J. Bienvenu (a.r.p. *D.* 1951), 1426 Elm St., Manchester, N.H.
Dr. Harvey E. Billig, Jr. (*Or.* 1935), Billig Clinic, 139 South Alvarado St., Los Angeles 4, Calif.
Dr. John T. Binion (*M.* 1953), National Institute of Health, Bethesda, Md.
Dr. Lemuel Bowden (*E.S.* 1941), 863 Park Ave., New York 21, N.Y.
Dr. Robert A. Broome, Jr. (*M.* 1944), 3 West Columbia St., Orlando, Fla.
Dr. Crawford S. Brown (a.r.p. *D.* 1952), Department of Dermatology, Hospital of the University of Pennsylvania, 36th and Spruce Sts., Philadelphia 4, Pa.
Dr. Lloyd T. Brown (*S.S.* 1908), Murray Lane, Harvard, Mass.
Dr. Roy L. Byrnes (a.r.p. *Path.* 1954), Memorial Hospital, 444 East 68th St., New York, N.Y.
Dr. Joseph F. Ciano (*Dn.* 1954), 61 Fairmont St., Dorchester, Mass.
Dr. William D. Cochran (a.r.p. *C.M.* 1954), Children's Medical Center, Boston, Mass.
Dr. Paul Colokathis (a.r.s. *Or.* 1954), 967 Elm St., Manchester, N.H.
Dr. E. Stanley Crawford (*E.S.* 1947), Baylor University College of Medicine, Texas Medical Center, Houston, Tex.
Dr. Ralph C. Darling, Jr. (*C.M.* 1954), Children's Medical Center, Boston, Mass.
Dr. Fa-Chi Dunn (a.r.p. *D.* 1954), 45 Napier Ave., Oakland, Calif.
Dr. Kenneth A. Evelyn (clin. fel. *M.* 1947), British Columbia Medical Research Institute, 755 West 12th St., Vancouver 9, British Columbia, Canada
Dr. James B. Field (*M.* 1952), National Institute of Arthritic and Metabolic Diseases, National Institute of Health, Bethesda, Md.
Dr. Knox H. Finley (*W.M.* 1934), 450 Sutter St., San Francisco 8, Calif.
Dr. Carl W. Gottschalk (*M.* 1946), Department of Medicine, University of North Carolina, Chapel Hill, N.C.
Dr. Sigurd B. Gundersen, Jr. (*S.* 1949), 218 South 14th St., LaCrosse, Wis.
Dr. Parker Heath, Jr. (a.r.p. 1954), Rockland, Maine
Dr. Robert B. Higgins (a.r.s. *U.* 1951), 148 Shelbourne Towers, Knoxville, Tenn.
Dr. John J. Hutchings (clin. fel. *C.M.* 1954), Department of Pediatrics, New York Hospital, New York 21, N.Y.
Dr. B. Hughes Kennedy (*C.M.* 1921), 2940 Clairmont Ave., Birmingham 5, Ala.
Dr. Martin B. Levene (r.p. *R.* 1954), 636 Beacon St., Boston, Mass.
Dr. Herbert B. Locksley (*S.* 1950), London House, Guilford, London, W.C. 1, Eng.
Dr. Robert W. Mackie (sr.r.s. *N.S.* 1954), U.S. Naval Hospital, Bethesda, Md.
Dr. Thomas J. Mathieu (r.s. *U.* 1954), 36 Perry St., Central Falls, R.I.
Dr. Sedgwick Mead (*E.M.* 1940 & *Path.* 1941), California Rehabilitation Center, 2600 Alameda St., Vallejo, Calif.
Dr. Robert F. Moore (*M.* 1954), Boston Psychopathic Hospital, 74 Fenwood Rd., Boston 15, Mass.
Dr. William L. Morgan, Jr. (*M.* 1953), National Institute of Health, Bethesda, Md.
Dr. John W. Norcross (*E.M.* 1937), 605 Commonwealth Ave., Boston, Mass.
Dr. William Parson (c.r.p. 1942), School of Medicine, University of Virginia, Charlottesville, Va.
Dr. George M. Perrin (*C.M.* 1953), Boston City Hospital, Boston, Mass.
Dr. James A. Pittman, Jr. (*M.* 1953), National Institute of Health, Bethesda, Md.
Dr. Savitri Ramcharan (*C.M.* 1954), Trinidad, British West Indies
Dr. Désiré J. A. Rebello (a.r.p. *D.* 1954), St. Joseph's Hospital, Lowell, Mass.
Dr. Remedios K. Rosales (r.p. *N.P.* 1952 & a.r.p. *Path.* 1954), 24 Fenwood Rd., Boston, Mass.
Dr. Robert B. Rosen (*C.M.* 1953), Children's Medical Center, Boston, Mass.
Dr. Lloyd H. Smith, Jr. (*M.* 1949), c/o Dr. Einar Hammarsten, Karolinska Institutet, Stockholm, Sweden
Major George H. Sweetnam, MC, USAR (*Dn.* 1937), 5th General Hospital, APO 154, c/o Postmaster, New York, N.Y.
Dr. Robert H. Talkov (a. *M.*), 403 Commonwealth Ave., Boston, Mass.
Dr. John B. Thomas (*M.* 1953), Boston City Hospital, Boston, Mass.
Col. Milton S. Thompson, MC, USA (*Or.* 1934), U.S. Army Hospital, Neubrucke, APO 34, c/o Postmaster, New York, N.Y.
Dr. Jerome K. Walker (*Dn.* 1954), 2161 Massachusetts Ave., Cambridge, Mass.
Dr. Weldon W. West (*S.* 1948), 3130 North Eldorado St., Stockton, Calif.
Dr. J. Garland Wood (clin. fel. *R.* 1950), Radiology Department, Medical College of Alabama, Birmingham, Ala.
Dr. Henry F. Zartman (*C.M.* 1954), Boston City Hospital, Boston, Mass.

Brief bits:—

Dr. Henry H. Brewster, who resigned from our Psychiatry staff on June 30, is Assistant Professor of Psychiatry at the Lakeside Hospital and Western Reserve Medical School in Cleveland, Ohio.

Dr. Benjamin Castleman conducted an all-day Pathology Slide Seminar on June 8, before the Minnesota Society of Clinical Pathologists in Duluth.

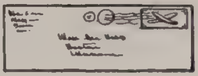
Dr. Robert H. Fennell, Jr. resigned from our Pathology Staff on June 30, to become Associate Pathologist at the Magee Hospital in Pittsburgh, Pennsylvania, and Assistant Professor of Pathology at the University of Pittsburgh School of Medicine. He wishes Magee Hospital used for his mailing address.

Dr. Francis M. Ingersoll attended the meeting of the American Society for the Study of Sterility, in San Francisco, June 18-20, and presented data from the Vincent Laboratory on the urinary excretion of interstitial cell stimulating hormone (ICSH) in normal and anovulatory women.

Dr. Robert R. Linton was made President of the Society for Vascular Surgery, at the meeting of the Society held in San Francisco on June 20.

Dr. Frank B. Norbury (*M.* 1949) announces the opening of his office for the practice of Internal Medicine, at 401 Farmers' Bank Building, Jacksonville, Illinois.

Dr. John W. Smillie (*E.S.* 1944) has been appointed Assistant Professor of Ophthalmology at the University of Michigan Medical School, Ann Arbor, Michigan.



This letter has come from another "singleton"—Dr. Arthur B. Emmons, II (*W.S.* 1905):

> Yours of July 9 made me stop and think, not because I am the only MGH man in this area, but—
>
> While I was working as an intern in the O.P.D. (Gyn.) at Massachusetts General, my right eye became infected. Eventually the sight in that eye was lost. Since then I have had a long and varied career, some of it not even medical. My last job was in Public Health work during World War II. Now I am retired (age 79), living in Indian Rocks, Florida, with my wife (2d), in a new and comfortable house.
>
> About three months ago an occulist told me that my left (good) eye had a beginning cataract. One of my good friends, a dentist, is now practising Body Chemistry. He has taken me on as a patient. I still have good eyesight, drive my car, and do not notice any impairment of sight. I am convinced he can clear up my cataract, as he has done for others. My diet is largely protein, to reduce calcium and increase phosphorus in the blood.
>
> So life goes on smoothly in this pleasant land. We may make an automobile trip north in September. I shall drive most of the way.

Another "singleton" has responded to our request for news. Dr. Mary S. (Blakely) Fisher (*M.* 1949) writes from 127 B Wallworth Park, Haddonfield, New Jersey:

> Your letter addressed to me in Elkins Park recently reached me at the above address, to which I moved in July. I do not know whether I am a "singleton" in Haddonfield, also [She is.—*Editor*], but as both towns are in the category of suburbs of Philadelphia I don't think there is anything unique in the local medical situation.
>
> I am an Assistant Radiologist at the Philadelphia Veterans Hospital, working part time. The rest of my time (and there is never enough) is occupied by two small children. The younger is ten months old. They comprise my special interest, along with the other usual occupations of the suburban housewife.
>
> I always enjoy THE NEWS.

We were very glad to receive this letter from Dr. Avrum B. Organick (*M.* 1952):

> Somewhat guiltily now, almost a year after leaving the General, I submit a check for a subscription to THE NEWS. My new job will take me far afield and I shall be anxious to hear from home.
>
> I began my new job on July 1 as Director of Tuberculosis at Fort Defiance Sanitarium, Fort Defiance, Arizona. This is on the Navajo-Hopi Reservation, where tuberculosis is a major problem. I shall have the privilege of working in cooperation with Drs. Carl Muschenheim and Walsh McDermott from the New York Hospital-Cornell Medical Center in problems of antituberculosis chemotherapy.
>
> In one week, on a short visit to Fort Defiance last March, I was impressed with a great variety of new experiences—medical, geographical, and social—concerning the Navajo. At some later time I should like to report to you on some of these experiences.

Dr. George D. Parker (*Dn.* 1939) has moved from Monte Vista to 5528 East 33d Avenue, Denver, Colorado. This interesting letter has come from him:

> I am sorry to lose the distinction of being a "singleton", but recently I set up an office

No. 51 in a series of Staff photographs
Dr. Wyland F. Leadbetter — newly appointed Chief of Urology Service

in Denver.

Monte Vista, situated in the tremendous San Luis Valley (as large as Connecticut) and surrounded by mountains, is one of the most beautiful areas I have seen in the United States. Nevertheless, there are many disadvantages associated with a small town which were nonconforming to Mrs. Parker and me, who are used to larger metropolitan areas. Denver is presently enjoying a tremendous boom, especially in construction.

I am very interested at this time in dental implants (vitallium). Last year I developed a new type of apical implant which is on the market. The August *Dental Digest* and September *Oral Hygiene* are running advertisements on it. Also, I attended the first university-sponsored study on implant dentures at Emory University, Atlanta, Georgia, last March. Dental implants are as yet highly controversial subjects to mention, but so was chlorinated water when it first came out!

This very nice letter has come from Dr. Hervey L. Smith (*W.M.* 1907)—our "singleton" in Palm Beach, Florida:

Yes, you are right. As far as I know, I am the only MGH-er in the town of Palm Beach.

As for special interests—I doubt if I have any. I do what I want to do and what I feel like doing, and time never hangs heavy. I winter in the South where I have a nice home, and summer in the North with relatives. I feel that the shift back and forth is beneficial.

I retired in 1939 and have not done a stroke of practice since. I do take the medical journals and I read them as much as ever, as I now have the time for so doing.

Palm Beach is a lovely town on an island nine miles long and a quarter of a mile wide. Three bridges connect it with the mainland. The town is beautifully laid out. It was established by northern millionaires before the days of income taxes. Now, for the most part, they have gone, but what they did lives after them.

The cost of living here is no greater than in the North. We have no State income taxes. We have no inheritance taxes. The first five thousand on real estate is exempt (Homestead), and valuations are low. Our summers are long and warm, but the temperature never equals what you have in the North. My complaint about summer is that it's just too long.

Florida is on the move, and the population is increasing rapidly. The colored people are trekking north, the whites of the North are heading south, cotton is working west across the Mississippi, and Texas cattle are coming east. This means changes, but "The Land of Flowers" will go on.

My best wishes to the MGH family. I graduated in 1907, so the family as I knew it is greatly changed. However, I am glad to know that a new personality carries on.

It is always good to hear from our men in military service. This letter has come from Lt. William A. Tisdale, MC, USAR (*M.* 1952), written on July 30 from the 121st Evacuation Hospital, APO 971, c/o Postmaster, San Francisco:

Many thanks for your faithful dispatching of The News! It and S. S. Pierce pipe tobacco continue to be my strongest Boston bonds.

After nine months of brain-washing in a separate medical battalion in Chong-pyong-ni, I was transferred to the 121st Evacuation Hospital in Seoul about three months ago. The hospital has 400 beds (no bassinets), some adequate consultants, and the general atmosphere of the MGH Medical Clinic on Monday mornings. We see a lot of infectious diseases, some oriental enigmas, and the usual forms of neurosis.

My Regular Army friends assure me this is a great experience. Returning to the M.G.H. is my fondest dream.

This very welcome note has come from Lt. Giles D. Toll, MC, USNR (*S.* 1952). His present address is U.S.S. *St. Paul* (CA 73), c/o Fleet Post Office, San Francisco.

It's a pleasure to renew my subscription to The News, which is a consistent source of interest and enjoyment.

The Navy continues to be very considerate in its assignments. After starting off the year with a trip around Cape Horn, I was fortunate in landing a billet on the *St. Paul,* which is presently operating in the vicinity of Japan, with her home port in Yokosuka. While the cruise is proving to be most interesting, it has unfortunately been devoid of a reunion with any MGH colleagues. Consequently, I am sorry not to have any items of particular interest for The News.

Warmest greetings to everyone at the Old Massachusetts.

Every MGH-er—old or young—will enjoy what Dr. J. Edwin Wood, Jr. (*W.M.* 1923) says in this letter, written from the School of Medicine, University of Virginia, Charlottesville, Virginia:

I did not realize that we had been so delinquent in our news items from this section of the country. We have quite a number of Massachusetts General house officers in this region.

I have one amusing story which is quite a commentary on the Massachusetts General Hospital, and I am sure it will be amusing to you.

Some months ago I was very anxious to get in touch with my son, Dr. J. Edwin Wood, III, who graduated from Harvard some five years ago and was at that time Medical Resident at the Evans Memorial with Dr. Chester Keefer. In the course of the long distance call, in some way the Massachusetts General got on the line and the operator asked for Dr. J. Edwin Wood. This was, of course, a mistake. We should have called the Massachusetts Memorial Hospitals. However, in a very few minutes the operator said that Dr. Edwin Wood had been a house officer at the Massachusetts General Hospital, but had not been there since 1923. I soon realized what the trouble was and had the call changed to the Massachusetts Memorial. However, the incident impressed me a great deal, as I am sure our own hospital and many other hospitals would not be able to turn to an index and in a few minutes name a house officer that had not been in the hospital for 31 years! The matter touched me considerably, as I did not realize that anyone would remember or even have a record of my previous connection with the institution.

Perhaps there are others besides Dr. Wood who do not realize that in our Archives Department we have the complete record of the service of every doctor associated with Massachusetts General from the time of the first Hospital Staff in 1821 up to and including the very last appointment made by the Trustees or the General Executive Committee.

THE NEWS

No. 138 Boston, Mass. October 1954

A HOSPITAL RESEARCH PROGRAM

EXPERIENCE AT MASSACHUSETTS GENERAL HOSPITAL

Developing a research program centered in a general teaching hospital is a stimulating and, at times, trying task. The first questions one is likely to be asked in this connection are, "Why do it at all? Can't research be done adequately in the laboratories of the medical school or of the pharmaceutical industry? Is it really necessary or desirable to have such a program centered in a general hospital?" The answer to these questions is, we feel, that research upon the conditions now of greatest concern to medicine can be done only in connection with a hospital. When medical research was dealing principally with conditions that could be studied satisfactorily in animals, it could be carried on wherever animals could be housed. But the diseases that are today's great plagues—arthritis, cancer, hypertension, heart disease, mental illness, to name a few—seldom naturally occur in animals nor can they easily be reproduced in them in forms comparable to those in which they occur in man. These conditions, therefore, must be studied mostly in man himself in a controlled environment—in other words, in a hospital. In this paper I shall discuss the organizational and administrative features of the research program at the Massachusetts General Hospital rather than its technical content.

In one sense, what we are doing at Massachusetts General should not be called a research "program" at all. By this I mean that it is not in fact a formal program or plan. The Hospital has simply attempted to provide an environment in which research can flourish, in which the members of our staff and of the faculty of medicine at Harvard who are working at the Hospital can work out new ideas, gather associates about them, and proceed to explore the frontiers of knowledge. There is, for example, no Director of Research at the Hospital, and this, we feel, is as it should be. Research done under systematic direction is often useful in the application of new knowledge, but such research is seldom basic in character nor are such arrangements very stimulating to original thought. Again, our attempt is to encourage the individual to develop his own ideas and to help him have an opportunity to carry them out.

Historically speaking, I suppose one can say that research of some sort has been carried on at the Massachusetts General ever since its first unit, the McLean Hospital, was opened in 1818. Careful clinical observation and willingness to experiment have always been manifested here, as they have been in all our major teaching hospitals. The medical literature yields many examples of advances made through the years by the Hospital's staff. But research as one of the prime functions of the Hospital really began in the first two decades of this century, principally under the leadership of Dr. David L. Edsall, for eleven years a Chief of a Medical Service and Professor of Medicine at Harvard Medical School. He encouraged the establishment of research laboratories in 1917 and was instrumental in starting our research or metabolic ward in 1924. Until about the time of the second World War this research was largely financed by Harvard Medical School and was on a rather small scale. Beginning with the move into the Hospital in January 1942 of Harvard's Collis P. Huntington Memorial Laboratories for cancer research, the program began an expansion which was greatly accelerated after the second war.

In 1946, soon after the celebration of the centennial of the first public demonstration of the use of ether for major surgery, the Trustees and staff began an intensified effort to put research at the Hospital on a broader and sounder financial base and to provide adequate physical facilities in which the work could be done. With a great deal of help from the Public Health Service, other government agencies, the Harvard Medical School, a number of foundations, several pharmaceutical houses, and a large number of individual donors, the funds annually available for research at the Hospital have risen from perhaps $350,000 before the war to $2,800,000 in 1953, and a fine new Research Building was completed in 1951 at a cost of about $2,000,000. Incidentally, in connection with our new Pathology Building about to be started, there will be two additional floors for research laboratories. Some 35 different units in the Hospital are now engaged in research of one sort or another.

This, it is easy to see, is representative of a sizeable endeavor. Presumably you will want to know how it is organized and financed, what are the main types of work going on, and what problems may have arisen in connection with it.

As to organization, the Trustees and staff realized after the war that if research was to be expanded and strengthened, something a little different from the usual Hospital services had to be established. A Committee on Research was therefore appointed by the Trustees, consisting of 20 staff members, 4 Trustees, and the Dean of the Medical School. This Committee meets monthly at lunch and reviews matters of general policy, new applications for funds, appointments of new research workers, and so on. It has a half-time, paid secretary, who is himself a research worker the other half of his time, and a non-paid chairman who is elected annually. It also has the necessary secretarial and accounting services at its disposal. In addition, it has the able assistance of the Hospital's full-time Associate Director for Resources and Development, Mr. David C. Crockett—a non-medical associate with primary responsibility for future planning of the Hospital's plant and functions and for fund raising. His duties, however, are by no means limited to matters of research.

It should be made clear that the function of this Committee is not to plan or direct research. It stimulates, guides, coordinates work in the various units, assists staff members to obtain funds from appropriate sources, but does not act as a censor or in any other way interfere with the individual's work. The Committee on Research has an Executive Committee which meets twice in the intervals between meetings of the full Committee and reviews projects and appointments in more detail.

A second important step was also taken by the Trustees—namely, to appoint a Scientific Advisory Committee of distinguished outside scientists. This Committee, on which such outstanding men as the Director of the Rockefeller Institute, the President of Johns Hopkins University, the President of Massachusetts Institute of Technology, the Professor of Biochemistry at Harvard, and a number of others, have sat, meets once a year for two days, reviews all research activities at the Hospital, and reports its findings and recommendations directly to the Trustees. In this way, the Trustees can learn whether the large sums being spent on research are being well used, whether the people doing the work are competent, and whether the work itself is worth while. It has been an exceedingly helpful Committee and its annual meetings are among the year's most stimulating and enjoyable occasions.

Aside from these two committees and their small staffs, there is no formal research organization and we do not feel the need for any. It is our belief, as I have indicated before, that research flourishes best where organization is least, and we have tried to keep the administrative arrangements as simple as possible.

Financing this large amount of research has, as I have mentioned, been done in a number of ways. One of the most interesting of these is the so-called MGH Research Fund. Six or seven years ago it was realized, partly from experience with grants for research projects during the war, that while grants for specific projects were very helpful, they also had serious limitations. For one thing, they are usually for a relatively short period of time—two or three or, at most, five years. Secondly, an idea must almost always be fairly well developed or, indeed, partially proven before it can attract a project grant. Then, too, there is necessarily a good deal of delay between the time an investigator has an idea and the time he obtains a project grant to use for its development. To overcome these difficulties the Trustees and staff raised a fluid fund, amounting to about $100,000 a year, largely by annual gifts from the pharmaceutical industry, which could be used for any research purpose, at the discretion of the Committee on Research and the Trustees. This Fund has proved to be invaluable in getting new investigators started, in providing special training at other institutions for certain investigators, in filling gaps between project grants, in underwriting new projects until outside support could be found for them, and so on.

The MGH Research Fund has seldom been used for any long-term support. An effort is always made to obtain financing from other sources, and on many occasions investigators have been able to return part or all of the allocations received from the Research Fund when other funds became available. It has, in brief, served as a fluid pool, almost a revolving fund, and it has been a godsend, especially to new and unknown investigators trying out new ideas until they have reached a stage of development sufficient to attract outside aid.

Another somewhat similar type of support is a generous annual institutional grant from the American Cancer Society. This, which is $120,000 in the current year, can also be expended largely at the discretion of the Committee on Research and the Trustees for research associated with cancer. The American Cancer Society has put a broad interpretation on its institutional grants and this fund, too, has served as fluid support. Here, again, we have tried not to freeze the fund by committing it to long-term support of the same individuals, but rather to assist investigators in getting started until long-range support can be found from other sources. Incidentally, a goodly share of this institutional grant can be (and is) used to pay for the hospital expenses of cancer patients admitted for purposes of clinical and scientific investigation. The Damon Runyon Fund has also provided a generous institutional grant for cancer research, amounting to about $50,000 a year, and a large share of this has been spent to purchase expensive and delicate research apparatus and equipment.

Aside from these fluid funds and from the generous assistance from the National Institutes of Health in constructing the Research Building, most of the funds for research have been obtained as grants for specific research projects or, occasionally, as grants for the work of a particular investigator.

A number of problems arise in connection with this kind of financing of research. In the first place, most of it is "soft money". If the government should become less interested in financing medical research in outside agencies, if foundation income were seriously reduced, if the Cancer Society and other similar groups failed to obtain sizeable contributions from the public, if the pharmaceutical industry were no longer interested, the bottom would drop right out of it. This, of course, is a hazard not only to the Hospital, but also especially to the investigators and their staffs. It means that offers from other institutions with "hard money" (i.e., endowments) for research are difficult to resist. It could mean an unwarranted strain on the Hospital's general budget if many investigators had to be bailed out at once, even temporarily. For this reason, the Hospital is actively campaigning for an endowment fund specifically earmarked for research and teaching. So far, I regret to say, the results have not been very encouraging.

Another problem produced by this type of financing is that most of the large sources of funds have been established for work in some particular field such as heart disease, cancer, polio, cerebral palsy, multiple sclerosis, and so on. In effect, this fact largely limits the institution to research in these specific fields, and restricts its freedom to roam wherever opportunities seem brightest. To date, this has not been particularly serious for us, largely because of the fluid funds I have mentioned and because of the broad interpretation put on their purposes by most of the agencies, both private and governmental. But it is potentially a danger and has inherent in it the principle, which we think is a bad one, that the donor is directing the investigator as to what his field of interest should be. Even in its present form, it has this effect to some degree because young investigators, pondering the many problems they might tackle, are not unaware that if they go one way, support is almost sure to be forthcoming, while if they go another, even if it appears more promising to them, they may have great difficulty securing funds. This, we feel strongly, is not in the best interests of science. This again points to the need for a "hard money" general endowment for research.

Perhaps the greatest single difficulty, with immediate and very noticeable effect upon the Hospital's operation, is that of obtaining sufficient funds to pay for the indirect costs of research. When a Chief of Service has a small laboratory with a few Bunsen burners and microscopes and one technician off behind his office somewhere, that isn't much of a problem. But when you have a 7-story building 45′ x 100′ to heat, light, clean, and maintain, an annual budget of $2,000,000 to collect and disburse, and 163 people to pay, it is something else again. What are the true indirect costs of medical research? Of course, they vary from project to project but, working closely with the Harvard Medical School and its other affiliated hospitals, we have come to the conclusion that they are, on the average, at least 25 percent of the direct costs and may well be as high as 35 percent. The 25 percent figure at the M.G.H., incidentally, has been audited and approved by the Atomic Energy Commission. In fact, we are now receiving, on the average, only about 10 percent of the direct costs toward paying for the indirect costs.

You can easily see what this means. It means that the institution has no choice, if it desires (as it does) to continue at full strength its three principal functions of patient care, teaching, and research, but to put its general funds into the support of these indirect costs of research. We see nothing improper in doing this to the extent deemed proper by the Trustees, but we do object to the fact that failure by research-granting agencies to recognize an adequate allowance for indirect costs has seriously restricted the freedom of the Hospital to do what it considers wisest with its own funds. To date, we have deliberately put our funds into such indirect research costs because we believe medical research is so important a function of our Hospital that we are justified in doing so. Perhaps the fact that one of our staff, Harvard Professor Fritz Lipmann, who has been supported principally with funds obtained through the Hospital, shared a Nobel Prize in Medicine in 1953 confirms to some degree the Trustees' wisdom in giving such generous support to research.

But if society wishes to preserve in hospitals, as we believe it should, the three inextricably merged functions that institutions like the Massachusetts General Hospital were designed to serve, and if at the same time society wishes to restore to these institutions, as we also believe it should, a reasonable measure of freedom to decide for themselves the wisest way to use their funds in support of their three functions, then society's research fund-granting agencies must come much closer than they now do to paying for the full indirect costs of research done in hospitals. Not that we feel the Hospital should put no funds into paying for the costs of research, direct and indirect. Far from it. But we feel most emphatically that we should have as much freedom of decision in this matter as we have in others. Incidentally, much the same principles apply to research grants offered to medical schools.

We, together with other similar hospitals and with medical schools, are actively seeking greater recognition by granting agencies of the indirect cost factor in research, and I am pleased to say that these efforts have already had some small success. But we shall have to go much further before we shall be satisfied that the situation is in a healthy balance.

There are numerous other difficulties and points of interest in MGH research activities which one might go into but, as I have said, I shall limit myself largely to matters of policy and administration, and, to that end, will discuss briefly only three more points.

The first of these is, I dare say, common to all institutions in this country in which physicians are engaged in research. It is that, at least until recently, medical education in this country has placed little emphasis upon training students in scientific methodology. As a result, many graduates of medical schools are totally at a loss when it comes to designing an experiment, whether it be a clinical trial of a new drug, the testing of a new surgical procedure, or a laboratory study. This is obviously less true of the basic medical scientists—although it exists even among them—but widespread among clinicians. The Committee on Research has been concerned about this deficiency and last year attempted to attack it by setting up a Therapeutic Trials Panel. This Panel, which includes basic medical scientists and statisticians from Harvard University as well as clinicians from our staff, is available for consultation to any investigator who wishes it. Again, it is not a censor—we believe investigators have to be allowed to make their own mistakes (except where patients are involved)—but gives advice when asked for it. The head of each department is responsible for requiring the members of his department to seek the advice of this Panel whenever he feels it to be desirable. We have not had a long experience with this Panel as yet, but similar plans have been successful elsewhere and our results so far have been encouraging. We are also hoping to make an arrangement with the Department of Pharmacology at Harvard Medical School, under which a pharmacologist from its staff will be assigned to and paid by the Hospital, from the MGH Research Fund, for about one-half of his time, both to carry on research of his own and to assist other investigators in the design of experiments—particularly therapeutic trials of new drugs. Finally, one of the members of the Department of Preventive Medicine at Harvard has offered to give a course on biostatistics at the Hospital, and we hope to arrange for this in a short time.

A question of an entirely different nature has arisen from the fact that certain government agencies have asked members of our staff to engage in classified research work—restricted, confidential, or secret. We believe, along with Harvard Medical School, that to have much classified research going on would be disastrous. It would impede or entirely prevent that free flow of discussion and criticism which is the very essence of science and which characterizes all our research activities at present. It would, moreover, require that certain experiments, possibly hazardous in nature, would be going on, whose character could not be revealed to the Committee on Research or the Trustees, in an institution for which the Trustees and the Corporation are basically responsible. Much of such classified research would certainly be intolerable. At present our policy is that an investigator may undertake classified research only when he is convinced that it is of crucial importance to the national security and when he is uniquely equipped to carry it out—so that if he didn't do it, it probably wouldn't be done at all. With this policy we have only one such project under way.

The requirements of the rather basic biological research now going on at the Hospital for men highly trained in certain scientific disciplines have resulted in the inclusion on our staff of an increasing number of non-clinical investigators: biochemists, physicists, organic chemists, biologists, psychologists, and eventually, as I shall indicate in a moment, probably social scientists as well. This has created a set of problems entirely new for our Hospital and, I dare say, new in the development of medical research. Because the work these men do is often related to patients—we have two full-time physicists, for example, working with our Neurosurgical Service on new methods of localizing brain tumors, one with radioactive isotopes, the other with ultrasonic waves—these scientists are more conveniently located at the Hospital rather than at the Medical School or in the University's basic science departments. But what status should they have at the Hospital, where, until recently, the physician was the unique professional staff member? If they are working at a hospital, what will their standing be in their chosen academic fields of physics, biochemistry, etc.? Will their colleagues at universities recognize them as real contributors in their fields of interest? Who ever heard of a real physicist doing research in a hospital? That these are not laughing matters will be attested by every one of our young non-clinical investigators. For each of them a possibility of future opportunity is obviously essential. If that is to be in a hospital, it is clear that until many hospitals have this type of medical scientist on their staffs, this possibility is very limited. If it is to be in a university or medical school department, the possibility is also limited unless academic institutions recognize work done in a hospital as a legitimate and integral part of the basic field of endeavor. Both of these types of opportunity for non-clinical investigators are extremely limited today, and this poses a serious question for both the hospital and the young investigator.

A beginning of an attack on a part of this problem has been made at the Massachusetts General Hospital. In 1952, on the recommendation of the Scientific Advisory Committee, the Hospital established a rank-scale for non-clinical investigators on the staff equal in status to that of the clinical investigator or of the practising physician. The titles "Biochemist", "Physicist", and so on, have a standing similar in every way to the highest rank on the medical staff—namely, "Physician", or on the surgical staff—namely, "Visiting Surgeon".

There are differences in the situation of the non-clinical investigator and that of the clinician, however, which have nothing to do with the status of an individual. For one thing, the young clinical research worker who does not turn out to be a first-rate investigator and therefore is not invited to remain in that capacity can yet become a successful practitioner of medicine. But the non-M.D. has little to fall back on that is comparable if he does not fulfill his promise as a researcher and is not offered a permanent position on a hospital staff or on a university faculty. Moreover, the number of opportunities for full-time permanent appointments is very different in the two cases. Of perhaps fifty full-time clinical positions at the Hospital, thirteen are positions carrying appointments without limit of time as Harvard professorships or associate professorships, and six others are permanent Hospital appointments. Of about the same number of full-time non-clinical research appointments, only one carries life tenure. Such differences make for restlessness and, ultimately, dissatisfaction on the part of the investigators.

We do not pretend to have reached a solution of these problems. The whole question of collaboration and other relationships between basic science and clinical investigators in a hospital setting is a quite new one, and answers to it will have to evolve as we get more used to the idea. Possibilities for improved academic connections for these workers are being explored, too. Altogether, it is an evolving situation and a somewhat muddy one, but we are conscious of it and are attempting to find constructive means for dealing with it.

Before closing, I should like to say a word about prospects for research in the future which have a deep interest for me, personally. In connection with the development of our Family Health Service—a comprehensive home, clinic, and in-patient service similar in many respects to the well-known one at Montefiore Hospital in New York—which will, we hope, be in reasonably full operation within a year, and which will serve many families in our neighborhood, we confidently count on the collaboration of the Harvard School of Public Health, as well as the Medical School, and of the various units of the Behavioral Sciences at Harvard University, and perhaps of other institutions, in extensive long-term studies of the intricate and as yet unresolved questions of the role of the socio-economic environment in health and illness, perhaps that of genetic factors also, and certainly of psychological and emotional factors. These will hardly be elucidated in a day; yet they are research problems peculiarly appropriate to a general hospital which serves, as does the Massachusetts General, not only as a significant research and teaching institution known in many parts of the world, but also very actively as the community general hospital for the population of a large part of the City of Boston. In our zeal for "scientific" discoveries in the laboratory, we shall certainly not forget our historic and primary mission: to be a center of health services for people. We are enlarging that mission to study our people (as well as our services) in order to serve our people more effectively. That, ultimately, must be the proper goal of any research program in a general hospital, and it is ours.

Dean A. Clark, M.D.,
General Director

Paper read at a joint session of the American Association for the Advancement of Science and the American Association of Hospital Consultants, Boston, Massachusetts, December 30, 1953.

* * *

Dr. Joe V. Meigs, with a group of members of the American Gynecological Club, attended clinics throughout England, Ireland, and Scotland during the summer. While in Scotland, Dr. Meigs was given an Honorary Fellowship in the Royal College of Surgeons in Edinburgh, and while in London, an Honorary Fellowship in the Royal College of Obstetricians and Gynecologists. He also attended the International Congress of Obstetricians and Gynecologists in Geneva, and visited with Dr. Ernst Navratil in Graz, Austria.

Before going to Europe, Dr. Meigs was given an Honorary Fellowship in the Swedish Medical Society.

While lecturing at the University of Buenos Aires, Dr. Henry K. Beecher was made an Honorary Member of the Argentine Society for Thoracic Surgery.

Mrs. Ruth M. Graham, in charge of the Cytology Laboratory of the Vincent Memorial Hospital, was awarded an honorary degree of Doctor of Science by the Women's Medical College in Philadelphia in June.

On June 20, at the annual meeting of the American Gastroscopic Society held in San Francisco, Dr. Edward B. Benedict was the recipient of the first Rudolf Schindler Award for advancing the gastroscopic procedure.

Dr. Schindler, who made the presentation at the Society's banquet at the Mark Hopkins Hotel, paid tribute to Dr. Benedict as the man who was the first to use the flexible gastroscope, independently, in this country; who has published so many excellent and extremely critical articles on gastroscopic subjects; who was the first to demonstrate and to emphasize the frequency of gross hemorrhage from gastritis; who published an excellent book on endoscopic methods; and who is the originator of the operating gastroscope—a contribution of very great importance.

Dr. Benedict's response was as follows:

> I am naturally very much pleased and honored to be the first recipient of the Rudolf Schindler Award for the advancement of the gastroscopic procedure. I want to thank the American Gastroscopic Society for so generously offering this Award and also to express my appreciation to the special committee of this Society for selecting me for this signal honor.
>
> As you all know, Dr. Schindler's career is a very distinguished one—teacher, author, and inventor. After receiving numerous honors in Germany and writing a German textbook on Gastroscopy, Dr. Schindler came to this country in 1934, where he became Visiting Professor of Medicine from 1934 through 1936 and Associate Professor of Medicine from 1937 to 1943 at Billings Hospital, University of Chicago. Since 1943 he has been Clinical Professor of Medicine at the College of Medical Evangelists in Los Angeles. In 1937 he published his excellent book on Gastroscopy, a new revised edition of which was published in 1950. In 1947 his monumental work on Gastritis was published. Dr. Schindler is also famous as the inventor of a rigid gastroscope in 1923, the Wolf-Schindler flexible gastroscope in 1932, and an optical diagnostic esophagoscope in 1948. In 1936 he received the Gold Medal Award of the American Medical Association, and last, but not least, in 1942 he was the founder and first President of the American Gastroscopic Society.
>
> I would like to say just a few words regarding Dr. Schindler's influence on my medical career. I was surgically trained at the Massachusetts General Hospital and spent a number of years in the active, or perhaps *in*active, practice of surgery. I had hoped to do gastric surgery, and actually did *one* subtotal gastrectomy! My chief interest was the stomach, and I was lucky enough to mention to Dr. Chester Jones in 1932 that we ought to have a method of direct endoscopic examination of the stomach. He agreed, but we both felt that rigid gastroscopes were probably too dangerous. However, I was lucky again, for in only a few weeks Dr. Jones told me the Carl-Zeiss Company agent had come to him asking that a trial be made of the new Wolf-Schindler flexible gastroscope. Dr. Jones and I tried it out together, with the aid of an ENT man, Dr. Charles Johnson. As luck would have it, our first patient was a man who was later proved to have a gastric lymphoma! We did not make the diagnosis, needless to say, on our first gastroscopic attempt. In fact, I believe we could do it now *only* with gastroscopic biopsy. Anyway, from then on my work in gastroscopy was started. Dr. Churchill suggested that I add bronchoscopy and esophagoscopy, and Dr. Allen suggested peritoneoscopy, too, so I gave up general surgery altogether and have devoted myself entirely to endoscopy. I have never regretted this change in my medical activities. I want to make it clear, however, that I owe ever so much to the stimulation and support of my colleagues at the Massachusetts General Hospital and the Harvard Medical School.
>
> Again, I want to thank the American Gastroscopic Society and Dr. Schindler, not only for this Award, but also for what I feel has been a very fortunate change in my life work.

The Board of Trustees, at their meeting on August 20, voted:

To grant Dr. Walter Bauer three weeks' leave of absence, effective in October;

To grant Dr. Allan M. Butler leave of absence for six months, effective October 1.

To reappoint:

Dr. Richard H. Eppright, who has been in the Navy, as Assistant Resident in Orthopedic Surgery, effective October 15.

To appoint:

Dr. Mahlon B. Hoagland as Assistant to the General Director for Research and Education, effective on Dr. Berg's resignation;

Dr. Charles V. duB. Lovell as Clinical Associate in Psychiatry, effective September 1;

Dr. Joseph J. M. McGovern as Assistant to the Children's Medical Service, effective August 1;

Dr. Donald P. Pederson as Assistant Resident in Anesthesia, beginning April 1, 1955.

At their meetings on August 18 and September 8, the General Executive Committee voted:

To grant Dr. Allan St. John Dixon leave of absence from his position as Clinical and Research Fellow in Medicine, for the period September 1 through October 31.

To promote:

Dr. James L. Vanderveen to the position of Chief Resident in Anesthesia, as of September 1.

To reappoint:

Theodore O. Macklin, A.B. as Research Fellow in Psychology for one year, beginning July 1;

Dr. Jorge M. Martin as Clinical and Research Fellow in Medicine for one year, beginning September 9;

Dr. Nancy Rollins as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Howard M. Spiro as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Albert Van Eerde as Assistant Resident in Anesthesia for one year, beginning October 5.

To appoint:

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine, beginning September 1;

Dr. Roger L. Black as Clinical Fellow in Medicine, for the period February 1, 1955 through March 31, 1955;

Dr. Walter C. Cotter as Clinical and Research Fellow in Neurosurgery, for the period August 1 through December 31;

Dr. Willy Hijmans as Clinical and Research Fellow in Medicine for one year, beginning January 1, 1955;

Dr. William H. Horwitz as Clinical Fellow in Psychiatry, effective September 1;

Dr. Roger A. Melick as Clinical and Research Fellow in Medicine, effective September 15;

Dr. Walter S. Michel as Research Associate in Physics (Medicine) for one year, beginning September 1;

Dr. Gisela A. Munzinger as Clinical Fellow in Psychiatry, effective as of July 1;

Dr. Edward S. Rendall as Clinical Fellow in Medicine, effective as of August 1;

Werner Ritschard, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning October 1;

Gene M. Smith, Ph.D. as Research Fellow in Psychology, beginning September 1;

Dr. Ernest A. Sneddon as Fellow in Anesthesia, effective as of August 15.

* * *

Dr. Frederick S. Tomchik, First Assistant Resident in Radiology, is in Oak Ridge, Tennessee, where he is studying the techniques of using radioisotopes. Dr. Tomchik is one of 32 scientists and physicians from throughout the United States who are enrolled in a four-week course being conducted by the Oak Ridge Institute of Nuclear Studies—a non-profit educational corporation of 32 universities in the South. The course includes a study of radiation-measuring instruments, the nature and theory of radiation, statistical problems in radiation measurements, and the techniques of working safely and effectively with radioisotopes.

Following the completion of the course, Dr. Tomchik will be associated for two months with the isotope research hospital unit of the Oak Ridge Institute.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Allergy

Burrage, W. S., and Irwin, J. W.
Cortisone and hydrocortisone in the treatment of allergic diseases.
Rhode Island M. J. 37:371-374, 381.

Anesthesia

Beecher, H. K., and Todd, D. P.
A study of the deaths associated with anesthesia and surgery.
Ann. Surg. 140:2-34.

Eisenman, G., and Rudin, D. O.
The compound origin of potential in a stimulated dorsal root.
J. Gen. Physiol. 37:781-793.

Rudin, D. O., and Eisenman, G.
On the role of the spinal afferent neuron as a generator of extracellular current.
J. Gen. Physiol. 37:795-812.

Cardiology

Sprague, H. B., and Hardy, H. L.
An unusual case of joint pains and fever: Berylliosis and pulmonary hypertension mistaken for rheumatic fever.
Circulation 10:129-132.

General Surgery

Waddell, W. R., Sniffen, R. C., and Whytehead, L. L.
The etiology of chronic interstitial pneumonitis associated with lipid deposition: An experimental study.
J. Thoracic Surg. 28:134-144.

Waddell, W. R., Sniffen, R. C., and Whytehead, L. L.
Influence of blood lipid levels on inflammatory response in lung and muscle.
Am. J. Path. 30:757-769.

Laboratory Science

Schmid, K.
The N-terminal residue in acid glycoprotein.
Biochim. et Biophys. Acta 14:437.

Neurology, Neurosurgery, and Psychiatry

Brown, T., Nemiah, J. C., Barr, J. S., and Barry, H., Jr.
Psychologic factors in low-back pain.
New England J. Med. 251:123-128.

Orthopedic Surgery

Brown, T., Nemiah, J. C., Barr, J. S., and Barry, H., Jr.
Psychologic factors in low-back pain.
New England J. Med. 251:123-128.

Physiology

Herbst, F. S. M., and Hurley, N. A.
Effects of heparin on alimentary hyperlipemia: An electrophoretic study.
J. Clin. Investigation 33:907-911.

Surgery—Thoracic

Scannell, J. G., and Shaw, R. S.
Surgical reconstruction of the superior vena cava.
J. Thoracic Surg. 28:163-174.

* * *

CHILD PSYCHIATRY UNIT

Children have received psychotherapy in the Psychiatry Department of the Massachusetts General Hospital since 1934. In September 1947, a unit for Child Psychiatry was established through the efforts of Drs. Stanley Cobb and Allan M. Butler, who obtained U.S.P.H.S. funds allocated for training and research.

Although these two pursuits are the primary concern of the Unit, financial support from other sources has now made it possible to provide independent psychiatric treatment of children; the Unit is a part of the Department of Psychiatry of the Massachusetts General.

The child psychiatry team consists of two full-time and six part-time psychiatrists, six fellows in psychiatry, four part-time psychologists, two graduate students in psychology, three staff social workers, and three social service students.

For the first few months of operation we had no official working space, but we took advantage of vacant offices where we could find them and gradually acquired "squatters' rights". When the Burnham-Vincent Building was completed in 1948, Dr. Butler let us use some rooms on Burnham 5 and 6, and, during off hours, in the Children's Medical O.P.D. In October 1953, thanks to the Hyams Fund and the M.G.H., a large portion of the uncompleted 7th floor of the Burnham Building was roofed in and converted into a permanent home for the Unit. This gave a big boost to our morale, brought us all together, and made it possible for us to cooperate more closely and to confer informally together more easily—important factors in effective psychiatric team work. Our Unit consists of offices, playrooms, and a conference room with a library containing publications on embryonics. We also have an observation room with one-way screens, permitting simultaneous observation of a play-therapy interview with a child in one room and an interview between mother and social worker in the other.

Patients are also seen in consultation on the wards, on request of the Pediatric Service, and some are taken into psychotherapy. Child psychiatrists are invited to participate in Pediatric Rounds, and joint discussions are held concerning cases of interest to both Services. Lectures and "clinics" are held from time to time as part of the Nurses' Training Program.

At present, emotionally disturbed children needing hospitalization for psychiatric reasons are admitted on the pediatric wards. Thanks to the understanding attitude of the pediatric house staff and nurses, this has worked out very well, but it has meant excluding from treatment highly disturbed children who require special care. We hope for a ward for such patients in the future.

The following table gives an idea of the service rendered by the Unit:

January 1 through December 31, 1953

Total number of interviews	7734
Intake applications	284
Cases seen for consultation and diagnostic study	199
Cases seen for psychological testing	65
New cases accepted for treatment	120
Total number of treatment cases	211

Waiting period: 3 to 6 months

In the usual course of events, a patient comes into treatment in the following manner: Peter X is taken to the Children's Medical O.P.D. because his mother is worried about his poor appetite, weight loss, temper tantrums, and nightmares during convalescence from atypical pneumonia. He is referred to Child Psychiatry, where the mother is interviewed by a social worker to get preliminary medical and social information. The case is discussed at Intake Conference, where it is felt that further information should be obtained by diagnostic interviews between Peter and a doctor and by psychological testing. The case is discussed again at a subsequent conference a few weeks later, at which time it is felt that the symptoms indicate a fairly serious emotional disturbance and not merely the expected psychological reaction to illness; this decision is based on the results of the psychological tests, play interviews, and additional social history. Therefore, Peter is accepted for eventual psychotherapy and placed on the waiting list. When the proper time comes, Peter begins treatment with a doctor and his mother gains help in understanding his problems, and her own in relation to his illness, through simultaneous interviews with a social worker.

Most of our cases fall into the following categories: Disturbances of development and adaptation (such as feeding difficulties, enuresis, constipation, learning problems); psychosomatic illnesses (asthma, eczema, rheumatoid arthritis, ulcerative colitis, etc.); psychoneurosis and psychoses. Since we give preference to referrals from within the Hospital, the majority of our cases have physical complaints, or what their parents consider are medical problems. In contrast to the type of cases most often seen by Child Guidance Clinics, we treat many children whose emotional problems are either secondary to physical disease, or are actual causative factors in their illness.

One of the Unit's most important jobs is the training of psychiatrists, psychologists, and social workers in the special techniques and problems of child psychiatry. This is done through group conferences and presentations (some of them jointly with the Pediatric and adult Psychiatry Departments) and by individual supervision of a trainee by a staff member. Lectures on the theoretical aspects of child development and psychopathology are also presented.

Training cases are selected with a view to providing a well-rounded experience with many different types of problems.

In addition to the fellows in psychiatry, fourth year Harvard Medical School students may spend an elective month with the Child Psychiatry Unit; the emphasis here is on improving the students' observation and evaluation of children's behavior on the wards, rather than training in the techniques of psychotherapy.

Research interest is mainly concerned with psychosomatic problems—the relationship of emotional and organic forces in producing disease. The facilities of the Hospital provide a unique opportunity for the study of children in all physical aspects, and for intensive psychiatric appraisal. The general fields for investigation are as follows:

1) Children's emotional reaction to the stress of illness, operation, hospitalization (events which may be harmful to the child's personality development, but which *can* be constructive and strengthening experiences). In particular, we studied (from 1947 to 1952) the reaction of children to the experience of having their tonsils out at the Eye and Ear Infirmary. This situation was chosen for a starting point because it involved a highly stereotyped condition of short periods of hospitalization and type of threatening procedure. At present we are investigating a more complex problem; children suffering from severe burns are being studied with Dr. Oliver Cope and the Surgical Service. This carries implications of importance in actual clinical treatment; for instance, such patients often suffer from anorexia, and the resultant reduction of caloric intake interferes with healing.

2) Investigation of the ways in which emotional conflicts precipitate, aggravate, or sustain physical illness is currently focused on a group of children with rheumatoid arthritis (in conjunction with Dr. Walter Bauer and the Arthritis Unit), and a group of children suffering from asthma (in conjunction with Dr. Leo Burgin and the Pediatric Staff).

During the past two years we have increased our sharing of mutual interest with other institutions which treat emotional problems of children, such as the Commonwealth of Massachusetts Department of Mental Health and the Metropolitan State Hospital, with attendant sharing of conferences and, to some extent, of fellows and other personnel. The James Jackson Putnam Children's Center, with its emphasis on intensive work with preschool children, proved to be an important complement to our work, and our liaison led last year to an affiliation of the Center with the M.G.H.

With Dr. Erich Lindemann's interest in preventive psychiatry and mental health, plans for the future point to a broadened scope of service in the community, with emphasis on early recognition and treatment of potential emotional disturbances—a program in which psychiatrists work with sociologists, anthropologists, and members of the Harvard School of Public Health.

Lucie Jessner, M.D.,
Head of Child Psychiatry Unit

MASSACHUSETTS EYE & EAR INFIRMARY

Eight members of the Infirmary's ophthalmology staff presented papers at the Seventeenth International Congress of Ophthalmology, held in New York City from September 12 to 17. The papers, on current eye research at the Infirmary, given at the September 14 sessions of the Congress were: "Fixation of corneal grafts", by Dr. Brendan D. Leahey; "The fine structure of the cornea", by Marie A. Jakus, Fellow in Ophthalmology with the Retina Foundation; "Criticisms of the deturgescence theory of corneal transparency", by Dr. David G. Cogan, Director of the Howe Laboratory of Ophthalmology, and V. Everett Kinsey, Ph.D., now of Detroit and formerly on the Howe Laboratory staff; and "Fat formation in the cornea", by Dr. Cogan and Toichiro Kuwabara, Fellow in Ophthalmology with the Howe Laboratory.

On the following day, Dr. Charles L. Schepens discussed "Aspects of the physiology of the vitreous body", and Dr. W. Morton Grant presented a paper on "Outflow of the intraocular fluid: Experimental aspects", as prepared by him and Dr. Robert R. Trotter, both of the Howe staff.

Dr. Grant had previously taken part in a glaucoma symposium at the opening sessions of the Congress, held in Montreal from September 9 to 11.

At a recent meeting in San Francisco, Dr. Trygve Gundersen was elected Chief of the Section of Ophthalmology of the American Medical Association. He had acted as Secretary for the past six years.

At the same meeting, Mr. John T. Murphy, Chief Pharmacist, presented a paper written in collaboration with Dr. Henry F. Allen of the Ophthalmic staff, and Miss Anita Mangiaracine, Bacteriologist, entitled "Preparation, preservation, and sterilization of ophthalmic solutions".

The American Board of Otolaryngology examinations were held in New York City during the week of September 13. The Eye and Ear Infirmary was represented by Dr. LeRoy A. Schall, Chief of Otolaryngology, Dr. Philip E. Meltzer, Surgeon in Charge of the Winthrop Foundation and Clinic for the Deaf, and Dr. Werner Mueller, Director of the Mosher Laboratory, who were present as examiners.

Dr. Schall, Dr. Mueller, and Dr. Meltzer stayed on for the following week to attend the meeting of the American Academy of Ophthalmology and Otolaryngology. Other members of the Infirmary at the meeting included Dr. Donald K. Lewis, Associate Surgeon with the Winthrop Foundation, Dr. George Kelemen, Research Associate with the Mosher Laboratory, and Dr. George F. Reed, Assistant in Otolaryngology.

ORTHOPTIC CLINIC

Orthoptics is a relatively new branch of ophthalmology in this country. It deals with defective visual habits, defective binocular vision, and defective ocular motility. It is properly defined as the teaching or restoring of single binocular vision by means of graded exercises. Single vision, or fusion, is the ability of the brain to blend two separate images of a single object, seen by each eye simultaneously, into one image, resulting in binocular depth perception or stereopsis.

Orthoptic training can, by no means, be considered a cure-all for strabismus (or more properly, squint), but rather, a part of the treatment, which may include the wearing of glasses and/or surgery on the extra-ocular muscles.

Squint, or strabismus, may be classified as follows: convergent (one eye deviated inward), divergent (one eye deviated outward), or vertical (one eye deviated upward in relation to the other). These may be constant (present at all times), periodic (present at reading distance or when the patient looks at a distance), or intermittent (present only at times, more commonly when the patient is fatigued or under stress). Any squint may be monocular (the same eye always deviating), or alternating (either eye may deviate).

Some squints are present from birth; these are congenital abnormalities. Many become apparent between the ages of eighteen months and four years; these are intermittent at first and then become constant, and are usually due to hyperopia or "far-sightedness". The child is becoming interested in his surroundings, and to obtain a clear image of distant objects he must increase the focus or accommodation of his eyes because he is hyperopic. Accompanied by this increase in focus, he receives a stimulus to converge his eyes, resulting in an over-convergence at distance. As he must increase his focus even more to see clearly at close range, his over-convergence is markedly increased. This type of squint is called accommodative, and is sometimes corrected by the wearing of proper glasses, if they are worn before the squint becomes constant. If the hyperopia is of a small amount, the child may outgrow his far-sightedness and hence his squint. This is infrequent, however.

Some squints may be caused by paresis or paralysis of one or more of the extra-ocular muscles. These may recover in time or may require surgical correction.

The cure of squint may be graded as follows:

1. A cosmetic cure in which the visual axes may be aligned (the eyes straightened with the aid of surgery on the extra-ocular muscles or with glasses), but in which fusion is not present because of

reduced vision in one eye or the fact that the patient never experienced single binocular vision during childhood and hence could not change his visual habits.

2. A functional cure in which the visual axes are aligned with or without the aid of surgery and the patient learns normal visual habits and appreciation of binocular depth perception without the aid of glasses, or with glasses, if there is sufficient refractive error to reduce the visual acuity.

The first aim of orthoptics is improvement of poor vision resulting from nonuse of an eye. This can result from a difference in the refraction of the two eyes, a difference in image-size (aniseikonia) which makes it difficult or impossible for the brain to blend the images from each eye into one clear image. Vision develops during childhood, and if a normal eye is not used during this period, visual development is arrested and will not develop in later life. A constant deviation of one eye produces double vision, even in an infant; the second image is suppressed for comfort, and if this condition persists during early childhood the visual acuity in the deviated eye will remain at the level it had reached when the deviation occurred or actually deteriorate further from disuse. This condition is known as amblyopia ex anopsia (blindness from disuse).

The only effective treatment for amblyopia ex anopsia is complete and constant occlusion of the fixing or dominant eye and use of correcting lenses, if necessary, to force the deviated eye to take up the task of seeing. Occlusion can be carried out at an early age (one year, and occasionally less), and to be effective should be instituted as early as possible. If a child has a constant deviation of one eye he will not "outgrow it", as many parents have been told. The eyes may appear to look better, but if even a small, barely discernible deviation is present during the age of visual development, irreparable damage is done. Therefore, an eye which deviates constantly from birth or even during the first few months of life, if untreated before the age of four or five, may have only blurred form perception. If visual acuity develops to the two-year level and then the deviation occurs (which is common), visual development will be arrested, and if untreated before the age of six or seven will develop no further.

It is most important to test visual acuity in children. This can be done easily at age three by means of picture cards or the illiterate E test. It is possible that a child may have apparently straight eyes, but a high refractive error in one eye may prevent development of normal central vision. Prescription of proper glasses and occlusion should be carried out before school age.

If an infant has an alternating deviation, alternate occlusion prevents development of incorrect visual habits until surgical correction can be undertaken. When the eyes are straight, the orthoptist can attempt to teach correct binocular visual habits.

Another group of patients who benefit from orthoptic training is that group with latent deviation, held in check by fusion. These patients have singular binocular vision under the best of conditions, but fatigue, tension, or illness may so impair the fusion faculty that symptoms of discomfort (usually double vision or blurring) are produced. These people can be taught to improve their visual skills by means of orthoptic exercises (*not muscle exercises*).

When a constant strabismus occurs in infancy or early childhood, surgical intervention is necessary as soon as possible (certainly before school age), as the ability to blend or fuse the images received from each eye is acquired during this time and cannot be learned after the age of seven years. Orthoptic training is instituted when the eyes are straight, in an effort to teach correct visual habits.

The Orthoptic Clinic of the Massachusetts Eye and Ear Infirmary was opened in 1942, under the direction of Dr. Edwin B. Dunphy, Chief of Ophthalmology. The department has grown steadily since its establishment. In 1948, in conjunction with Simmons College, a training school for orthoptic technicians was started. Since that time, eleven students have successfully passed the examinations of the American Orthoptic Council.

Originally the Orthoptic Clinic cared only for those registered as out patients; but last year a private clinic was begun, as well, to which members of the visiting staff have sent their patients. It is a rule that all clinic patients with squint must have an orthoptic work-up before being subjected to surgery. The final decision as to the disposition of the case rests, of course, with the chief of the clinic, but the orthoptist can help him tremendously by working patiently with the child and evaluating any defects in his binocular ability.

Ann E. Stromberg,
Orthoptist

Brief bits:—

Dr. Edward B. Benedict attended the meetings of the American Gastroenterological Association, held in San Francisco on June 18 and 19, and discussed the following papers: "Gastric carcinomas missed", by Dr. F. E. Templeton, and "The differential diagnosis of ascites and its surgical management", by Dr. Jere W. Lord, Jr. On June 20, Dr. Benedict attended the meeting of the American Gastroscopic Society in San Francisco and presented a paper titled "Massive hemorrhage from gastritis".

Dr. Patricia H. Benedict attended the meeting of the Endocrine Society in San Francisco on June 17 and presented a paper entitled "Amenorrhea with normal follicle-stimulating hormone (FSH): Follow-up report on 60 cases".

Dr. Edward F. Bland has returned from Europe, where he attended the International Conference on Thrombosis and Embolism, in Basel. In collaboration with Drs. Gordon Scannell and Gordon Myers he presented a paper on "Mitral commissurotomy and appendage amputation for recurring embolism".

Arnold F. Brodie, Ph.D. has resigned as Research Fellow in Biochemistry, to join the Department of Bacteriology at Harvard Medical School.

Dr. Anne P. Forbes, assistant to Dr. Fuller Albright, has left the United States with her family, to spend a year in Paris.

Albert W. Frenkel, Ph.D., Research Fellow in Biochemistry, has resumed his permanent position as Professor in the Department of Botany at the University of Minnesota.

Dr. Parker Heath, Jr. (a.r.p. 1954) announces the opening of his office for the practice of Internal Medicine at 22 White Street, Rockland, Maine.

Janey H. Park, Ph.D., Research Fellow in Biochemistry, has assumed a position in the Department of Physiology at Vanderbilt University in Tennessee.

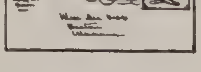
Rosalind V. Pitt-Rivers, Ph.D. has tendered her resignation as Visiting Biochemist and returned to England to resume her position at the National Institute of Medical Research, in London.

Dr. Stuart Ragland, Jr. (*M.* 1951) is now an Associate in Medicine at the Medical College of Virginia, in Richmond, engaged in part-time teaching and research.

John L. Wood, Ph.D. has finished his assignment as Research Fellow in Biochemistry and has resumed his permanent position as Head of the Department of Chemistry at the University of Tennessee.

New addresses:—

Dr. James M. Davis (*S.* 1948), Oteen Veterans Administration Hospital, Oteen, N. C.
Dr. Richard R. Evans (*Path.* 1944), Department of Allergy, Cleveland Clinic, 2020 East 93d St., Cleveland 6, Ohio
Dr. Peter L. Hurst (clin. & res. fel. *C.M.* 1954), Kaiser Foundation Northern Hospitals, Vancouver, Wash.
Dr. Charles S. Keuper (r.p. *D.* 1951), 270 Commonwealth Ave., Boston, Mass.
Dr. George H. Lawrence (*W.S.* 1947), Barnes Hospital, St. Louis, Mo.
Dr. John E. LeDonne (r.p. *D.* 1952), 357 Essex St., Salem, Mass.
Dr. Alexander S. Macmillan, Jr. (r.p. *R.* 1953), Peter Bent Brigham Hospital, Boston, Mass.
Dr. Norman Paul (clin. fel. *N.*), 31 Barberry Rd., Lexington, Mass.
Dr. Stuart Ragland, Jr. (*M.* 1951), 3540 Floyd Ave., Richmond, Va.
Dr. Leon Reznick (r.p. *D.* 1954), 270 Commonwealth Ave., Boston, Mass.
Dr. William P. Rogers, Jr. (clin. a. *S.*), 264 Beacon St., Boston, Mass.
Dr. Boris Senior (*C.M.* 1950), Medical School, Mowbray, Cape Town, South Africa
Dr. Adney K. Sutphin (*W.M.* 1943), 1805 Monument Ave., Richmond, Va.
Dr. Robert H. Walker (a.r.p. *Path.* 1951; a.r.s. 1953), Medical Arts Bldg., Calgary, Alberta, Canada
Dr. Jan Wolff (*M.* 1954), 25 Bay Wood Ave., San Anselmo, Calif.



Dr. Ronald C. Bishop (*M.* 1945)—another "singleton"—has sent us this interesting letter:

Your request for a letter from me has been lying on my desk, unanswered, too long.

First of all, I don't think I deserve the distinction of "singleton". I think I got it only because I put the E in front of the Ann Arbor. This merely means that I live three miles east of Ann Arbor. I really am a part of the Ann Arbor medical community, in which there are several other MGH-ers.

At present I am in the Department of Internal Medicine of the University of Michigan. My base is at the Simpson Memorial Institute where we do mainly Hematology. My teach-

No. 52 in a series of Staff photographs
Dr. Mahlon B. Hoagland—Associate Biochemist in Medicine and newly appointed Assistant to the General Director for Research and Education

ing duties consist of helping with the second year course in laboratory diagnosis and helping some with the fourth year students in their Medicine.

My hematology interests have led to several little side lines. My main hobby is iron metabolism. Most recently I have been working with radioactive iron, watching patients incorporate the tagged iron into hemoglobin, etc. We are also working with cobalt-60 tagged vitamin B_{12}, evaluating absorption under various conditions.

As of July 1, I was promoted to the rank of Assistant Professor in the Medical School. This carries with it a little more financial support than we have had, even though the work goes on about the same.

Our fourth, Andrew Lloyd, was born on June 28. This makes two girls and two boys for us. I don't know which, if any, will be coming MGH way in the future.

We enjoy The News a lot.

Regards to all at the General.

This friendly letter has come from Dr. Edwin C. Hoodless (a.r.s. *Or.* 1952)—our "singleton" up in Victoria, British Columbia:

I am afraid I haven't very much of interest to relate, other than that practice is progressing very satisfactorily here in Victoria. I am limiting my work to referred orthopaedic surgery. I have done this mainly because Victoria is not a large city (110,000), and the general practitioners have for years done all their own surgery, so I felt that if I opened an office and received patients directly from the street I would be in competition. Now they know when I see a patient for them that the patient goes back to them when I am finished with him.

I have not felt that I could afford a great deal of time for any hobbies, which would be boating. However, you might have heard of Flo Chadwick, who was out here for a month this summer in preparation to swim the Strait of Juan de Fuca. I was along with the official boat the day she attempted the swim, and although she was in the water for five hours, she swam only about four miles off shore because of the extremely severe tides.

My family and I sincerely miss Boston, although we don't like your hot summers. You can be assured that any holidays we take, we will come back to M.G.H. for a visit.

Dr. Walter A. Thompson (r.p. *Psychiat.* (McLean) 1931), who has been a "singleton" at his previous address, may find he is in the same category in his new location. We cannot be sure until the 1955 Directory is compiled. However, from Pinewood, Katonah, N. Y., Dr. Thompson writes:

First, I shall clear up my address. You have it as Rockland State Hospital, Orangeburg, N. Y. I left that hospital after the war, and am now the clinical director of the above hospital.

My home address is 714 Ackerman Avenue, Glen Rock, New Jersey, but within a month or two it will be Pockahoe Drive, Sleepy Hollow Manor, North Tarrytown, N. Y. I expect my new home to be completed there at the latest by the end of October.

I hope that in Tarrytown I will still be a "singleton".

A letter from Dr. Hervey L. Smith (*W.M.* 1907), our "singleton" in Palm Beach, Florida, appeared in the September issue of The News. Since then, this very cordial postscript has arrived from Dr. Smith:

Thank you so much for publishing my letter. I was afraid you would think I was boosting Florida too much. However, Palm Beach is a very lovely place, and just right for the retired.

And, if by chance or otherwise, you or any of the MGH family happen to be in Florida this coming winter, don't pass me by.

♣ ♣ ♣

The Hospital is soon to be favored by a very special art show. Paintings and etchings by Jan Gelb, well-known New York and Provincetown artist, will be on exhibition in the Brick Corridor during the first two weeks in November.

To justify the use of that word "special" as descriptive of the coming show, we give you a brief outline of this artist's work and the recognition she has received, as known to us—personally—over a period of several years.

Jan Gelb received her earliest training at Yale University School of Fine Arts, where she was awarded prizes for merit and progress, and in anatomy. Later, she worked and studied at the Art Students' League, the National Academy, and other art schools. She also received private instruction in this country and in France. Her work has been exhibited at the Metropolitan Museum Watercolor Show in 1952, the Whitney Museum Painting Annuals from 1951 through 1953, the Pennsylvania Academy in 1952, the Brooklyn Museum, the Library of Congress, the Philadelphia Print Club, and other exhibitions going way back to the National Academy in 1929. She is listed in *Who's who in the East* and *Who's who in American art.* Her techniques include oil, tempera, water color, etching, lithography, and fresco. She has developed her own flexible gessoed paper, usable with oils. Her work has been presented at solo shows in many galleries in this country, and she is represented in the permanent collection of the Metropolitan Museum of Art.

Everyone who attended the Boston Art Festival in the Public Gardens in 1953 will remember the painting by Jan Gelb which received Second Prize. We can now look forward to our own little private showing of some of her latest work.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 139 Boston, Mass. November 1954

THE ROBERT W. LOVETT MEMORIAL RESEARCH UNIT

STUDIES PERTAINING TO CONNECTIVE TISSUE AND ITS DISEASES*

The last three years have been exciting ones for the group interested in the connective tissue diseases. The introduction of new techniques to probe further the physiology and reactivity of connective tissue and the addition of enthusiastic new recruits to our ranks have stimulated the "old hands" in their continued pursuit of long-term objectives.

The most significant recent event in the history of the group has been the opening of our full floor of laboratories in the new Research Building of this Hospital. The staffing of many of these laboratories with investigators trained in the fundamental sciences has had some interesting effects—first, considerable shyness and even a little suspicion on the part of clinicians and fundamental investigators, then (as the complexities of modern biophysical, biochemical, and analytical techniques were revealed) the clinicians experienced an inferiority complex. This did not last long, because it was soon realized that the fundamental scientists, all motivated by a sincere desire to see their work reach useful application, desired clinical corroboration regarding the many problems of mutual interest. Soon an occasional clinical fellow, like Drs. Allan Dixon and Alex Muller, found full-time places at the laboratory bench, while Dr. Karl Schmid, the protein chemist, found himself following with great excitement the reticulocyte count in a patient with pernicious anemia.

With a physician-biologist, Dr. Jerome Gross, heading the biology unit, and a physician-biochemist, Dr. Evan Calkins, taking Dr. William S. Clark's place in the clinical unit, the two approaches to the study of connective tissue diseases have been integrated. A series of conferences in which each member presents his work to the group for critical appraisal, and the continuation of the weekly seminars, given partly by outside speakers, have facilitated greatly the interchange of ideas and methodology, with the result that both the fundamental and the clinical studies have benefited by this dual approach.

Fundamental studies

Drs. Gross, Jeanloz, and Soodak have continued with the studies which were outlined in the 1951 and 1953 reports in The News.

Dr. Gross has continued his studies on the mechanisms of fibrogenesis of collagen and the isolation and characterization of the precursors of this fibrous protein. Of considerable interest is the extraction of collagen from whole fresh connective tissues by cold physiological salt solutions and its precipitation in the test tube under physiological conditions in the form of typical native collagen fibrils as determined by electron microscopy and chemical analyses. From these and related studies, Dr. Gross and his colleagues believe they have characterized one of the fundamental building blocks of collagen fibrils. Studies are in progress on the defect in collagen formation in scurvy, an example of a controllable metabolic connective tissue disorder, and on the metabolic activity of the salt-soluble collagens of vertebrate connective tissues. He is also investigating other biological systems in which connective tissue can be synthesized and degraded in a controlled manner under the influence of hormones, vitamins, etc., so that such systems may be used by the other members of the groups in independent but cooperative studies on all the components of the connective tissue and the mechanisms that control their formation and degradation. It is hoped that such studies will provide fundamental information on which to base a rational attack on such things as aging processes, physiological functions of connective tissue and its alterations in certain degenerative disease processes.

Dr. Jeanloz has continued to study the structure and reactivity of polysaccharides containing amino sugars which constitute important components of ground substance and synovial fluid. His structural studies have included a synthesis of a series of 14 possible methylated glucosamines and galactosamines, with a comparison of their properties with those of the methylated degradation products of hyaluronic acid. Several more of these methylated hexosamines have been synthesized and others are under study. In addition, some progress has been made in the introduction of a radioactive labeled carbon in position 6 of glucosamine. This should provide an invaluable tool for studying the physiology and metabolism of this ubiquitous compound. Drs. Stoffyn and Jeanloz have devised a method to separate, identify, and estimate minute amounts of glucosamine and galactosamine by paper chromatography and a study of the mucopolysaccharides, using this procedure, is under way.

Elucidation of the enzymatic mechanism for the synthesis of hexosamines from glucose, for their oxidation, deamination, acetylation, and phosphorylation, and especially for the biosynthesis of mucopolysaccharides and glycoproteins, is the objective of Dr. Morris Soodak. At present he is engaged in studying the enzymes found in extracts of B. coli which phosphorylates N-acetyl glucosamine. He is also attempting to study the reactions of uridine diphosphate N-acetyl glucosamine and uridine diphosphate glucuronic acid, two substances believed to be intermediate in the synthesis of mucopolysaccharides.

Since the last report, the group has been fortified by the coming of Dr. Karl Schmid to head the protein research unit. Formerly of Dr. E. J. Cohn's department at Harvard Medical School, Dr. Schmid is investigating the precise chemical structure of a typical glycoprotein, acid glycoprotein, which he has isolated in crystalline form from normal human blood. He is emphasizing the structure of the polypeptide moiety, while Dr. Dixon, working in Dr. Jeanloz's laboratory, has separated, identified, and estimated quantitatively the neutral sugars and amino sugars. Dr. Schmid is also characterizing glycoproteins isolated from connective tissue, synovial fluid, and Wharton's jelly.

Dr. Robert Giles and Dr. Calkins are attempting to apply techniques such as those mentioned above to a study of amyloid and other extracellular deposits. (Amyloidosis is a complication encountered in approximately one-third of all rheumatoid arthritis patients.) Amyloid obtained from patients, in varying degrees of purity, has been chemically characterized as being 90 percent protein and roughly 1.5 percent hexosamine. Whether the hexosamine is present as a mucopolysaccharide or as a mucoprotein is still under study. In addition, attempts to produce this condition experimentally by serial injection of antigens into rabbits and mice are under way.

Dr. David Kahn, our pathologist, continues to collaborate in many of the group's clinical and physiologic studies. Notable among these is a study of nodule formation and the characteristics of skin and subcutaneous tissue in the elbow area, often occupied by nodules. He is also studying the pathology of finger joints in advanced rheumatoid arthritis.

Before entering the Army Medical Corps, Dr. Kulka, our former pathologist, completed a comprehensive study of early articular lesions in rheumatoid arthritis. On the basis of these findings, we now have added information which strongly suggests that vascular inflammation may be the initial lesion in rheumatoid arthritis and related diseases. This will be followed up by a chemical and molecular characterization of small blood vessels in the hope of obtaining confirmation of this finding.

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*This is Publication Number 169 of the Robert W. Lovett Memorial for the Study of Crippling Diseases, Harvard Medical School. These studies have been made possible by generous grants from the Commonwealth Fund, New York, since January 1, 1938.

Dr. Louis Dienes continues to pursue the relationship between L organisms and bacteria. The recent isolation by Dr. John Sharp of an L form of group A hemolytic streptococci from eight strains has added enormous stimulus to this work. In view of the known role of L forms in causing arthritis in animals and the not infrequent association of streptococcal infections with rheumatic fever and rheumatoid arthritis, the possible etiological importance of this observation is of great significance. The fastidious nutritional requirements of most of the L forms, as compared to those of the bacteria, have been the subject of a special study by Dr. Sharp and Dr. Dienes. They have discovered that an increase in the sodium chloride content to a range of 1.5 to 6.0 percent in the medium will permit the growth of these L forms.

Clinical studies

One example of the use of new techniques to attack an old problem is the use by Dr. Allan Dixon of combined Evans-Blue dye and radioactive sodium chromate tagged red blood cells in determining to what extent the anemia of rheumatoid arthritis is a true anemia and to what extent it represents hemodilution. The discovery that 10 women patients with active rheumatoid arthritis displayed an average 21.6 percent increase in plasma volume and a 6.2 percent decrease in red cell volume as compared with 10 normal women, matched for age, suggests that hemodilution is at least one factor which is usually not considered in studies on the mechanism of the anemia of this disease. These data were extended by serial measurements of plasma volume and red cell volume, in cooperation with Drs. Calkins and Mitchell, in one patient with active rheumatoid arthritis both prior to and following abrupt cessation of cortisone therapy. Over the course of two weeks this patient displayed a fall in hematocrit from 46 to 34 percent, an associated increase in plasma volume, and a 6 percent decrease in red cell volume. Upon resumption of cortisone, the plasma volume returned to its former level within three days. These studies will be amplified during the coming year.

Another example of reinvestigation of an old problem by new techniques is the study of uric acid metabolism which was conducted by Dr. Alex Muller. For many years investigators have wondered, "Is gout due to an increased production of uric acid or to a decreased excretion?" Using a method for degrading and analyzing uric acid which he devised, Dr. Muller analyzed the incorporation of orally administered glycine, labeled with N^{15}, in the urinary uric acid excreted by patients with gout. The results, which agree with those simultaneously reported by Dr. DeWitt Stetten, showed that while in some patients there is definitely an increased rate of synthesis of uric acid, it is normal in others. Whether this represents two kinds of gout or two phases of the same disease remains to be established.

Dr. Ropes has extended her studies on synovial fluid physiology in two respects. She and Dr. Muller have investigated the mechanism of transfer of glucose from the blood to synovial fluid in various disease states in man and in normal calves, and compared these rates of transfer with those for galactose, a non-utilizable monosaccharide, pentoses, and methylated glucoses. These interesting data suggest that glucose and galactose are transported across the membrane in an active manner, presumably due to specific enzyme action. These studies also indicate that the rate of transport is decreased in joint disease. Further studies along this line are in progress in an attempt to elucidate the enzymatic reaction involved.

Dr. Ropes is also planning to undertake a study of the interrelationship between the glucosamine and the polysaccharides of synovial fluid responsible for its viscosity, in order to determine whether the denaturation of mucin in joint disease is due to breakdown or to incomplete synthesis of these polysaccharides. In this study, she will make use of techniques for chromatographic analysis of hexoses and hexosamines which have been worked out by Drs. Stoffyn and Dixon in Dr. Jeanloz's unit.

Dr. Ropes has also been studying the ratio of oxidized and reduced ascorbic acid in the blood of patients with rheumatoid arthritis. She has found that the percentage of oxidized ascorbic acid has been high in serum and synovial fluid in many individuals with active disease. In view of the known ability of the oxidized form of ascorbic acid to cause *in vitro* degradation of hyaluronic acid, this finding may have physiological significance. These studies are being extended, and the effect of massive doses of vitamin C in rheumatoid arthritis and amyloidosis is being observed.

The mode of action of aspirin in rheumatoid arthritis has never been disclosed. We have good reason to believe that aspirin has a very real effect on water and electrolyte metabolism. Furthermore, the observation that one of our patients with active arthritis, while on aspirin therapy, excreted significant amounts of homogentisic acid in his urine, in addition to gentisic acid, the usual breakdown product of aspirin, has called up many questions concerning the metabolism of this drug in both patients with active arthritis and normal subjects. To find the answers, Drs. Bachman and Calkins, in cooperation with Dr. DuToit of the Massachusetts General Hospital Chemistry Laboratory, are undertaking a pilot study of these problems.

Steroids

The introduction of ACTH and cortisone as therapeutic agents in the treatment of rheumatoid arthritis in 1949 led to a flurry of clinical trials, then chemical observations, and more recently to fundamental studies aimed at determining the mode of action of these agents. Our initial observations were outlined in THE NEWS of June 1950. More recent studies have centered around the question: "What are the consequences of prolonged cortisone administration?" These studies have been stimulated by our clinical experiences with 40 patients receiving long-term cortisone treatment. The total incidence of serious complications has been impressive: Three patients became psychotic; two of the three were receiving large doses of cortisone (greater than 125 mg. a day). Two patients sustained pathological fractures. Six patients developed severe infections. Of these, one died in adrenal insufficiency; a second, who also developed adrenal insufficiency, was revived following the intravenous administration of hydrocortisone. One patient died with pneumonia and symptoms suggesting adrenal insufficiency five months after the cessation of cortisone. Of two patients with diabetes, one became very much worse and could not be controlled with insulin and a second developed diabetic neuropathy including miliary aneurysms. One patient developed very severe hypertension.

Careful evaluation of these clinical experiences has yielded a great deal of information concerning the selection of patients for steroid therapy and safeguards against such complications. The institution of the latter has reduced the incidence of complications in patients currently receiving steroid treatment.

Drs. Lincoln Clark and Gardner Quarton have studied these patients from the psychiatric point of view; many of their observations have been published. This work has continued under Dr. Quarton's direction, and has consisted of trials of intensive psychotherapy in selected patients. In addition to several patients with clear-cut rheumatoid arthritis, one patient with a severe hysterical character structure and possible rheumatoid arthritis was studied intensively to clarify the differential diagnosis. On several occasions this patient was hypnotized, and her characteristic joint pains were both induced and removed by suggestion. The study of one case of lupus erythematosus disseminatus with extensive joint involvement revealed a rather dramatic relationship between emotionally disturbing episodes and exacerbations of symptoms. Other patients have been seen more superficially in the weekly Arthritis Clinic. A weekly research meeting has been held with psychiatrists and social workers working with children with arthritis. This was done not only to develop a research design for studying arthritic children, but also to compare and coordinate hypotheses arising from work with both children and adults. Unfortunately, Dr. Quarton has been called to active duty in the Naval Medical Corps for at least twelve months. Dr. Lincoln Clark has been on active duty with the Army Medical Corps since April 15, 1953. Because of the loss of these psychiatry colleagues, this phase of our work will proceed at a reduced tempo until they rejoin us. Once they return, we will reinvestigate the value of "group therapy" in the care of arthritis patients.

The relatively frequent occurrence of apparent adrenal insufficiency in patients maintained on cortisone for long periods following exposure to severe stress has led us to investigate the suppressing effect of cortisone on the pituitary, adrenal, and thyroid glands. These investigations have been carried out in cooperation with Dr. Lewis Engel of the Huntington Laboratories and Dr. Farahe Maloof of the thyroid study unit. The initial studies concerned a small group of patients, maintained on daily oral cortisone in doses of 75 to 100 mg. for periods of two to four years. The response to increased demand for endogenous adrenal and pituitary hormones was studied by means of balance measurements, steroid excretion studies, daily eosinophil counts, and close clinical observation throughout two surgical procedures in one patient and after the abrupt cessation of the cortisone therapy in three patients. These data revealed that the one patient failed to display the normal catabolic response to surgery and the customary rise in urinary excretion of corticoids. The data obtained following the cessation of cortisone therapy suggested that there was an immediate increase in secretion of ACTH. Either because this secretion was quantitatively insufficient, or because of adrenal unresponsiveness, the secretion of adrenal hormones was both inadequate in amount and abnormal in nature. This abnormal adrenal response caused a variety of interesting metabolic and clinical phenomena currently in process of investigation. This "cortisone withdrawal syndrome", normally about ten days in duration, was arrested promptly by the intravenous or intramuscular administration of ACTH. For this reason, it is our belief that pituitary atrophy is associated with maintenance cortisone therapy and is of greater clinical importance than the adrenal atrophy.

The mechanism of the thyroid-depressing effect of cortisone has never been elucidated. Interesting new data on this phenomenon have been provided by determining the radioactive iodine uptake on several patients both before and after abrupt cessation of cortisone. These data suggest that in some patients cortisone acts as a goitrogenic agent. Further studies of these endocrinological interrelationships are in progress.

One of the side effects of long-term cortisone therapy which has interested us greatly has been the effect of this agent on calcium metabolism. Review of annual balance studies in these patients suggests that after three years of therapy the loss of calcium is due largely to the activity of the rheumatoid process. This problem is being further elucidated by determining the calcium, phosphorus, and nitrogen content of the bones of cortisone- and non-cortisone-treated patients dying with rheumatoid arthritis.

In view of the profound metabolic effects of orally administered cortisone, the value of intra-articular steroids has been studied again, particularly the variations in degree and duration of benefit. Because of the inconsistent effects, the injection of new steroids in a large group of patients is under way. Dr. Frank Austen and Dr. Calkins have studied the effects of serial intra-articular injections of both hydrocortisone and hydrocortisone acetate. Although the subjective benefits are difficult to evaluate, objective studies revealed that administration of the hydrocortisone acetate was followed by a rapid and pronounced shift toward normal in all the characteristics of the synovial fluid in every case. Free hydrocortisone failed to produce any objective changes in the fluid of some patients; and in the others the effects were exceedingly transitory. Inasmuch as hydrocortisone is known to be much more soluble than hydrocortisone acetate, this study suggests that insolubility may be a desired physical characteristic of the ideal intra-articular steroid, and that objective criteria are more valuable than subjective criteria in the evaluation of steroids.

Butazolidin, another recently introduced drug for the treatment of arthritis, has been studied by Dr. Short. His results are in agreement with those reported by others, namely, that this agent is more beneficial in patients with rheumatoid spondylitis than in individuals suffering from the peripheral form of rheumatoid arthritis.

Follow-up studies

The advent of these new therapeutic agents has served to emphasize the need for better methods for the systematic evaluation of therapeutic regimes, both new and old, on the course of rheumatoid arthritis and related diseases. Our follow-up study clinic provides such opportunities.

The cross-section description of rheumatoid arthritis, based on the detailed studies of the first 293 cases carefully studied in this clinic, is now in its final stages and should be submitted for publication shortly. An example of the type of information obtained from this study is the observation by Dr. Short that of the 80 patients who experienced remissions, these were complete in 85 percent of these cases. This is a fact which, in itself, must be taken into consideration in the evaluation of any form of therapy. Half of these 80 patients exhibited a pre-hospital admission course consisting of attacks and remissions each of less than one year's duration. Thirty-nine percent of the patients had brief attacks and long remissions. The data further showed that when an attack of rheumatoid arthritis persists longer than a year, the prospect of a spontaneous remission becomes less likely. Analysis of the factors associated with exacerbations and remissions revealed other interesting information, namely, in regard to the month of onset of both initial and subsequent exacerbations. The onset of the disease, which in a sense should be considered the initial exacerbation, occurred more frequently in "the colder months of the year". The possible etiological implications of this demonstration of the seasonal nature of rheumatoid arthritis should not be lost sight of in any consideration of its etiology. Some of the possibilities other than climatic changes that must receive equal consideration are:

First, the increased frequency of respiratory injections during the winter months. In the case of rheumatic fever, attacks occur in the United States predominantly in late winter and early spring and are believed to correspond to the seasonal prevalence of hemolytic streptococcus infections.

Next, by analogy, the marked seasonal variation in the incidence of certain infectious diseases, chiefly of virus origin. For example, measles and poliomyelitis occur in epidemic form in entirely different seasons of the year.

A third possibility rests upon differing nutritional requirements according to season. Recent studies in pellagra indicate that an increased metabolic requirement for water-soluble vitamins in late spring and early summer is responsible for outbreaks of pellagra at this season.

Finally should be mentioned the inactivity and even atrophy of endocrine organs in certain animals during the winter months, including the anterior pituitary and adrenal cortex. As far as we know, this has not been demonstrated in man.

This follow-up clinic study, in addition to supplying leads such as those cited above, serves to emphasize two other points: first, the need for establishing simple reproducible criteria for the quantitative description of the clinical course of rheumatoid arthritis, and secondly, the need for designing and conducting controlled therapeutic trials of all measures used in the treatment of this disease—notably aspirin, cortisone, and, if possible, bed rest.

To assist us in the achievement of these needs, Dr. William Reynolds, formerly a Milbank Fellow in Preventive Medicine, has been made a senior member of the connective tissue study group. He will be supported by a five-year Senior Fellowship from the Arthritis and Rheumatism Foundation. His present work includes an examination of the subjective clinical measurements of "activity" of rheumatoid arthritis and an attempt to devise suitable objective measurements of these manifestations.

Within the next year, the group intends to embark on a new long-term follow-up study of a group of selected patients with rheumatoid arthritis, using the systematic follow-up methods already in effect in this clinic, supplemented by sound objective determinations. Dr. Short will serve as chairman of the committee consisting of Drs. Ropes, Reynolds, Zeller, and Calkins, which will review the objectives of such a study and the specific techniques to be used. Once these recommendations have been put into effect, the follow-up arthritis study clinic should be a more rewarding, educational, and learning experience. For example, it is hoped that a more systematic study of the factors associated with exacerbations of connective tissue diseases will be forthcoming. An attempt to devise more objective measurements of joint inflammation as well as articular function will be undertaken. Prediction of the occurrence of remissions and exacerbations on the basis of these findings as well as psychiatric and physiologic data will be attempted. We are seriously considering the possibility of extending this approach to include a study of normal individuals and relatives of connective tissue disease patients, as well as the patients themselves.

In addition to these forward-looking, long-range projects, members of the study group will continue, as they have in the past, their interests in specific clinical problems—usually those raised by the individual patients previously observed. Whereas these "backward-looking" studies usually do not permit the employment of comprehensive statistical methods, they yield information of great value which can be subjected to more careful scrutiny in the future.

One such example is the recent observation that certain patients with rheumatoid arthritis, primarily those whose spines are involved, have a form of heart disease which is distinct from that caused by rheumatic fever, syphilis, or lupus erythematosus disseminatus. It is manifested clinically by aortitis and lone aortic insufficiency which is frequently the cause of angina pectoris and occasionally left ventricular failure. Pathologically, the lesion resembles syphilitic aortitis with a widened aortic ring and non-adherent valves. Typical rheumatoid nodules have been seen microscopically, thus establishing the etiology of this newly recognized form of heart disease.

A detailed analysis of ocular manifestations of rheumatoid arthritis is another study of this type. This has been undertaken at the clinical and pathological levels by Drs. Donald Mitchell and Parker Heath. The most serious ocular manifestation encountered in this study of 1200 clinic patients was involvement of the uveal tract and iris, frequently leading to blindness. The clinical features and prognosis of these ocular lesions have been described in detail. To our knowledge, this represents the most exhaustive study yet completed on this little appreciated aspect of rheumatoid arthritis.

These latter studies illustrate the immense value of this "pedigreed" group of patients. Their carefully documented records, including methodical follow-up observations, provide for the newcomers to our group a long-range view of this chronic disease and the opportunity to obtain a perspective which ordinarily is gained only by years of clinical work. Thus, the experience with one patient can quickly be compared with that of a much larger group exhibiting similar clinical findings. Many compilations of such data reach eventual publication; many others do not. The latter outcome, however, does not lessen the great benefit of the experience for either the individual physician in question or his associates. No doubt such opportunities are of importance in attracting clinical and research fellows from all sections of this country and abroad. We are proud of Drs. Blais, Bocking, Bywaters, Clark, Engleman, Horowitz, Mitchell, Tonning, Weinberger, and other alumni who now head their own rheumatic disease study units elsewhere; Drs. Gall and Schaffer, who head departments of pathology and bacteriology, respectively; and especially of Dr. Granville A. Bennett, Professor of Pathology and recently appointed Dean of the University of Illinois Medical School.

Thus, the fundamental objectives of the group remain unchanged after twenty-six years: care of the patient, teaching, and research. All of these depend for their accomplishment on the maintenance of a top-flight study clinic, with its body of patients who are constantly available for specific clinical or metabolic studies. These patients yield their synovial fluid, blood, and tissues for chemical characterization; they provide difficult and unanticipated situations demanding treatment; and above all, they constantly raise questions that no one of us can answer.

In closing, on behalf of our patients and staff physicians, we should like to express our great appreciation to the many other members of the team who have made the activities of the unit possible. Research and clinical technicians, nurses, secretaries, members of the Social Service Department, the men in the orthopedic workshop, medical illustrators, record room librarians, and countless others have joined us in this common endeavor. We thank them.

Walter Bauer, M.D.,
Chief of Medical Services

* * *

As a result of the wish of the late Dr. Francis T. Hunter that gifts to the Boston Medical Library should take the place of floral tributes to his memory, a number of his friends are desirous of establishing a permanent memorial to Dr. Hunter as part of the plan for enlarging and modernizing the facilities of the Library. Contributions to this fund will be welcomed and may be sent direct to the Library, 8 The Fenway, with this designation.

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After a good many years of effort, plans have been completed and contracts let for the construction of the new medical science building to house the laboratories and offices of the Departments of Pathology, Dermatology, Neurology, and Psychiatry. This building will take the form of a five-story west wing of the Baker Memorial, extending almost to Charles Street and connecting with the Phillips House by a two-story link. There will also be constructed a second story on the corridor connecting the Phillips House with the Baker and White Building. In the new building Pathology will occupy the basement and first two floors above ground, and the other three Departments the three floors above those.

Construction should take about thirteen months, and the total cost will be in the neighborhood of $2,000,000. Additional funds will be needed if the floor for Psychiatry is to be finished; the present plan includes only the shell of this floor. Additional funds are also desired toward the base cost, in order to save as much as possible of the Hospital's General Funds.

The architects for the building are Shepley, Bulfinch, Richardson, and Abbott, and the contractor is the George A. Fuller Company.

The Board of Trustees, at their meetings on September 10 and 24, and October 8, voted:

To accept the resignation of Dr. Robert S. Bandurski from the position of Assistant in Biochemistry, effective as of September 19.

To reappoint:

Dr. George B. Murphy, Jr. as Third Assistant Resident in Surgery, beginning September 7.

To appoint:

Dr. Morris H. Adler as Assistant in Psychiatry, effective September 1;
Dr. John A. Benson, Jr. as Assistant in Medicine, effective as of October 1;
Dr. Carl A. L. Binger as Consulting Visiting Psychiatrist, effective as of September 1;
Dr. James J. Crumbley, Jr. as Interim Resident in Medicine, for the term August 27 through September 30;
Dr. Richard A. Field as Chief Resident in Medicine, beginning January 1, 1955;
Dr. Boy Frame as Resident in Medicine, beginning January 1, 1955;
Dr. Elizabeth G. French as Assistant to the Children's Medical Service;
Dr. Felix G. Freund as Fellow in Anesthesia for one year, beginning October 1;
Dr. George W. Geiss as Assistant in Physical Medicine, beginning October 1;
Dr. John H. Lamont as Assistant in Psychiatry, effective September 1.

At their meetings on September 15, 22, and 29, the General Executive Committee voted:

To promote:

Dr. Si-Chun Ming from the position of First Assistant Resident in Pathology to that of Resident for one year, beginning January 1, 1955.

To reappoint:

Dr. Thomas Frank as Clinical Assistant to the Children's Medical Service for one year, beginning August 15;
Dr. Patrick A. Ongley as Clinical Fellow in Medicine, assigned to Cardiology, for the period beginning October 1;
Dr. Elbert P. Tuttle, Jr. as Clinical and Research Fellow in Medicine for one year, beginning October 1.

To appoint:

Dr. Henrik H. Bendixen as Clinical Fellow in Anesthesia for one year, beginning December 1;
Dr. Dorothy H. Henneman as Research Fellow in Anesthesia for one year, beginning September 1;
Dr. Kiyoshi Inada as Graduate Student Assistant in Surgery, effective as of September 7;

Elizabeth B. Keller, Ph.D. as Assistant Biochemist (Medicine), effective as of July 1;
Mr. Thomas F. Lohr as Research Fellow in Anesthesia, for a period of five months, beginning September 1;
Harris S. Moyed, Ph.D. as Research Fellow in Biochemistry, effective as of September 1;
Dr. Stuart H. Mudd as Research Fellow in Biochemistry, effective as of July 1;
Dr. Robert L. Nielson as Clinical and Research Fellow in Medicine for one year, effective September 13;
Dr. Victoriano Pardo-Menendez as Graduate Student Assistant in Pathology, effective as of September 13;
Mr. Richard R. Peebles as Research Fellow in Psychology, for a period of six months, beginning September 6;
Ann Ross, A.B. as Research Fellow in Psychology, effective September 20;
Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine), effective as of July 1;
Dr. Malcolm Thompson as Clinical and Research Fellow in Medicine, effective as of December 6;
Babette S. Whipple, Ph.D. as Research Fellow in Psychology, for the period September 6, 1954 through January 2, 1955.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Allergy

Burrage, W. S., Burgin, L. B., Wang, D. M. K., and Irwin, J. W.
Allergy in infancy and childhood.
In M. Clin. North America, vol. 38, no. 5, Philadelphia, W. B. Saunders Company, pp. 1255-1279.

Anesthesia

Cullen, S. C., Comroe, J. H., Jr., Brown, E. B., Jr., Beecher, H. K., and Maloney, J. V., Jr.
Problems in ventilation: A panel discussion.
Anesthesiology 15: 416-435.

Lasagna, L., and Beecher, H. K.
The optimal dose of morphine.
J.A.M.A. 156:230-234.

Neurophysiology

Brazier, M. A. B.
Electroencephalography.
In Progress in Neurology and Psychiatry, vol. 9, E. Spiegel, Editor, New York, Grune & Stratton, chapter 12.

General Surgery

Bartlett, M. K., and McDermott, W. V., Jr.
Amputation neuroma of the bile ducts with obstructive jaundice.
New England J. Med. 251:213-216.

Riddell, A. G., and McDermott, W. V.
Hepatic coma.
Lancet, June 19:1263-1267.

Laboratory Science

Irwin, J. W., Burrage, W. S., Aimar, C. E., and Chesnut, R. W., Jr.
Microscopical observations of the pulmonary arterioles, capillaries, and venules of living guinea pigs and rabbits.
Anat. Rec. 119:391-407.

Weille, F. L., Martinez, D. E., Gargano, S. R., and Irwin, J. W.
An experimental study of the small blood vessels of the spiral ligament and stria vascularis of living guinea pigs during anaphylaxis.
Laryngoscope 64:656-665.

Ophthalmology

Johnson, C. C.
Blepharoptosis: A general consideration of surgical methods.
Am. J. Ophth. 38:129-162.

Pathology

Atkins, L.
Progeria.
New England J. Med. 250:1065-1069.

Burt, A. S., Reiner, L., Cohen, R. B., and Sniffen, R. C.
Klinefelter's syndrome: Report of an autopsy, with particular reference to the histology and histochemistry of the endocrine glands.
J. Clin. Endocrinol. & Metab. 14:719-728.

Sniffen, R. C., Howard, R. P., and Simmons, F. A.
The testis. IV. Idiopathic eunuchoidism with low FSH; testicular changes secondary to lesions in or near the pituitary and secondary to estrogen therapy.
A.M.A. Arch. Path. 57:464-480.

Thomas, W. A., Randall, R. V., Bland, E. F., and Castleman, B.
Endocardial fibroelastosis: A factor in heart disease of obscure etiology. A study of 20 autopsied cases in children and adults.
New England J. Med. 251:327-338.

White, P. D., and Fennell, R. H., Jr.
Endocardial fibro-elastosis with marked cardiac enlargement and failure in a man who died at the age of 71 after 15 years of angina pectoris and two years of congestive heart failure.
Ann. Int. Med. 41:333-342.

Miscellaneous

Brazier, M. A. B. (translator)
The epilepsis, by Henri Gastaut.
Springfield, Ill., Charles C. Thomas.

Monks, J. P., and Heath, C. W.
A classification of academic, social, and personal problems for use in a college student health department.
Student Medicine 2:44-62.

In addition to the article by Drs. Riddell and McDermott which appeared in the June 19 issue of *The Lancet,* that same English journal has referred to the work of members of our Staff in two of its recent editorials.

VOLUNTEER GROUPS

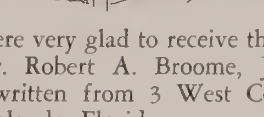
MGH STAFF WIVES HOSPITAL COMMITTEE

Instead of the usual Fall Morning Coffee at the Hospital, meetings will be at the homes of the Community Chairmen. This will give the new President, Mrs. Oliver Cope, an opportunity to become better acquainted with the Staff Wives, and to more conveniently receive suggestions for Staff Wives activities for the coming year.

Both the Hospitality Committee and the Music Committee have already commenced activities for the season. A most enjoyable tea was given by Mrs. Edwin Cole on October 6 in the Medical Staff Room, to welcome those persons who have recently arrived from abroad to work and study at the M.G.H., and to greet those from other countries who have been at the Hospital during the past year. It is expected that a second tea will be given toward the end of January, and a third in early April. Any Staff wife who would like to avail herself of the opportunity to meet these friends from abroad will be cordially welcomed. Those who would like to become better acquainted may obtain names and addresses from Mrs. Raymond Adams, Hospitality Chairman, by telephoning her at BL 8-8442.

The first fall concert for patients, arranged by the Music Committee, was given in the Chapel on October 20. The next concert took place on November 3, and it is hoped there will be a third one on November 17. These concerts provide a real source of pleasure to patients. Except for the assistance of Staff Wives and their friends, however, the patients would be unable to attend, as the Hospital personnel cannot take time from regular duties to convey patients to and from the Chapel. Mrs. James Burns, LA 7-5020, would welcome hearing from any person who could occasionally help in escorting these patients. The concerts are usually held from 2:30 to 3 P.M.

The furniture exchange has been meeting a real need on the part of persons from abroad and those from other sections of the States who are here only temporarily and who find that furnished apartments are too expensive. Mrs. Richard Sweet, LO 6-5671, or Mrs. Charles Burbank, BE 2-1648, would be pleased to hear from anyone having furnishings to contribute to the exchange.



We were very glad to receive this letter from Dr. Robert A. Broome, Jr. (*M.* 1944), written from 3 West Columbia Street, Orlando, Florida:

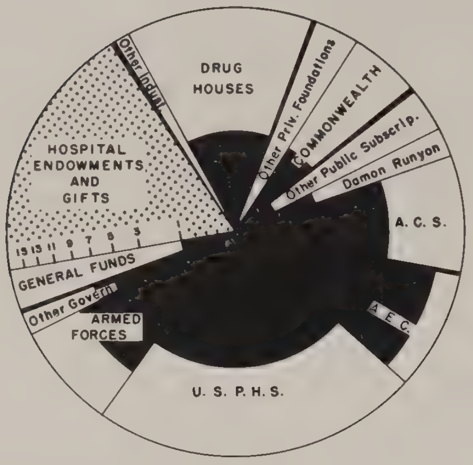
> I enjoy reading THE NEWS, and it helps to keep up with both people and publications.
>
> I have been here in Orlando for four years now, in a very satisfying practice of Internal Medicine and Cardiology, in partnership with a classmate.
>
> Dr. Merrill Wattles, here, is a graduate of the Eye and Ear; and Miss Rachel Brown, a fine nurse of the 1950 class, is one of our head nurses at the Orange Memorial Hospital. You can probably tell me of some more MGH folk here that even I don't know about!
>
> Best wishes to all.

New addresses:—

Dr. Kenneth T. Bird (*M.* 1944), 5 Bay State Rd., Boston 15, Mass.
Dr. Theodore S. Golden (clin. assoc. *C.M.*), 52 Lincoln St., Framingham, Mass.
Dr. Buford Hall (*M.* 1946), 1853 West Polk St., Chicago 12, Ill.
Lt. Charles E. Huggins, MC, USNR (*S.*

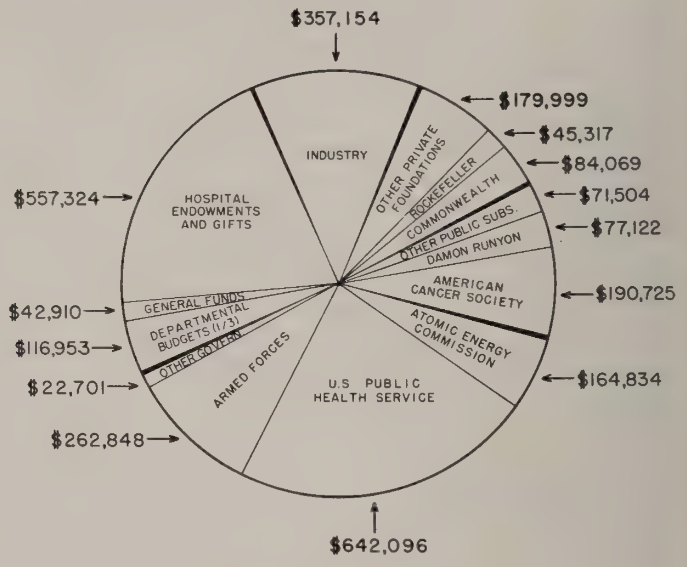
OVERHEAD RECEIVED 1951

ESTIMATED ACTUAL OVERHEAD = 17%



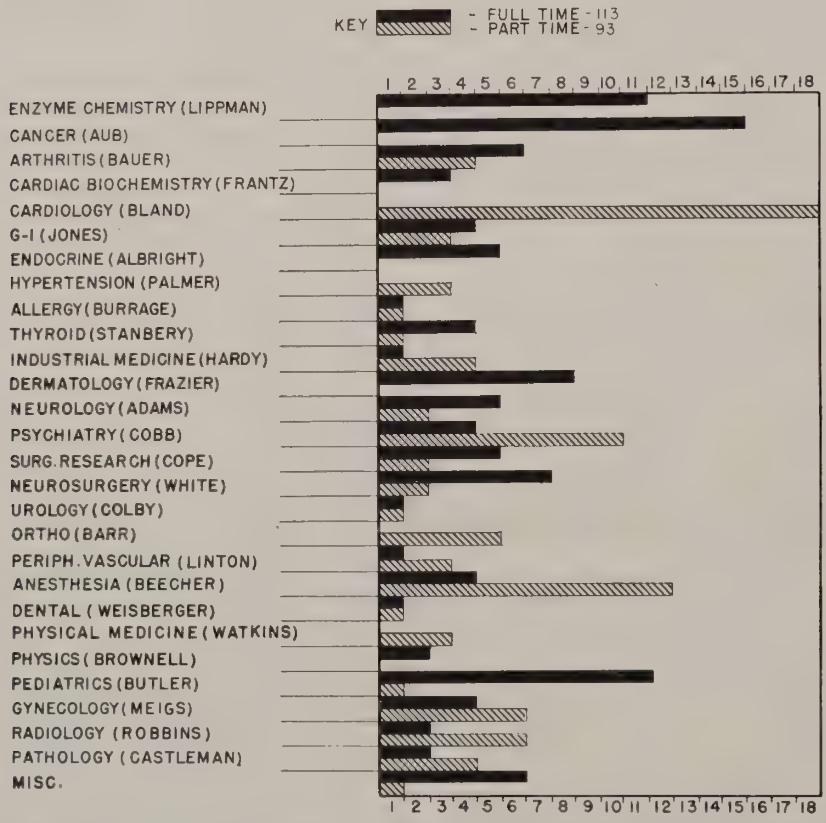
ESTIMATED OVERHEAD COSTS 1951	138,863
SUPPLIED FROM GRANTS	55,630
17% ON HOSPITAL CONTROLLED FUNDS	18,145
ALLOCATION FROM MGH RESEARCH FUNDS	50,000
UNREIMBURSED OVERHEAD	15,088

TOTAL MGH RESEARCH FUNDS - 1953
$2,815,556



MGH FUNDS	$2,335,802
HARVARD FUNDS	479,754
TOTAL	$2,815,556

M.D. AND Ph. D. INVESTIGATORS AT M.G.H.



1953), Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md.

Dr. Adil O. Icgoren (clin. fel. *R.* 1954), Kadikoy Moda Caddesi #129, Istanbul, Turkey

Dr. Knowles B. Lawrence (clin a. *S.*), 1683 Beacon St., Brookline, Mass.

Dr. Alexander Leaf (*M.* 1944), Radioisotope Division, Zoophysiology Laboratory, University of Copenhagen, Copenhagen, Denmark

Lt. David J. L. Luck, MC, USAF (*M.* 1954), 5029 North Lake Drive, Milwaukee 11, Wis.

Dr. Julio Quevedo (*Oph.* 1933), 15 Calle 6-59, Guatemala City, Guatemala

Dr. John W. Raker (*E.S.* 1942), Pennsylvania Hospital, Philadelphia, Pa.

Dr. Marion L. Smith (a.r.p. *An.* 1951), 544 West Second St., Lexington, Ky.

Lt. Ernest A. Sneddon, MC, USNR (r.p. *An.* 1954), U.S. Naval Hospital, Chelsea, Mass.

Dr. Weldon W. West (*S.* 1948), 309 Regent Court, Stockton 4, Calif.

Brief bits:—

Dr. Robert S. Bandurski has resigned as Assistant in Biochemistry, to assume a position at Michigan State College, East Lansing, Michigan.

Dr. Edward B. Benedict recently attended the Fall Clinical Session of the Maine Medical Association in Portland, where he presented a paper on "Endoscopic aids in diagnosis".

Dr. Charles B. Burbank has been appointed Director of Surgery at Leominster Hospital, Leominster, Massachusetts.

Dr. Walter S. Burrage has been appointed Chief Consultant in Allergy and Member of the Council of Chief Consultants, Veterans Administration, Washington, D.C.

Joseph F. Ciano, D.M.D., has opened his office at 350 Hancock Street, Quincy, Massachusetts.

Dr. Nathaniel W. Faxon has been appointed Medical Advisor by the Welfare Board of Falmouth, Massachusetts. Dr. Faxon is also called upon quite occasionally to investigate conditions in hospitals, both within and outside the State.

Dr. Harriet L. Hardy has just returned from a trip to Europe. She went first to Naples, where she attended the Eleventh International Congress on Industrial Medicine. At this Congress she read a paper on "The clinical use of monocalcium disodium ethylene diamine tetra-acetate in lead poisoning." This meeting lasted a week, and was held in a very picturesque castle overlooking the Bay of Naples. She then went to Milan, where she spent some time at the famous Occupational Medical Clinic, talking with the staff about problems of mutual interest. Finally, she attended the International Congress on chest diseases, held at Barcelona, Spain, during the week of October 4.

Dr. Nils Normann has resigned from the Anesthesia Department, to engage in full-time research at the Jewish Hospital, St. Louis 10, Missouri.

Yale J. Topper, Ph.D. has resigned his position as Research Fellow in Biochemistry. He leaves to assume a position in the Institute for Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland.

Dr. Paul D. White has been elected President of the International Society of Cardiology.

Miss Mary R. Wolf became the new permanent Head of our Volunteer Service on October 4.

* * *

Contributions to THE NEWS in the amount of $523.05, over and above subscription fees, were received during the fiscal year 1953-1954. A note of appreciation is always sent to each contributor, but THE NEWS takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

THE NEWS

1811

No. 140 Boston, Mass. December 1954

EMOTIONAL FACTORS IN CHILDREN WITH RHEUMATOID ARTHRITIS

In 1948 the Child Psychiatry Unit first became interested in the emotional aspects of juvenile rheumatoid arthritis, when psychiatric consultation was requested because these children had difficulty in adjusting to hospitalization and their illness. The children showed depressive reactions, feeding problems, and uncooperative behavior, especially toward medication and physiotherapy. Originally we were more aware of emotional disturbance as a consequence of illness and hospitalization. As our experience increased, we became impressed with certain common emotional constellations in these children and their families which appeared to be possible contributing factors in the etiology of the disease. However, we do not believe that emotional factors are the sole explanation for the disease, but that they are interrelated with many other factors, such as heredity, hormones, trauma, and infection. All of the possible causative factors seem to have a complex interrelationship and may vary in relative importance from case to case.

The role of emotional factors in adult patients with rheumatoid arthritis has been the object of study by many investigators, including several from the Massachusetts General Hospital. In 1939 Drs. Cobb, Bauer, and Whiting reported that the onset and recurrence of arthritis related to life situational stress. In 50 arthritic patients they found that 31 had close correlations of arthritis with stress situations of grief, poverty, and family worry. Dr. Alfred Ludwig in his psychiatric studies of adult arthritis patients was impressed with the marked immaturity in their personality make-up. He described them as extremely dependent, insecure, and inadequate to master or cope with the environment. They reacted to emotional crises with intense activity of the autonomic nervous system in a manner resembling patients with traumatic war neuroses. We are unaware of similar psychiatric studies of children with rheumatoid arthritis being reported in the medical and psychological literature.

Since 1948 the Child Psychiatry Unit has collected data on 40 children with rheumatoid arthritis and their parents. The orientation of this investigation has been an exploratory clinical study in which the children were seen in psychotherapy by a child psychiatrist and the parents in casework by a psychiatry social worker. The children were also given psychological tests by a clinical psychologist. This teamwork approach of psychiatrist, social worker, and psychologist is a well-established tradition in the psychiatric treatment and investigation of children. The data we obtained reflect the emphasis on treatment. The children were seen as in patients and out patients in psychotherapy — four being followed for five years and the remainder for varying lengths of time.

General characteristics

The group of 40 children ranged in age from 2 to 16 years, with a striking sex distribution of *29* girls and *11* boys. This ratio of girls over boys with juvenile rheumatoid arthritis is similar to that reported by other workers. The ordinal position of the children in the family varied considerably and did not seem to be significant.

Onset

In most cases the onset of arthritis was gradual, with vague symptoms that could not be diagnosed for some time. One aspect of onset which warrants further investigation was that in some it occurred during periods known to be critical in the emotional development of the child. As shown in the table below, 10 children developed arthritis between the ages of 1½ and 3 years, when the child makes his earliest attempts to separate from the mother and become independent. During this period motor development promotes the child's getting free and moving away from the mother. Other critical phases in development are during the ages of 3 to 5 years and 10 to 12 years, onset occurring in 9 children in each group. Though other conflicts of motor, physical, and instinctual origin are usually highlighted at these times, it was our impression that in the arthritic children the struggle for separatedness and independence was accentuated.

Age	No. of children
1½ to 3	10
3 to 5	9
6 to 9	8
10 to 12	9
13 and over	4
	40

In one-third of the cases, onset correlated with an emotionally charged event. These events seemed to be precipitants rather than causes, since there was usually evidence of a long-sustained emotional conflict between mother and child prior to onset.

Recurrence

In one-fourth of the cases a recurrence or aggravation of the arthritis was related to an emotionally charged situation, often similar to circumstances at the time of original onset. In a few cases we found what is referred to as "the anniversary phenomenon", that is, the arthritis recurred during the same time of the year as when it originally began. In one case it recurred twice on exactly the same date without any known precipitants.

Concept of illness

Although in most illnesses children and parents have feelings and fantasies that are quite different from the actual nature of their diseases, fantasy explanations about arthritis were more strikingly prevalent. This may be encouraged by the fact that arthritis is a disease where much is still unknown. Whether such fantasies might influence the physiological manifestations of the disease could not be ascertained.

The mothers expressed the feeling that in some way they were responsible for the illness. Their guilt often focused on events during the pregnancy with the arthritic child, such as falls, illness, death of a relative, and depressions. The mothers felt that these events affected the child and that rheumatoid arthritis was the result.

The children also had feelings of guilt concerning the arthritis — that it was punishment for bad thoughts or bad deeds. In their fantasies the disease was frequently represented as an immobilization of, or a retaliation for, intense destructive impulses.

Mother-child relationship

One outstanding aspect of the mother-child relationship was its unusual closeness and intensity. The closeness and extreme interdependence seemed to predate the illness and then were fostered by the illness itself which set up an infantile situation where the mother has to be the arms and legs of the child. The response of the children, even the older ones, to hospitalization was marked by depressed attitudes and feelings of abandonment. For the mothers, separation from the children through hospitalization was an acutely upsetting experience. They had difficulties in accepting the medical recommendation for hospitalization, visited often and left with great difficulty, and spontaneously brought food from home — showing great need to keep possession of their children.

Another aspect of the mother-child relationship was the special feeling toward the arthritic child, in contrast to other members of the family, which seemed to predate the onset of the illness. The special feelings often related to unusual experiences during the pregnancy which had not occurred with the other children in the same family.

Personality characteristics

The mothers, in spite of many individual personality differences, had some common characteristics. They had been deeply deprived from childhood, physically and emotionally. Over half experienced the loss or threat of loss of an important relative during the pregnancy or early life of the arthritic child. There was a marked tendency to depression, exemplified in a mood of resignation and a fatalistic stoical acceptance of fate. Another outstanding characteristic was the slavish martyr-like devotion to the arthritic child. In some instances the mothers' lives were practically consumed in the care of their sick children. In other ways, the mothers demonstrated their martyr attitudes: the frequency of performing good service to others, a suffering relationship with their husbands who were often alcoholics, poor providers, chronic invalids, or cruel in their treatment of them. Also striking in these mothers was their extreme difficulty in expressing feelings, either positive or negative, even in relation to situations which would arouse a response in anyone. They also revealed the personal history of their lives very slowly.

All of the children showed a disturbance in mood, particularly in the hospital. Most of them were depressed, varying in degree from mild to those who were apathetic, immobile, unresponsive, and anorexic. Three were originally somewhat manic, becoming depressed later. The depression seemed to be the result of separation from a close mother-child unit and of inability to express their feelings. It was striking how they complained so little of pain from their illness, and how frequent the response to the question, "How are you feeling?" was "fine", "all right", and "good". The inability to express feelings was based on the attitude that feelings, both positive and negative, were dangerous. They were afraid of what they might do to others as well as what might happen to them. They had great difficulty tolerating separation from their mothers. The fantasy life of these children was of a very primitive aggressive type. It took a good bit of time for them to express their fantasies, but when they did, they were characterized by violence, devouring forces, death, and destruction.

Evaluation

From our studies it is difficult to distinguish the emotional reactions consequent to the illness from emotional factors predating the arthritis and possibly related to causation. While the consequent reactions from immobilization and hospitalization colored the picture we saw of the child, the findings in the group were consistent, regardless of the duration of symptoms and amount of hospitalization. In addition, we compared the group of arthritic children with a group of 18 children who had rheumatic fever and who were studied in our Unit by Drs. Holder, Brazelton, and Miss Talbot. Rheumatic fever offered a good comparison, since it had so many similar clinical features. However, both the mothers and children of the rheumatic fever group experienced the illness quite differently in terms of a neurotic reaction consequent to illness with marked anxiety, superficial guilt, and ideas of causation based on realistic external causes, such as infection and dampness. In contrast, the mothers and children of the arthritis group showed evidence of depression, deep guilt, and ideas of causation based on personal causes and fantasy explanations.

In juvenile rheumatoid arthritis the core emotional conflict appeared to be in the mother-child relationship where there was a struggle for separatedness. This conflict seemed to be the resultant of forces within the mother's personality and the occurrence of certain crucial events during the child's early life. The crucial event was an actual, symbolic, or threatened loss to the mother which occurred during the pregnancy or early life of the arthritic child. As a result, the mother gave to the child the feelings that belonged to the person who was lost. She also gave herself in a self-sacrificial way to the child in an attempt to recapture what she felt she had lost. The result was a very intense close mother-child relationship in which the child maintained an infantile personality structure where he was unable to achieve separatedness from her. When he tried to separate, the mother would experience it as another loss or threat of loss.

It is of interest that the emotionally charged event related to onset usually represented a loss or threat of loss, and also during the critical phases of emotional development the struggle of the child to move apart from the mother was experienced by her as a loss.

Further developments of the study

This clinical study was supported initially in 1948 by a research grant from the National Institute of Mental Health of the U.S. Public Health Service for the Study of Psychosomatic Disorders of Children. In 1953, and now in 1954, the Arthritis and Rheumatism Foundation (New England Chapter) has continued the support of our work.

In September 1954 the Unit undertook a further extension of this preliminary study, with funds from a special research grant from the U.S. Public Health Service. The plan is to apply a more systematic and reproducible method of dealing with the psychological data from interview material already obtained. Interview material from two patient populations, consisting of a research group (arthritis cases) and a control group (asthma cases), will be compared. The two groups will be matched according to a number of significant variables (age of patient, age at onset of illness, sex, number of interviews, etc.). The two groups will be compared by the use of scales that are constructed from the concrete data existing in interview material. The data upon which the clinical impressions of the preliminary clinical study were based will be selected for scaling. By this method we hope to confirm or reject in an objective way the clinical impressions of the preliminary study. We hope to determine whether certain emotional constellations common to children with rheumatoid arthritis and their parents are present in a significant number, and whether these distinguish this group from groups with other diseases.

Gaston E. Blom, M.D.,
Associate Director, Child Psychiatry Unit

* * *

FRANCIS TENNERY HUNTER

1897–1954

Frank Hunter was no ordinary doctor. At the lunch table in the MGH cafeteria, a newcomer might at first think of him as a rather peppery man whose talk was cynical, but in a moment he would be convulsed by hearing the latest story told artfully. Later he would find out that Frank Hunter had a keen mind, which enabled him to know much about many subjects and to talk about them with authority and clarity.

Frank Hunter was born in Ohio but was brought up in Florida. At the age of nineteen, in 1915, he came to Boston, ostensibly to study music, but higher education was more appealing and he passed the entrance examinations for Harvard College. In the summer of his sophomore year (1917), he went to France to drive an ambulance for the French Army. He returned to college in November, made up the lost time, and took his Harvard A.B. in 1919.

In September he entered the Harvard Medical School, where all was well until February 1920, when he developed pneumonia, followed by empyema, and for a time was seriously ill. He was sent back to Florida to recuperate. In June he came back to Harvard, this time to take courses in abnormal psychology in the Graduate School of Arts and Sciences. In January 1921, he returned to the Medical School to begin again where he had left off in the year before. That summer he worked again in the Graduate School and received his M.A. In his fourth year in the Medical School he came into contact with Dr. George R. Minot at the Collis P. Huntington Hospital and began his interest in blood. After receiving his M.D., *cum laude,* he worked with Dr. Minot at the Huntington, and his interest in hematology, as well as in tumors, and especially in leukemia, increased. In July 1925, his West Medical internship began at the Massachusetts General Hospital. At the Huntington he had met Miss Margaret Weld, younger sister of Dr. Minot's wife, and on December 17, 1925, they were married. After the internship, Drs. Minot and Locke gave him a desk at 311 Beacon Street, but his mind was much too active for the routine of clinical histories and physical examinations.

His work at the Huntington, at the new Palmer Memorial, and at the Out-Patient Department of the Massachusetts General, centered around diseases of the blood. The study of patients with leukemia, lymphoma, lymphoblastoma, and cancer gave rise to interest in x-ray, as well as to the effects of poisons. He became one of those experts who know much about a number of peculiar and rare conditions.

In four patients with severe nausea, bleeding gums, cough, and weakness, he found that their symptoms depended upon contact with benzol in their occupations, and the paper which he wrote[1] with Dr. Hanflig is one of the important articles on benzol poisoning.

In 1935 Dr. Hunter and Dr. George W. Holmes[2] studied the toxic effects of x-ray and described three types of x-ray sickness. The first is a toxic sickness with nausea and vomiting, which is due to the absorption of tumor tissue breakdown products. The second group is psychic, while the third group can be called true roentgen sickness. The authors showed that this was related to a disturbance of liver function, and that by increasing the intake of fluid and of carbohydrates before the x-ray treatment, the symptoms could be modified, if not prevented.

Hunter's paper on "Hutchinson-Boeck's disease (generalized 'sarcoidosis'): Historical note and report of a case with apparent cure"[3] was another important contribution.

In 1939 the work on benzol was continued, and three papers were published from the M.G.H. under the general title "Chronic exposure to benzene (benzol)". The clinical effects were described by Dr. Hunter.[4] Of 89 individuals exposed to benzene fumes, only 11 showed a perfectly normal blood picture. Dr. Hunter pointed out that the first signs of poisoning may not occur until they are precipitated by an infection some time later.

When the Baker Memorial Hospital was opened in 1930, Dr. Hunter was put in charge of the new clinical laboratory. Under his guidance, the standard of clinical pathology in the whole Hospital was raised to a high level.

In the *Fifteenth report of the H.M.S. Class of 1924* is this bit concerning Dr. Hunter:

"He has a fierce interest in the x-ray treatment of lymphoma, on which he is an authority.

"He has written about a dozen clinical papers and a Laboratory Manual. He is Associate Physician in charge of the Clinical Laboratories at the M.G.H. and Ten Terrified Technicians tremble at his word.

"He likes Egyptian hieroglyphics, medical history, playing the viola in Bill Breed's string quartet, and gastronomy. Several years ago he upset the Authorities at the Museum of Fine Arts in Boston by taking an x-ray of the mummy of a priestess and proving that 'she' was a man."

The *Laboratory manual of the Massachusetts General Hospital* was first published in 1922, was revised in 1928 by Drs. Roy R. Wheeler and Francis T. Hunter, and was rewritten by Hunter in 1939.[5] As for the mummy, he had a portable x-ray machine taken up to the Museum, partly to look for gold in the mummy case and partly because he also was an inquisitive physician.

The modern method by which hemoglobin is measured photoelectrically was introduced by Dr. Frank Hunter. His papers give the detailed instructions, and they explain the calculations by which the results can be transposed into grams per 100 cc. He could use the same machine to measure methemoglobin and carbon monoxide hemoglobin.

In World War II, Dr. Hunter spent over four years in the Navy. He was with Base Hospital 4 in the South Pacific from July 1942 to February 1944, and then, after three months at the Naval Hospital in Chelsea, he was made a Commander and was appointed Executive Officer in the Fargo Building, where he worked from May 30, 1944, to November 13, 1945. He was promoted to Captain on his retirement. His wife and two children were glad when he was released at last. His graphic accounts of Naval "efficiency" and some of his illustrations of "Snafu" were "as funny as a crutch".

Some years after the war, he wrote a monograph entitled *The quantitation of mixtures of hemoglobin derivatives by photoelectric spectrophotometry.*[6] One need only turn the pages of this book to realize the scholarly attitude of its author.

"With recent evidence suggesting that radiologists have a higher death rate from leukemia than their colleagues, protection . . . becomes . . . important." So begins another major contribution by Frank Hunter and his associates.[7] The paper describes the limit of safe exposure to x-ray, the hazards of overexposure, and the amount of scatter of radiation under various circumstances. Again, a series of careful observations is interpreted by curves in graphic form. This paper led to the development of the film badge — a great improvement over the dental film previously suggested. This badge was thereafter prescribed for all those doctors and technicians who might come into contact with x-rays, and the same badge was used in the radioactive laboratory. The badge alone makes the wearers conscious of the danger. It is fair to say that Dr. Hunter's work has done more than any other to protect x-ray workers from the hazards of their occupation.

A true scientist is inquisitive; also, he is accurate. One morning at Grand Rounds a resident described a tumor as being the size of an orange. Dr. Hunter asked immediately, "How big is an orange? The ones my wife bought the other day are not more than two and one-half inches in diameter, whereas those sent me from Florida last winter were at least five inches in diameter. It is important to be accurate, so that changes in the size of the tumor can be recognized."

Frank Hunter was a great lover of books. He read extensively and thoughtfully. In a patient with an intention tremor, he recognized the "Danbury shakes" as due to mercury poisoning, and that reminded him of the Mad Hatter in *Alice's adventures in Wonderland,* who had similar symptoms. A few days later he brought the little book to Grand Rounds and read aloud the section about the trial. He was much interested in the Boston Medical Library, and now there is a plan to establish a memorial to him in the Library.

He was a devoted husband and father, he was a true friend to many contemporaries, and he was an important scientist. To lose him at the height of his career is most unfortunate. His many friends miss him.

F. M. R. Jackeman M.D.

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[1] Hunter, F. T., and Hanflig, S. S.: Chronic benzol poisoning. A report of four cases, M. & S. J. *197:* 292-299, 1927.

[2] Holmes, G. W., and Hunter, F. T.: The management of roentgen sickness, New England J. Med. *213:* 308-310, 1935.

[3] Hunter, F. T.: Hutchinson-Boeck's disease (generalized "sarcoidosis"): Historical note and report of a case with apparent cure, New England J. Med. *214:* 346-352, 1936.

[4] Hunter, F. T.: Chronic exposure to benzene (benzol), J. Indust. Hyg. & Toxicol. *21:* 331, 1939.

[5] Hunter, F. T.: Laboratory manual of the Massachusetts General Hospital, Philadelphia, Lea & Febiger, 1939, 119 pp.

[6] Hunter, F. T.: The quantitation of mixtures of hemoglobin derivatives by photoelectric spectrophotometry, Springfield, Illinois, Charles C. Thomas, 1951, 226 pp.

[7] Hunter, F. T., Merrill, O. E., Trump, J. G., and Robbins, L. L.: The protection of personnel engaged in roentgenology and radiology, New England J. Med. *241:* 79-89, 1949.

Hunter, F. T., and Robbins, L. L.: The protection of personnel engaged in roentgenology and radiology. Final report, New England J. Med. *244:* 9, 1951.

* * *

On October 15, Dr. Churchill received the degree of Doctor of Laws, *honoris causa,* from the Queen's University, Kingston, Ontario, Canada. The occasion was the Hundredth Anniversary of the Founding of the Faculty of Medicine at the University. The award reads:

"Edward Delos Churchill, surgeon and teacher of surgeons, distinguished representative of a famous school and hospital, whose innovations in surgery of the chest have added to the achievements of all who are fellow practitioners."

On October 18, the Royal College of Physicians in London awarded the Moxon Medal to Dr. James L. Gamble (*W.M.* 1912) for his contributions to medical science.

The Moxon award is presented every third year to the person who is deemed to have most distinguished himself by observation and research in clinical medicine. Among ten previous winners, only one was an American — the late Dr. George R. Minot (*E.M.* 1913).

The Board of Trustees, at their meeting on October 22, voted:

On recommendation of the General Executive Committee and Out-Patient Department Committee to change the name of the Out-Patient Department to "The Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary", this having been already approved by the Infirmary.

To promote:

Dr. Joseph W. Gardella from Clinical and Research Fellow in Medicine to Assistant in Medicine.

To extend the appointment of:

Dr. Verner S. Johnson as Assistant Resident in Orthopedic Surgery from January 1 through March 31, 1955, and to appoint him Senior Resident for one year, beginning April 1, 1955.

To appoint:

Dr. Robert C. Detwiler as Assistant Resident in Orthopedic Surgery, beginning July 1, 1955;

Dr. Robert B. McFarland as Third Assistant Resident in Pathology, beginning July 1, 1955;

Dr. Allan B. McNie as Third Assistant Resident in Pathology, beginning July 1, 1955;

Dr. Geraldine M. Peiffer as Assistant Resident in Anesthesia, beginning August 1, 1955;

Dr. John S. Robey as Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1955.

At their meetings during October, the General Executive Committee voted:

To accept with regret the resignation of Yale J. Topper, Ph.D. as Research Fellow in Biochemistry, effective as of October 2.

To promote:

Dr. William R. Buchanan, Jr. to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1955;

Dr. Robert C. Coe from the position of Assistant Resident to that of Resident in Surgery, beginning January 1, 1955;

Dr. Richard B. Kearsley to the position of Chief Resident on the Children's Medical Service for one year, beginning July 1, 1955;

Dr. Kazuo K. Kimura to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1955;

Dr. Barbara M. Orski to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1955;

Dr. Leonard H. Plotkin to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1955.

To reappoint:

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1;

Dr. Nicholas J. Fiumara as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Robert B. Giles, Jr. as Clinical and Research Fellow in Medicine, effective as of October 15;

Dr. Franz S. M. Herbst as Clinical and Research Fellow in Dermatology, for the period July 1 through October 31;

Dr. Mark R. Knapp as Assistant Resident in Anesthesia for one year, beginning November 19;

Dr. Raymond D. Manchester as Clinical and Research Fellow in Dermatology, as of October 1;

Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine, effective as of October 1;

Dr. Guillermo C. Sanchez as Research Fellow in Anesthesia, for a period of nine months, beginning October 1;

Dr. John T. Sharp as Clinical and Research Fellow in Medicine, effective as of December 1.

To appoint:

Miss Aileen K. Adams as Clinical Fellow in Anesthesia for one year, beginning June 1, 1955;

Dr. R. Andjus as Research Fellow in Anesthesia for one year;

Dr. William L. Bencze as Research Fellow in Medicine for one year, beginning September 29;

Earl W. Davie, Ph.D. as Research Fellow in Biochemistry, effective as of October 1;

Dr. Francis L. A. de Marneffe as Clinical Assistant in Psychiatry, for the period January 1 through June 30, 1955;

Dr. Albert C. England, Jr. as Research Fellow in Neurology, assigned to Electroencephalography, for a period of six months, beginning October 1;

Dr. Murray M. Freed as Clinical Fellow in Physical Medicine for one year, beginning January 1, 1956;

Dr. Samut Jatinandana as Graduate Student Assistant and Clinical Fellow in Dermatology, effective as of October 1;

Dr. Michel Leclerc as Graduate Student Assistant in Surgery, effective as of October 1;

Dr. Kenneth J. Ryan as Research Fellow in Biochemistry for one year, beginning October 1;

Dr. John B. Vander as Clinical and Research Fellow in Medicine, effective as of October 1.

The General Executive Committee also voted to appoint the following group as Graduate Student Assistants in Medicine, assigned to Cardiology, for one year, beginning October 1:

Dr. Leandre P. Decarie, Montreal, Canada
Dr. Yves Desrochers, Montreal, Canada
Dr. Jorge A. Fernandez-Mendia, Guatemala
Dr. Arnold Fieldman, Short Beach, Conn.
Dr. Alberto Mazzoleni, Milano, Italy
Dr. R. Judson Pearson, Jr., Beaufort, S. C.
Dr. William C. Pomeroy, Jr., Los Angeles, Calif.
Dr. Chotibun Puranaveja, Dhonburi, Thailand
Dr. Raoul J. Roberge, Quebec, Canada
Dr. Donald F. Williams, Porterville, Calif.
Dr. Walter K. Yates, Huntington, W. Va.

* * *

HORMONE LABORATORY

Collis P. Huntington Memorial Hospital of Harvard University, at the Massachusetts General Hospital

The first crystalline steroid hormone, estrone, was isolated from urine just twenty-five years ago. This discovery was soon followed by the isolation of other female and male sex hormone metabolites and ultimately by the detection of steroids derived from the adrenal cortex. It was soon recognized that these substances were intimately related to normal and abnormal growth processes.

The early recognition of the interrelationships of the internal secretions to growth led in October 1935 to the establishment of the Hormone Laboratory by the late Dr. Ira T. Nathanson, then Littauer Fellow in Surgery at the old Huntington Hospital. When the Huntington Hospital closed its doors and the research laboratories moved to the Massachusetts General Hospital, the Hormone Laboratory had already made substantial contributions to the fields of cancer and endocrinology.

Observation of the effects of endocrine gland removal and steroid therapy in advanced cancer of the breast and prostate gland served to justify the establishment of the Laboratory and to emphasize the significance of this approach. This led to continuing expansion of the staff and activities of the Hormone Laboratory, which placed a strain on the physical facilities of the quarters in the Domestic Building. During this period, the remarkable observations of Kendall and Hench on the palliative effect of cortisone and ACTH in rheumatoid arthritis emphasized the central role of the adrenal cortex in disease processes not theretofore thought to be under endocrine control. These events placed an additional work load upon the staff of the Hormone Laboratory and further strained the physical facilities. This pressure was relieved when the Laboratory moved to its present location in the Research Building.

The principal activity of the Hormone Laboratory centers about the study of errors in steroid metabolism in neoplastic disease. In developing a unified approach to this problem it has been necessary to devote much time and effort to devising methods for the separation, identification, and quantitative analysis of individual components of very complex mixtures. We have availed ourselves of the latest advances in techniques, such as chromatography, counter-current distribution, and finally that most powerful tool, infrared spectroscopy. The methods now available permit us to develop a broad picture of the quantitative changes in steroid excretion patterns which occur as a result of disease, endocrine gland removal, and steroid and pituitary hormone administration. The Hormone Laboratory has always derived its strength from the intimate relations of the Laboratory, the Clinic, and the Metabolic Ward. The continuing interchange of ideas and data has helped to bridge the gap and should be increasingly fruitful in improving our understanding of this important area and thus lead to better and more effective care of patients.

The activities of the Hormone Laboratory have always extended beyond the confines of the Huntington Laboratories to collaboration with other groups within and outside the Hospital. Collaborative projects with the Departments of Surgery and of Gynecology have been in progress for some time. More recently a project on steroid biosynthesis and metabolism, using radioactive compounds, was begun with the group at the Worcester Foundation for Experimental Biology.

Clearly, this extensive program could not have been undertaken without a highly skilled, devoted, and loyal staff to whom great credit is due for past accomplishments and on whom we count heavily for future achievement.

Lewis L. Engel, Ph.D.,
Head of Hormone Laboratory

* * *

Brief bits:—

Dr. Dana L. Farnsworth (*W.M.* 1935), Associate Physician on our staff, has been appointed the Henry K. Oliver Professor of Hygiene at Harvard University. Until this recent appointment, Dr. Farnsworth has been serving as the first full-time medical director at Massachusetts Institute of Technology. In his new position he will direct all medical care at Harvard. He succeeds Dr. Arlie V. Bock (*W.M.* 1917), a member of our Board of Consultation, who retired from Harvard this year, after about thirty years of service.

Dr. Amasa B. Ford (*M.* 1950) announces the opening of his office in the Benjamin Rose Hospital, 2073 Abington Road, Cleveland 6, Ohio, for the practice of Internal Medicine.

Dr. Earl A. Glicklich (a. *D.*) announces the opening of his office at 403 Commonwealth Avenue, Boston, for the practice of Dermatology.

Dr. John B. Kinmonth (clin. & res. fel. *S.* 1949) has been appointed Professor of Surgery at St. Thomas's Hospital in London. Dr. Kinmonth trained at St. Thomas's, but has recently been on the staff at St. Bartholomew's Hospital.

Dr. J. Gordon Scannell attended the New England Postgraduate Assembly meeting on October 25. With Dr. Gordon S. Myers, he presented a paper on "Correctable congenital cardiac disease".

Dr. William R. Waddell spoke at the New England Postgraduate Assembly in October, with Dr. Frederick J. Stare. Their subject was "Application of recent nutrition researches to specific medical problems of general practice".

MASSACHUSETTS EYE & EAR INFIRMARY

The regular fall meeting of the New England Oto-Laryngological Society was held on Wednesday, November 17, in the Upper Amphitheatre of the Eye and Ear Infirmary. Dr. LeRoy A. Schall presided at the morning Clinical Conference, and Dr. Charles I. Johnson led the afternoon meeting. The last speaker of the afternoon was Mr. George A. McLaughlin, Boston attorney and Infirmary Corporation member, who talked on estate management.

The 420th meeting of the New England Ophthalmological Society was also held at the Infirmary on November 17. Staff members participated in the daytime sessions, and the evening lectures were given by Dr. Hugh C. Donahue, also of the Eye and Ear staff, and Dr. Walter S. Atkinson of Watertown, New York, who was the guest speaker.

The annual meeting of the Infirmary will be held on December 8, rather than in February as has been the custom, in order that it may follow more closely the change in the fiscal year. The election of officers and the appointment of staff members for the coming year will be the principal business of the meeting.

Dr. John A. Renner of Youngstown, Ohio, is spending six months at the Infirmary, observing in the clinics, operating rooms, and wards of the ENT Service.

Dr. Bernard Zeavin has been appointed Assistant in Ophthalmology; Dr. Alexander S. Macmillan, Jr., now at the Peter Bent Brigham Hospital, has received an appointment as Assistant Roentgenologist; and Dr. Mahlon B. Hoagland replaced Dr. Robert L. Berg as Secretary of the Infirmary's Research Committee when the latter's resignation became effective this fall.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Burke, R. C., Swartz, J. H., Chapman, S. S., and Huang, W. Y.
Mycoticin, a new antifungal antibiotic. 1. Preliminary paper.
J. Invest. Dermat. 23: 163-168.

General Surgery

McDermott, W. V., Jr., Adams, R. D., and Riddell, A. G.
Ammonia metabolism in man.
Ann. Surg. 140: 539-556.

Speare, G. S.
Staphylococcus pseudomembranous enterocolitis, a complication of antibiotic therapy.
Am. J. Surg. 88: 523-534.

Neurology, Neurosurgery, and Psychiatry

Cogan, D. G., and Barrows, L. J.
Platybasia and the Arnold-Chiari malformation.
A.M.A. Arch. Ophth. 52: 13-29.

Otolaryngology

Kelemen, G.
Histological test of tonsillar activity.
In Memoria, IV Congreso Panamericano de Otorrinolaringologia y Broncoesofagologia, Mexico, 1954, pp. 413-414.

Reed, G. F.
Ventriculomastoidostomy: Its significance to the otologist.
Ann. Otol., Rhin. & Laryng. 273-277.

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CARDIAC CATHETERIZATION LABORATORY

The development of surgical techniques for the amelioration or correction of congenital and acquired cardiovascular diseases, particularly during the past ten years, created a need for more accurate methods of diagnosis. Cardiac catheterization, first performed by Forsmann on himself in 1929, was later employed by Cournand to measure the cardiac output in man and was further developed as a diagnostic procedure, especially by Cournand, Bing, and Dexter.

The first cardiac catheterization studies at the Massachusetts General Hospital were carried out in a small room in the basement of the Bulfinch Building in 1945 on a group of eight patients with neurocirculatory asthenia by Drs. Mandel Cohen and William Bridges. The investigation concerned measurement of the cardiac output, which was also estimated by a dye technique and ballistocardiography. Thereafter, Bill Bridges attempted several diagnostic studies of patients with congenital heart disease but, in view of the limited facilities then available, eventually discontinued the program to turn to other work.

The present cardiac catheterization laboratory was brought into being through the efforts of Dr. Paul White and Dr. Bland and made possible by a gift from the late Mrs. Theodore Brown who provided for the cost of construction. Since the laboratory required a fluoroscope and other x-ray equipment, Hospital policy dictated that it be set up on White 2 within the x-ray department and under its supervision. The space and equipment have been made available for other research activities, including Thornton Brown's studies on motility of the spine, Bill Chapman's investigation of the effects of drugs on the gastrointestinal tract, and x-ray department studies directed by Milford Schulz concerning radium dosimetry and other physical problems. The laboratory has also been useful for cerebral angiograms, arteriograms, and angiocardiograms. Equipment for the laboratory has largely been provided by grants from the National Heart Institute of the U.S. Public Health Service.

Cardiac catheterization studies were again taken up in the new laboratory in 1948. By this time Bill Bridges had left for Seattle and the team consisted of Gordon Scannell, Stanley Wyman, John Hurst, and E. Grey Dimond, in addition to the author. We have been extremely fortunate in having Miss Ann Murphy with us from the beginning — at first through the kindness of Dr. Beecher, since she was then a full-time member of his department. Not only has Miss Murphy been an apparently tireless and completely accurate technician, she has also devoted much time and effort to teaching many of our graduate students and visitors and working out new techniques for the laboratory.

During the past six years we have been supported by a grant from the National Heart Institute and helped by many members of the x-ray department and several residents and postgraduate students in the cardiac department, particularly Drs. Allen Barbour, Thomas Mattingly, James O'Neill, Pier Curti, and Goodman Cohen. Dr. Ernest Craige, until he joined the University of North Carolina in 1951, and Allan Friedlich since that time have, with Gordon Scannell and the author, completed several studies directed toward a more complete understanding of pulmonary hypertension in congenital and acquired heart disease. These include investigations of the hemodynamic effects of protoveratrine on patients with systemic hypertension with and without congestive heart failure, the significance of pulmonary hypertension in constrictive pericarditis, respiratory and circulatory abnormalities in patients with mitral stenosis before and after surgery, and the physiologic variables encountered in patients with congenital heart disease with pulmonary hypertension. In recent years there has been an increasing demand for cardiac catheter study of patients in the Hospital for diagnostic work-up where cardiac surgery may be indicated. Although such

BREAKING GROUND, NOVEMBER 8, FOR THE NEW MEDICAL SCIENCE BUILDING, WHICH WILL HOUSE THE LABORATORIES AND OFFICES OF THE DEPARTMENTS OF PATHOLOGY, DERMATOLOGY, NEUROLOGY, AND PSYCHIATRY.

Left to right: Mr. Henry R. Shepley (of Shepley, Bulfinch, Richardson, and Abbott, Architects), Dr. George P. Berry (Dean of Harvard Medical School), Dr. Benjamin Castleman (Chief of Pathology Department), Mr. Francis C. Gray (Chairman of our Board of Trustees), Mr. Ralph Lowell (Trustee), Mr. Theodore Chase (Member of our Corporation), and Dr. Dean A. Clark (General Director)

studies have not answered all the diagnostic questions, particularly where there is disease on the left side of the heart, we expect that clinical problems will occupy an increasing amount of time in the future. The recent acquisition of a new angiocardiographic machine capable of taking very rapid x-ray films in two dimensions simultaneously will allow us to carry out combined catheter-angiographic studies and, with the help of Dr. Wyman, we may expect to gain much useful information as to the aortic and mitral valves and the left ventricle.

At present, catheterization studies are carried out twice each week, with an evening conference each Wednesday for analysis of the data. Each one of the twelve graduate students in the yearly course of the cardiac department is assigned to the laboratory for a month, and several of these students have since set up cardiac catheterization laboratories in teaching centers in their own countries. The laboratory experience is supplemented by a weekly teaching exercise, during which emphasis is placed on the limitations of the technique, and the importance of interpreting the data with respect to the clinical problem and all the available information about the patient. It is felt that these laboratory and conference periods have become an essential part of our teaching program.

The technique of cardiac catheterization permits right atrial and intraventricular electrocardiography, and by making available venous blood from the heart, liver, and kidneys, is also helpful in studying the circulation and metabolism of these organs. Although it is a rather cumbersome procedure, there is at present no indication that it will soon be supplanted by other techniques capable of giving the same information.

Gordon S. Myers, M.D.,
Head of Cardiac Catheterization Laboratory

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The following officers have been elected for the 1954–55 fiscal year:

EXECUTIVE BOARD

Chairman	Mrs. Oliver Cope
Vice-Chairman	Mrs. Howard Ulfelder
Secretary to the Board	Mrs. Grant V. Rodkey
Corresponding and Recording Secretary	Mrs. E. Peirson Richardson
Treasurer	Mrs. Charles L. Short
Hospitality	Mrs. Raymond D. Adams
Special projects	Mrs. Richard H. Sweet
Volunteer Service	Mrs. Charles B. Burbank
Music	Mrs. Milford D. Schulz

COMMUNITY CHAIRMEN

Belmont	Mrs. Claude E. Welch
Cambridge	Mrs. Robert N. Ganz
Boston	Mrs. Richard G. Whiting
Brookline	Mrs. Benjamin Castleman
Chestnut Hill	Mrs. John Homans, Jr.
Dedham	Mrs. Edward Hamlin, Jr.
Milton	Mrs. William C. Quinby, Jr.
Newton	Mrs. James H. Currens
Lincoln, Weston, Watertown, Waltham	Mrs. Perry J. Culver
Lexington, Concord	Mrs. Alexander Leaf
Winchester, Arlington, Stoneham	Mrs. Laurence L. Robbins

DISTAFF CLUB

The Distaff Club held its first fall meeting on October 15. Plans for the coming months were discussed and the following officers were elected:

President	Mrs. Stephen M. Krane
Vice-President	Mrs. Bernard B. Stone
Secretary	Mrs. Jens G. Rosenkrantz
Treasurer	Mrs. Alfred J. Luessenhop

Our Ether Day observance was held again this year in the Moseley Rotunda, with Dr. Dean A. Clark presiding.

The program opened with words of greeting from Mr. Henry R. Guild, a member of our Board of Trustees and Treasurer of the Massachusetts General Hospital Corporation.

Then followed the presentation to the Hospital of a portrait of Dr. Augustus A. Gould, who was one of those present in our Ether Dome at the first public demonstration of the use of ether for major surgery on October 16, 1846. The presentation address was made by Mr. Horace Gooch of Louisville, Kentucky, grandson of Dr. Gould. The several descendants of Dr. Gould who were present for the ceremony had been entertained at a special luncheon which preceded the afternoon events.

The musical portion of the program was the rendition of the Beethoven Sonata No. 5 in F major, for violin and piano, played for us by Helen Teschner-Tas, violinist, with David Bacon at the piano.

Then came the awarding of Service Pins by Dr. Clark — a feature that has come to be associated with our annual observance of Ether Day. These pins are presented each year to members of both the professional and non-professional groups, in recognition of continuous years of loyal service. Nearly 100 pins were presented to individuals who had served the Hospital continuously for 5 years, 34 were presented for 10 years of service, 8 for 20 years, 9 for 25 years, 4 for 30 years, and 2 members of the Hospital family — Nancy Fraser, R.N., and Sara F. MacPherson — received pins indicating 40 years of service.

Since our traditional observance of Ether Day fell this year within the week proclaimed by President Eisenhower as National Nurse Week, Dr. Clark gave special recognition to this designation by presenting citations to representatives of the Professional Nurses and the Licensed Practical Nurses. The text of the citation reads:

> It is most fitting on Ether Day that we join with others throughout the United States in paying tribute to the nursing profession for its great contribution to the welfare and security of the people of our Nation.
>
> Here at the Massachusetts General Hospital, we wish to express particular appreciation to the Professional Nurses and the Licensed Practical Nurses in this Hospital who, by their selfless devotion to their chosen profession, contribute immeasurably to the care of our patients.

The citations were signed by Dr. Clark.

Refreshments were served in the East Dining Room after the ceremonies.

* * *

New addresses:—

Dr. William M. Crowell (a. psychiat. *McL.*), 32 Pierce Rd., Watertown, Mass.
Dr. James M. Doonan (clin. a. *S.*), 1101 Beacon St., Brookline, Mass.
Dr. Albert J. Finck (a.r.p. *N.* 1949), Beth Israel Hospital, Boston 15, Mass.
Dr. James A. Halsted (*W.M.* 1932), Wadsworth Veterans Administration Hospital, Los Angeles 25, Calif.
Dr. Robert J. Vitt (a.r.s. *Or.* 1951), 793 North Cherry Ave., Tulare, Calif.

THE NEWS

1811

No. 141 Boston, Mass. January 1955

MASSACHUSETTS EYE & EAR INFIRMARY

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DEVELOPMENTS ON THE OPHTHALMOLOGICAL SERVICE

In spite of the tendency of the number of clinic patients everywhere to decrease, due to the growth of voluntary insurance plans and good industrial employment, the Eye Clinic has held up remarkably well. Although we do not have the great hoards of patients like those of the 1930's, we still remain the leading OPD clinic in point of numbers, and the recent tendency to decrease has been halted. Thus, a good supply of teaching material for residents and medical students is always available. The effectiveness of the Eye Clinic is enhanced by the attendance of the Chiefs of Service, as well as all other staff members, on regular days throughout the year. This, we believe, is a better plan for complete follow-up of patients than having separate staffs for the O.P.D. and for the house.

The resident staff consists of nine men, who enter the Infirmary at stated periods throughout the year (one every three months) and progress upward through various grades of responsibility. This vertical arrangement has been in vogue here for many years and has worked so well that we see no good reason to change to the customary horizontal type. The residency, which is twenty-eight months in length, is preceded by the five-month Basic Science Course in Ophthalmology at the Harvard Medical School. Throughout the year, the resident group receives a course of lectures at the Infirmary, given by various members of the staff and by visiting ophthalmologists. On Wednesday afternoons, they make rounds with the Chief of Ophthalmology, during which every patient is seen and discussed.

Another new development in staff organization has been the staff dinner meetings. These are held three times a year at the Club Dining Room at Vanderbilt Hall, and are well attended by the visiting staff. In addition, the Director of the Infirmary and the President of the Board of Managers are present, and an opportunity is given everybody to ask questions about hospital plans and make suggestions for improvements. At one of these meetings three years ago, the staff voted to use the fees that had accumulated from Blue Shield patients cared for in the wards for a post-residency scholarship to enable some young ophthalmologist to do investigative work at the Infirmary for a year. This money is invested by the Infirmary and now amounts to $87,000. When the fund reaches $100,000, the Frederick H. Verhoeff Fellowship will be created in honor of our Consulting Chief of Ophthalmology.

The weekly clinical conferences, at which residents present interesting cases, are well attended by the staff and by a number of visiting ophthalmologists from other institutions.

One of the great advantages of the residency is its close association with the various services at the Massachusetts General Hospital. Each resident spends three months of full time on the MGH Neurological Service, where he does perimetry, makes neurological rounds, and follows neurosurgical cases. In view of the close association between neurology and ophthalmology, this is an invaluable experience for him and, we hope, is helpful to the Neurological Service.

Another resident answers all eye consultations on the MGH wards. Thus, he has the advantage of seeing the integration of ophthalmology and general medicine—an association he must never forget.

Our children's ward is looked after by an MGH pediatric resident, whose close association with our residents is invaluable.

One of the big developments in recent years has been the growth of the Retina Service. This service was organized in 1948 under the direction of Dr. Charles L. Schepens. All cases of retinal detachment are sent there for special study prior to surgery. During the past year, 720 patients were completely worked up, of whom 468 were operated upon. Due to Dr. Schepens's tireless energy, new diagnostic tools have been devised, including a special type of binocular ophthalmoscope. These tools make for more accurate localization of the retinal tears, so that the difficult surgical procedures of sealing them up are attended with greater success. The cure of retinal detachment has always been difficult. To illustrate—twenty-five years ago the crude surgical procedures then in vogue were attended by less than 5% success. The percentage of success gradually rose, until, by World War II, it was about 50%. Recent statistics from Dr. Schepens's clinic show it to be 70%. Because of the increasing number of retina patients coming to the hospital from outside of Boston, it became necessary to enlarge the quarters of the Retina Service. New construction, extending out over the admitting area from the Eye Clinic, was begun last year, and the Retina Service is now housed in air-conditioned quarters much larger than their former accommodations. Each resident spends three months here learning how to use the special diagnostic instruments, assisting in surgery, and caring for the patients postoperatively. In addition to Dr. Schepens, Dr. Ichiro D. Okamura and Dr. Robert J. Brockhurst are on the permanent staff, and Dr. Silvio Von Pirquet of Vienna is on a one-year fellowship, given by the Retina Foundation.

The Eye Pathology Department has been reorganized since the retirement of Dr. Parker Heath last July. Dr. David G. Cogan has been appointed Director of the Laboratory, and Dr. Taylor R. Smith and Dr. Toichiro Kuwabara as Assistant Pathologists. Each resident spends three months in this laboratory. Dr. Smith conducts monthly pathology conferences at the meetings of the New England Ophthalmological Society.

To attempt to describe research activities at the Infirmary since the War would require a separate article. Brief mention will be made here of the four chief ones, and it is hoped that each will be the subject of a special report at a later date.

The Howe Laboratory of Ophthalmology is conducting both basic and clinical research of great importance. Dr. David Cogan and Dr. Toichiro Kuwabara are investigating fat formation in the cornea. Dr. W. Morton Grant and Dr. Robert R. Trotter are continuing their important work on glaucoma, with special reference to the outflow of aqueous from the anterior chamber of the eye. Dr. David D. Donaldson has perfected a stereoscopic camera for photographing the angle of the anterior chamber and correlating the findings with the clinical conditions. His exhibit at the Academy of Ophthalmology and Otolaryngology received the Blue Ribbon Award.

The Retina Foundation is also doing important basic research, particularly on the vitreous. Dr. Endre A. Balazs's activities cover two different fields—namely, biochemistry and tissue culture. In biochemistry, Dr. Balazs is studying the chemical structure and formation of the vitreous body. With Dr. Claes-Henrik Dohlmann, he has done a chemical investigation of Descemet's membrane and of the corneal stroma. In the tissue culture field, Dr. Balazs is studying the effect, *in vitro*, of mucopolysaccharides upon the mitosis and migration of fibroblasts; he is also investigating the biosynthesis of hyaluronic acid with the help of radioactive isotopes. Dr. Marie A. Jakus is studying the fine structure of eye tissues with the electron microscope; she is currently investigating the animal and human cornea, the sclera, and the lens. Dr. Lazlo Varga is investigating the physiochemical properties of the vitreous gel. Dr. Arthur F. Howe is studying the effect of electro-magnetic radiation on the vitreous body.

Dr. William Stone, Jr. is continuing his interesting work on the plastic cornea and on the integrated postenucleation implant.

Dr. Merrill J. King, Dr. Julian F. Chisholm, Jr., and Dr. Leona Zacharias have been studying the epidemiology of retrolental fibroplasia at the Boston Lying-in Hospital, with the collaboration of Dr. William E. Reynolds of the Department of Preventive Medicine, Harvard Medical School. It appears there may be other factors besides excessive oxygen in the etiology of this disease, which blinds so many premature infants.

The sterilization and preservation of ophthalmic solutions has been the subject of a combined study by the Bacteriology Laboratory of the Infirmary and the Pharmacy. Mr. John T. Murphy, Head of the Pharmacy Department, investigated the conditions under which ophthalmic drugs will withstand degradation after autoclaving, when they are kept for a year or more.

Dr. Henry F. Allen and Miss Anita Mangiaracine, our Bacteriologist, made a comparative study of the antibacterial properties of several substances used as preservatives for eye solutions. In a series of well-controlled experiments, they found that chlorobutanol 0.5%, introduced at the Infirmary by Mr. Murphy twenty-five years ago, was still the best.

Finally, a survey of all bottles of medications currently in use at the Infirmary was undertaken. Of the 576 bottles tested, only one showed bacterial contamination.

Public interest in the Eye Bank has steadily increased, partly because of our film "Eyes of service", which has been shown to numerous clubs and organizations. This film was made possible by a donation from the Junior League of Boston. Sixty hospitals throughout New England are now affiliated with this program and supply eyes enucleated shortly after death from donors who die in these hospitals. During the year, eighty eyes were received, of which twenty-six were used for corneal transplantation and fifty-four for research purposes.

Edwin B. Dunphy, M.D.,
Chief of Ophthalmology

An award was presented to Dr. Varaztad H. Kazanjian, "in recognition of his outstanding and distinguished contribution to the art and science of oral surgery . . .", by the American Society of Surgeons, at their conference in Florida on November 5. Dr. Kazanjian was the Chalmers J. Lyons lecturer at this conference, and spoke on "Fifteen years of oral surgery". Following the lecture, Dr. Carl Waldron, Professor Emeritus of Oral Surgery at the University of Minnesota, gave a biographical sketch of Dr. Kazanjian's life and presented the award —a bronze scroll—the first such award to be given.

The next evening, at a reception, Dr. Kazanjian was made an honorary member of the Chalmers J. Lyons Academy of Oral Surgery — a society made up of membership from the University of Michigan.

Three members of the Infirmary's staff participated in the Clinical Congress of the American College of Surgeons, held at Atlantic City from November 15 through 19. At the Session on Otolaryngology, Dr. Daniel Miller presented a paper entitled "Cancer of the nasopharynx". During Sessions on Ophthalmology, Dr. Brendan D. Leahey collaborated in a panel discussion of "Surgical management of diseases of the cornea", and Dr. Paul A. Chandler collaborated in a panel discussion of "Selection of operative technique in retina separation".

The 421st meeting of the New England Ophthalmological Society was held at the Infirmary on December 15. The operating clinic and presentation of cases were followed by an afternoon pathology conference conducted by Dr. Taylor R. Smith. In the evening Dr. William Stone, Jr. spoke on "The method for removal of large retrobulbar cavernous hemangioma". The guest speaker was Dr. Peter C. Kronfeld of the Illinois Eye and Ear Infirmary, who spoke on "Functioning and non-functioning blebs".

Dr. LeRoy A. Schall, Chief of Otolaryngology, participated in a symposium on "Management of cancer of the larynx", at the meeting of the New York Cancer Society, held at the New York Academy of Medicine on December 7.

Mr. A. B. Nutt, noted ophthalmic surgeon from Sheffield, England, visited last month at the Infirmary. Mr. Nutt had just completed a month of lectures, demonstrations, and operations in Australia, and was returning to England. He gave a lecture for the residents and staff on December 10.

Another visitor last month was Dr. Luis Navas, a former resident at the Infirmary, who stopped here to visit and observe while traveling from England to his home in Nicaragua.

Mr. Alan S. Feldman, Speech Pathologist and Audiologist of the Winthrop Foundation, and Mr. Robert L. Berk, Educational Psychologist of the Foundation, are giving a course this year in "The nature, management, and special education of exceptional children", at Northeastern University College of Education.

Mr. Feldman is also giving a course in "Hearing testing" at the Winthrop Foundation. This 12-week course deals with the techniques and principles of hearing testing, and the understanding of hearing losses. It is given primarily for nurses or secretaries in doctors' offices, with the purpose of training them so that they may be able to give hearing tests themselves.

The Editor of THE NEWS has been given the following information, revising and supplementing the account of the Seventeenth International Congress of Ophthalmology which was sent to us for our October NEWS:

> At the International Congress of Ophthalmology, held in New York City from September 12 to 17, members of the Staff of the Retina Foundation organized a symposium on the vitreous body. The following papers were read:
>
> "Aspects of the physiology of the vitreous body", by Charles L. Schepens, M.D.; "Structure of the vitreous gel", by Endre A. Balazs, M.D.; "Physico-chemical properties of the vitreous body", by Laszlo Varga, Ph.D.; and "Effects of irradiation on the vitreous body", by Arthur F. Howe, Ph.D. In addition to this symposium, a paper was read on "The fine structure of the cornea", by Marie A. Jakus, Ph.D., Associate at the Retina Foundation.

* * *

THOMAS DUCKETT JONES

1899-1954

T. Duckett Jones died November 22, 1954, at the Johns Hopkins Hospital, at the age of fifty-five, of diffuse vasculitis and malignant hypertension. He was born in Petersburg, Virginia, and was a descendant of a colonial family long distinguished in medicine. His father was a physician, his brother is a surgeon, a sister is a physician, and two other sisters are married to physicians. He graduated from the Virginia Military Institute in 1919 and received his medical degree from the University of Virginia in 1923, where he served as intern and resident. In 1925 he was a Dalton Fellow and cardiac resident at the Massachusetts General Hospital, and thereafter spent a year as a National Research Council Fellow with Sir Thomas Lewis at University College Hospital in London. In 1928 he came to the House of the Good Samaritan in Boston and organized the clinics and the research department, which he directed for the next twenty years. During this period he was also an active member of the Harvard Medical School faculty and of the staff at the Massachusetts General Hospital where, under Dr. Paul D. White's supervision, he inaugurated and developed the rheumatic fever clinic. As a result of his many and important contributions, he became recognized internationally as an authority on this disease. In 1947, because of his eminence in the field, he was asked to become the medical director of the newly established Helen Hay Whitney Foundation in New York City. It was with great reluctance that he gave up his active research career in Boston, but the realization of the opportunity offered by his new duties to further the control and prevention of the disease to which he had devoted his life left him no alternative. In addition to his many responsibilities in this connection, he was a vice-president of the American Heart Association and chairman of the association's Council on Rheumatic Fever, president-elect of the National Health Council, president of the Protein Foundation, chairman of the Committee on Plasma Fractionation and Related Processes at the Laboratory of Physical Chemistry at Harvard University, and an original member of the Advisory Council of the National Heart Institute.

Duckett Jones was in many ways an unusual person. His deep loyalty to his friends, to his associates, and to his profession was his religion. His life was devoted to the conquest of rheumatic fever, and through his own efforts and those of countless others whom he inspired he well knew that victory was near at hand. His last important public appearance was as chairman of an international panel on rheumatic fever at the Second World Congress of Cardiology in Washington in September. It was shockingly evident to his friends at that time that he was seriously ill, but only upon their insistence did he finally seek medical aid. He lived only two months longer, but to the end it must have been a source of deep satisfaction to him to know that the studies he started a quarter of a century ago and the interest he inspired in others elsewhere had played such a significant role in the progress made during the intervening years. In Boston alone there remain 3,000 patients who recall with gratitude and affection his careful and kindly guidance through childhood rheumatism at the House of the Good Samaritan and the Massachusetts General Hospital.

His was truly a dedicated life.

dward F. Bland, M.D.] E. F. B.

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Dr. Carl Binger, who has joined our Staff as Consulting Visiting Psychiatrist, needs no introduction to anybody. However, since there may be interesting details concerning Dr. Binger's professional career with which a few may not be acquainted, we give you this release which was sent to us from the Office of Publicity at Radcliffe College:

Dr. Carl Binger has been appointed lecturer on psychiatry at the Harvard Medical School and consulting visiting psychiatrist at the Massachusetts General Hospital.

Dr. Binger, who is particularly interested in the problems of mental health in relation to education, has also been appointed psychiatric consultant to the medical staff of Radcliffe College. He will participate in the Radcliffe Seminars, an adult education program at the graduate level offered to women in the Greater Boston area. The title of his seminar is "The history of psychiatry".

Dr. Binger was graduated from Harvard College in 1910 and from the Harvard Medical School in 1914. He interned at the Massachusetts General Hospital. He was formerly associated with the Rockefeller Institute for Medical Research, and until recently practised psychiatry in New York City, where he was on the faculty of the Cornell University Medical College and on the visiting staff of the New York Hospital.

He is editor-in-chief of "Psychosomatic Medicine" and is a fellow of the New York Academy of Medicine and of the American Psychiatric Association and a member of other learned societies. His publications include: *The doctor's job, Personality in arterial hypertension,* and *More about psychiatry.*

A former resident of New York City, Dr. Binger now lives at 21 Lowell Street, Cambridge, Massachusetts.

It is possible that Dr. Binger may be less well known for his poems. We, personally, have for many years been delighted when we could find a Binger verse in any publication. Therefore, we felt highly honored when we asked for and were given permission by Dr. Binger to include this hitherto unpublished poem of his in THE NEWS.

THE MOUND

(Marlborough School)

This flinty stone, this rib and bone of England
Came from "The Mound",
The hallowed ground, where Merlin lies entombed.
Could but the mind, 'ere eyes grow dim and rheumed,
Hold fast its past,
And like this stone, with surface polished
Reflect its gods, remote but undemolished:
Romans, Scholars, Kings, and Boys,
Once living hosts, now faded toys,
Chalky ghosts who walk on Marlborough Downs
Trailing their ancient glories and their gowns.

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While attending the last meeting of the Pan Pacific Surgical Association, in Honolulu in October, where he was asked to present a paper, Dr. Arthur W. Allen was elected President of the Association for a three-year term of office.

On November 20, on the occasion of the celebration of the 75th Anniversary of the Philadelphia Academy of Surgery, Dr. Allen was made an Honorary Fellow of the Academy of Surgery. On this same occasion, Dr. Frederick A. Coller (*W.S.* 1914), Professor of Surgery at the University of Michigan, was also given an Honorary Fellowship.

Dr. Allen left on December 20 for Midland, Texas, where both he and Dr. Coller took part in a program of the Midland Diagnostic Cancer Clinic on the evening of the 21st. This was incidental to their both spending the holiday season with their children, who now reside in Midland.

The Board of Trustees, at their meetings during November and on December 3, voted:

To approve the arrangement whereby Dr. Raymond D. Adams will act as Consulting Neurologist at Lemuel Shattuck Hospital; and to authorize the creation of an extra Assistant Residency in Neurology, so that one such Assistant Resident shall always be on duty at Lemuel Shattuck Hospital.

To reappoint:

Dr. Gordon L. Brownell as Associate Physicist in Medicine, for the three-year period ending December 31, 1956;

Dr. Jerome Gross as Associate Biologist in Medicine, for the three-year period ending December 31, 1956;

Dr. Roger W. Jeanloz as Associate Biochemist in Medicine, for the three-year period ending December 31, 1956.

To appoint:

Dr. Miriam W. Carmichael as Assistant Resident in Neurology, beginning July 1;

Dr. Martin R. Coles as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Chester J. Dexter as Clinical Associate in Surgery, as of November 1, 1954;

Dr. G. Richard Dickersin as Third Assistant Resident in Pathology for one year, beginning July 1;

Dr. James F. Donovan as Assistant Resident in Orthopedic Surgery, beginning October 1;

Dr. G. Lynde Gately as Clinical Associate on the Children's Medical Service;

Dr. Thomas H. Green, Jr. as Assistant in Surgery, as of November 1, 1954;

Dr. Lowell P. Hager as Assistant Biochemist, effective as of September 1, 1954;

Dr. Robert H. Hansen as Assistant Resident in Anesthesia for one year, beginning October 1;

Dr. Wayne M. Hebertson as Assistant Resident in Neurology, beginning July 1;

Dr. John H. Knowles as Resident in Medicine, beginning September 1;

Dr. Vasilios G. Letsou as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Edward C. Parkhurst as Assistant Resident in Urology for one year, beginning July 1;

Dr. Russell E. Randall as Assistant Resident in Medicine, beginning July 1;

Dr. Francoise J. Robert as Assistant Resident in Pathology, assigned to Neuropathology, beginning July 1;

Dr. Richard L. Sidman as Assistant Resident in Neurology, beginning July 1;

Dr. Marvin D. Siperstein as Assistant Resident in Medicine, beginning April 1;

Dr. William P. Smith as Resident in Medicine, beginning January 1, 1956;

Dr. William A. Tisdale as Resident in Medicine, beginning July 1;

Dr. Sumner I. Zacks as Intern in Pathology for one year, beginning July 1.

At their meetings on October 6, November 3, 17, 24, and December 1, the General Executive Committee voted:

To extend Dr. Allan St.J. Dixon's leave of absence to January 31.

To promote:

Dr. David W. Allen from the position of Intern to that of Assistant Resident in Medicine for one year, beginning October 1;

Dr. Frank K. Austen from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. Gerald M. Edelman from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Lamont W. Gaston from the position of Assistant Resident to that of Resident in Medicine for one year, beginning January 1, 1956;

Dr. Robert B. Giles, Jr. from the position of Clinical and Research Fellow to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Jan Koch-Weser from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Glenn A. Langer from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. William E. Lassiter from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. Donald B. Martin from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. Lot B. Page from the position of Assistant Resident to that of Resident in Medicine for one year, beginning October 1;

Dr. Katharine E. Spreng from the position of Intern to that of Assistant Resident in Medicine, beginning October 1;

Dr. Oscar E. Starobin from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. Pindaros R. Vagelos from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

Dr. Henry deF. Webster from the position of Assistant Resident to that of Resident in Neurology, beginning July 1;

Dr. Thomas J. Whitfield, III, from the position of Intern to that of Assistant Resident on the Children's Medical Service for one year, beginning January 1;

Dr. Ralph C. Williams, Jr. from the position of Intern to that of Assistant Resident in Medicine, beginning July 1;

To reappoint:

Mr. Alden V. Loud as Research Fellow in Medicine for one year, retroactive to July 1, 1954;

Dr. Henning Pontoppidan as Assistant Resident in Anesthesia for one year, beginning December 7, 1954;

Norman M. Prentice, M.A. as Research Fellow in Psychology, effective as of October 1, 1954;

Gershen Rosenblum, M.A. as Research Fellow in Psychology, for the period October 1, 1954 through January 31, 1955;

Dr. Clarival doP. Valladares as Graduate Student Assistant in Pathology, for the period December 1, 1954 through October 31, 1955.

To appoint:

Dr. Philippe Benda as Clinical and Research Fellow in Neurosurgery for one year, beginning January 1;

Dr. John L. Cain as Clinical Fellow in Radiology, beginning July 1;

Dr. Federico G. Cayco as Graduate Student Assistant in Surgery for one year, beginning November 15, 1954;

Dr. Bu-fei Cheng as Research Fellow in Urology, effective as of October 1, 1954;

Dr. Ernesto D'Agostino as Fellow in Anesthesia for one year, beginning July 1;

Dr. Sigismond Deutscher as Graduate Student Assistant on the Children's Medical Service, for a period of six months, beginning November 9, 1954;

Dr. Donald Dodds as Graduate Student Assistant on the Children's Medical Service, for a period of three months, beginning December 1, 1954;

Dr. Mercedes L. Enriques-Yap as Graduate Student Assistant on the Children's Medical Service, for a period of two weeks, beginning November 15, 1954;

Dr. Claude Faribault as Clinical Fellow in Radiology for one year, beginning January 1;

Dr. Jacques Houli as Clinical Fellow in Medicine, for a period of three months, beginning November 15, 1954;

Dr. Maurice McGregor as Clinical and Research Fellow in Medicine, assigned to Cardiology, effective October 20, 1954;

Dr. Richard G. O'Brien as Clinical Fellow in Radiology, beginning July 1;

Dr. Snorri Snorrason as Graduate Student Assistant in Medicine, assigned to Cardiology, for one year, beginning October 1, 1954;

Dr. Brian D. Stringer as Graduate Student Assistant in Surgery for one year, beginning November 15, 1954.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor considerable unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Anesthesia for wounded men.
J. Kentucky M.A. 52:692-694, 716.

Gravenstein, J. S., Devloo, R. A., and Beecher, H. K.
Effect of antitussive agents on experimental and pathological cough in man.
J. Appl. Physiol. 7:119-139.

Greene, N. M., Bunker, J. P., Kerr, W. S., von Felsinger, J. M., Keller, J. W., and Beecher, H. K.
Hypotensive spinal anesthesia: Respiratory, metabolic, hepatic, renal and cerebral effects.
Ann. Surg. 140:641-651.

Lasagna, L.
Nalorphine (N-allylnormorphine): Practical and theoretical considerations.
A.M.A. Arch. Int. Med. 94:532-558.

Lasagna, L., and Beecher, H. K.
The analgesic effectiveness of codeine and meperidine (Demerol).
J. Pharmacol. & Exper. Therap. 112:306-311.

Lasagna, L., and Beecher, H. K.
The analgesic effectiveness of nalorphine and nalorphine-morphine combinations in man.
J. Pharmacol. & Exper. Therap. 112:356-363.

Endocrinology

Goetz, F. C., Beigelman, P. M., and Thorn, G. W.
A method of insulin bio-assay and its application to human plasma fractions.
Proc. Soc. Exper. Biol. & Med. 86:484-486.

General Medicine

Graham, J. R.
Rectal use of ergotamine tartrate and caffeine alkaloid for the relief of migraine.
New England J. Med. 250: 936-938.

General Surgery

Allen, A. W.
Carcinoma of the stomach.
Geriatrics 9:493-496.

Allen, A. W., Donaldson, G., Sniffen, R. C., and Goodale, F., Jr.
Primary malignant lymphoma of the gastrointestinal tract.
Ann. Surg. 140:428-438.

Waddell, W. R., Geyer, R. P., Grillo, H. C., and Stare, F. J.
The treatment of malnutrition with particular reference to the surgical patient.
Am. J. Surg. 88:698-702.

Warren, R., Linton, R. R., and Scannell, J. G.
Arterial embolism: Recent progress.
Ann. Surg. 140:311-317.

Welch, C. E.
Medical progress: Abdominal surgery.
New England J. Med. 250:56-70.

Welch, C. E.
Le traitement chirurgical des pancreatites.
Maroc Medical 348:33-54.

Welch, C. E., and Rodkey, G. V.
A method of management of the duodenal stump after gastrectomy.
Surg., Gynec. & Obst. 98:376-379.

Welch, C. E., and Whittemore, W. S.
Carcinoma of the rectum in a centenarian.
New England J. Med. 250:1041-1042.

Gynecology and Obstetrics

Graham, J. B., Graham, R. M., and Liu, W.
Prognosis in cancer of the uterine cervix based on the vaginal smear before treatment: SR—The sensitization response.
Surg., Gynec. & Obst. 99:555-562.

Laboratory Science

Frenkel, A.
Light induced phosphorylation by cell-free preparations of photosynthetic bacteria.
J. Am. Chem. Soc. 76:5568-5569.

Gardner, L. I., Berman, H., and Deane, H. W.
Metabolic competition between desoxycorticosterone acetate and strophanthin-G in the rat.
Endocrinology 55:417-425.

Hager, L. P., Geller, D. M., and Lipmann, F.
Flavoprotein-catalyzed pyruvate oxidation in *Lactobacillus delbrueckii.*
Federation Proc. 13:734-738.

Hoch, F. L., and Lipmann, F.
The uncoupling of respiration and phosphorylation by thyroid hormones.
Proc. Nat. Acad. Sc. 40:909-921.

Lipmann, F.
Consideration of the role of coenzyme A in some phases of fat metabolism.
In Fat metabolism, V. A. Najjar, Editor, Baltimore, The Johns Hopkins Press, pp. 111-116.

Lipmann, F.
Development of the acetylation problem, a personal account. (This paper is based on Dr. Lipmann's Nobel Prize address delivered in Stockholm, Sweden, December 11, 1953, when the award in medicine and physiology was made.)
Science 120:855-865.

Neurology, Neurosurgery, and Psychiatry

Blom, G. E., and Nicholls, G.
Emotional factors in children with rheumatoid arthritis.
Am. J. Orthopsychiat. 24:588-601.

Zuidema, G. D., and Cohen, S. J.
Pseudotumor cerebri.
J. Neurosurg. 11:433-441.

Ophthalmology

Hirsch, O.
Operative treatment of pituitary tumors by the transsphenoidal septal method.
Medicus 8:147-157.

Hirsch, O., and Hamlin, H.
Fats of visual fields and optic discs in pituitary tumors.
Am. J. Ophth. 37:880-885.

Physical Medicine

Geiss, G. W., Myers, C., and Bevill, H.
Adapted two harness table loom.
Am. J. Occup. Therapy 8:202-203,219-220.

Miscellaneous

Clay, C. L.
Pastor & chaplain: An administrator's view.
South. Hosp. 22:22,24.

The *Journal of the Association of Medical Illustrators,* Number 6, 1954, contains articles of interest for doctors as well as illustrators. It may be read in the Treadwell Library or purchased by writing to Miss Kathleen Mackay, Business Manager, Woodruff Memorial Building, Emory University, Georgia.

The 1954 A. M. I. *Directory,* which includes biographical sketches of members of the Association, may be purchased from the editor, Mrs. Muriel McLatchie Miller, Medical Illustration Department, Massachusetts General Hospital, Boston.

ENDOCRINE RESEARCH

Endocrine research in the Vincent Memorial Laboratory had its inception in 1948 when, at the suggestion of Dr. Nathan B. Talbot, a project to develop a bioassay for the pituitary luteinizing hormone (LH) was undertaken by the writer in the newly-opened laboratory. Existing knowledge did not permit the chemical separation of follicle-stimulating hormone (FSH) and LH prior to bioassay. However, it appeared that biological fractionation of the two hormones in body fluids might be achieved by taking advantage of the high degree of specificity of their actions in the male test animal, as demonstrated by Greep.

With the aid of generous support from the Commonwealth Fund of New York to the Children's Medical Service, the goal of a bioassay for LH was steadily pursued. It was found that LH could be detected and roughly quantitated in suitably prepared extracts of human urine by the production of graded responses in the ventral prostatic weight of hypophysectomized immature male rats. Clinical application of the method followed. It was shown that the urine of prepuberal children of both sexes is devoid of the hormone; that in adult life LH is present in higher concentration in the urine of females than in that of males; and that in menopausal females and castrated males the titer of the hormone is increased 10- to 20-fold.

As the potentialities of this new tool for gynecological research became apparent, the project was expanded under the auspices of the Department of Gynecology. With the assistance of a generous grant from the Willcox Fund to Dr. Francis M. Ingersoll, serial studies were undertaken to ascertain the pattern of LH excretion throughout the menstrual cycle of normal adult women. It was found that a sudden increase in the rate of excretion of LH occurs in mid-cycle, immediately prior to ovulation. In women with menstrual disturbances associated with a failure of ovulation, the rate of excretion of LH is constant — no increases in rate occurring at mid-cycle or at any other time. These observations make it possible to distinguish those patients in whom nonoccurrence of ovulation is ascribable to failure of the ovary to respond to normal rhythmical LH stimulation (such as the Stein-Leventhal syndrome) from those in whom it is due to inadequate secretion of LH by the pituitary. These studies are currently being extended to women with menstrual and reproductive disorders of other types.

Methodological studies designed to increase the sensitivity of the LH assay are being conducted along with the clinical studies. The usefulness of measurement of P_{32} uptake by the prostate as an index of LH effect has been explored in collaboration with Dr. Melvin L. Taymor. The total P_{32} uptake appears to be a somewhat more sensitive indicator of LH activity than is prostatic weight, particularly at lower dosage levels. Fractionation of the prostatic tissue disclosed little or no change in the specific activity of the acid-soluble and phospholipid fractions, but a pronounced increase in the specific activity of the pentose nucleic acid and desoxyribose nucleic acid fractions.

Physiological studies directed toward elucidating the mechanisms underlying pituitary LH release are also in progress. That the ovarian steroids may be influential in this regard is suggested by the observation that the administration of a suitable dose of estrogen to normal women during the follicular phase of the menstrual cycle results in a sudden increase in the rate of LH excretion, a delay in the occurrence of ovulation, and a prolongation of the cycle. In patients with pituitary insufficiency, anovulatory sterility, and psychogenic amenorrhea, on the other hand, the administration of estrogen exerts no discernible effect upon the rate of LH excretion. These observations suggest that assays of urinary LH after estrogen administration may become a tool of considerable usefulness for ascertaining whether insufficiency with respect to LH excretion is due to failure of the pituitary to elaborate the hormone or to release preformed LH into the circulation.

The possibility that a neural factor also plays a role in bringing about the release of LH from the pituitary is being investigated in collaboration with Drs. Robert S. Schwab, Mary A. B. Brazier, and Mary Louise Scholl of the Department of Neurology. A description of the temporal relations between changes in the electroencephalogram and alterations in the rate of LH excretion and in other endocrine indices throughout the menstrual cycle of normal adult women is being obtained. Since there is abundant clinical evidence to support the concept that a rhythmic central nervous system discharge effects the release of LH in the human being, it will be of interest to ascertain whether the mid-cycle peak of LH excretion is preceded by significant changes in the character of the electroencephalogram.

Finally, the LH bioassay procedure is being used to guide the fractionation of human blood plasma in a collaborative project with the Protein Foundation and the Department of Biophysical Chemistry of the Harvard Medical School. It is believed that by means of techniques similar to those employed for the isolation of such human blood products as albumin, antihemophilic globulin, and gamma globulin, the gonadotropic hormones can be extracted from the blood. Their chemical and physiological properties can then be studied and their therapeutic usefulness evaluated.

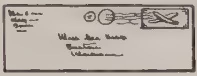
In all of these undertakings the investigators have enjoyed the support and encouragement of Dr. Joe V. Meigs, the Chief of the Gynecologic Service. It is hoped that, by the use of the new endocrine tools being developed in the Vincent Memorial Laboratory, knowledge of human reproductive physiology and of diseases of the reproductive system may be extended.

Janet W. McArthur, M.D.,
Assistant Physician

VOLUNTEER GROUPS

Distaff Club

Mrs. Soma Weiss, Community Relations Consultant for the Hospital, was guest speaker at the November meeting of the Distaff Club. Mrs. Weiss conducted an excellent discussion of the Massachusetts General Hospital, from both the economic and sociological viewpoint, and of our duties as doctors' wives in the Hospital and in the community.



New addresses:—

Dr. Richard Chute (*E.S.* 1929), 78 Upland Rd., Brookline 46, Mass.
Capt. Jean P. Gauthier-Lafaye, MC (fel. *An.* 1953), SP. 58.418, French Zone, Germany
Dr. H. Louis George, Jr. (*C.M.* 1929), 205 Trust Bldg., Watertown, N. Y.
Lt. Donald J. Glotzer, MC, USNR (*S.* 1953), Depot Infirmary, US Marine Recruit Depot, Parris Island, S. C.
Dr. Alexander C. Ritchie (a.r.p. *Path.* 1954), St. Mary's Hospital, 3830 Lacombe Ave., Montreal 26, Canada
Dr. Thornton Stearns (*E.S.* 1913 & *Or.* 1914), 736 Haxtun Ave., Orange, N. J.
Dr. Herman J. Sternstein (assoc. s. *Otolar.*), 54 Winter St., Norwood, Mass.
Dr. Joseph B. Tanner (sr. r.s. *Or.* 1954), 300 Homer Ave., Palo Alto, Calif.
Lt. Yang Wang, MC, USAF (*M.* 1953), 1605 USAF Hospital, MATS, APO 406, c/o Postmaster, New York, N. Y.

We were very glad to receive this fine letter from Dr. Sedgwick Mead (*E.M.* 1940 and *Path.* 1941), written from his new address—California Rehabilitation Center, 2600 Alameda Street, Vallejo, California:

> This is the first communication I have sent to The News since nearly seven years ago, at which time I left the MGH family and went to St. Louis. This will bring you up to date.
>
> In June of 1954, I resigned as Associate Professor and Director of the Division of Physical Medicine at Washington University in St. Louis and accepted the position of Medical Director here at the California Rehabilitation Center. This is a nationally and internationally known rehabilitation center, formerly called the Kabat-Kaiser Institute. Another center, under the direction of Dr. O. Leonard Huddleston, is located at Santa Monica, California. Both centers are loosely affiliated with the Kaiser Foundation Hospitals and Kaiser Health Plan. However, most of our patients come from sources outside the Kaiser chain.
>
> At Vallejo we occupy one end of a one-level, pavilion-type hospital, the other end of which forms one of the Kaiser Foundation Hospitals. There are 205 beds, all told, with 75 reserved for rehabilitation. A flexible arrangement exists, however, whereby the acute hospital needs can be expanded to some extent into the rehabilitation side and vice versa. We have an interesting and challenging arrangement in our rehabilitation ward. The patient begins with full nursing care and is graduated as soon as possible into one of the self-care wards, where he no longer receives nursing service and at most may hire an attendant to help with such minor difficulties as getting into or out of bed. The cost to the patient drops proportionately, so there is a strong motivation to move from nursing service to self care. Each time one of our patients graduates from the nursing ward to one of the self-care wards he receives a little diploma which bears a seal. Some of the patients live in inexpensive houses on what is called "The Terrace"—a series of utility flats maintained by the organization for the benefit of patients and their families.

Dr. Walter Bauer, Chief of Medical Services, and members of the Medical House Staff

The largest single group of patients on rehabilitation at the present time consists of poliomyelitis patients. We also have patients with multiple sclerosis, paraplegia, and assorted types of disability involving the nervous or musculoskeletal systems. Our centers have attracted attention internationally because of the development here of the facilitation techniques of neuromuscular re-education. These techniques employ the direct and intimate training of the patient, by the physical therapist, with manual resistive techniques and with special attention to patterns or neuromuscular engrams. These methods are under close study at the present time.

Before my family joined me in our new home at 1530 Arlington Boulevard, El Cerrito, California, we all got together on the East Coast and renewed friendships in and round New England. On August 25 we sailed for Genoa on board the *Vulcania* of the Italian Line. We had perfect weather and wonderful service and Italian cuisine. There were stopovers at Lisbon, Gibraltar, and Barcelona. We went by train from Genoa to Rome for the Third International Poliomyelitis Conference, which was held from September 6 to 11. I participated in several demonstrations of rehabilitation techniques and gave one paper in Italian on practical rehabilitation. These contributions were well received. We also visited the Pope's summer palace at Castel Gandolfo, where a special audience was held for members of the Congress. To my regret, I missed some of our Boston friends because of the diffuse nature of the Congress and the fact that it was spread out through many hotels. I did not get a chance to see Dr. Whittenberger or Dr. Enders, but had a chat with Dr. Chester Keefer.

We then flew by K.L.M. to Frankfort, where we had breakfast on a misty morning, and then to Schiphol—the airport at Amsterdam. If the Italian Line is our favorite steamship line, K.L.M. is certainly tops in our estimation as an airline! They couldn't do too much for us. We then took a bus to the small North Sea resort of Scheveningen, a few kilometers from The Hague. The family got in a good deal of sightseeing in both Rome and The Hague, while I had to stick more closely to business. We were on even terms in Holland, since I could speak the native language no better than they! The reason for going to Scheveningen was the Sixth International Meeting of an organization known as the International Society for Welfare of Cripples. I was an official delegate of the National Society for Crippled Children and Adults, and gave a short paper on paraplegia.

The family managed to get to the museum in Amsterdam where all those wonderful Van Gogh and Rembrandt paintings are, and together we went to Rotterdam one day and saw the pattern of reconstruction in the square mile of the city which was bombed out with mechanical precision by the Germans in 1944. The new buildings are perfectly magnificent. Efficient city planning has been utilized by the methodical Dutch. The low prices, the high quality of goods, the sincerity and the unfailing courtesy of the Dutch people make Holland among the most attractive countries we have ever visited. With many regrets we boarded a K.L.M. Constellation at midnight on Thursday, September 16, and Saturday morning at 7 A.M. we were in San Francisco. We did not deserve to have such perfect weather all the way. Not even one bump on the airplanes.

I have nearly a dozen rolls of stereocolor film which I trust will turn out well when developed and ready for showing. Now we are settling down again to hard work and to school, after a pretty disorganized but happy summer.

Anyone from Harvard or the M.G.H. who comes this way should call on us at our El Cerrito address, which is right next door to the University in Berkeley, and, above all, visit our center in Vallejo, which is about 34 miles from San Francisco, at the north end of the Bay. My telephone in Vallejo is 3-4551.

Best wishes to all our friends at M.G.H., and particularly in the Sixth General Hospital Association.

This letter has come from Dr. Fa-Chi Dunn (a.r.p. *D.* 1954), written from 478 A 36th Street, Oakland, California:

I have changed my address three times since we came to California last June. Consequently, we haven't heard from The News since we came out here, and both Chun-Ming and I miss the paper very much.

Although we came here in June, I didn't start to work until the middle of September. I waited three months to get my medical license. I am now working as staff dermatologist at the Kaiser Foundation Hospital in Oakland.

Chun-Ming is not working at the present time. Our 14-months-old boy keeps her "on call" 24 hours a day.

Dr. Carroll C. Miller (*W.S.* 1938) writes from his new address—304 Humphrey Street, Swampscott, Massachusetts:

In May of last year I moved my home and office to the above address and am practising General and Thoracic Surgery in the Lynn area. This is "home town" for me and it is pleasant to get back among many old friends and professional acquaintances. It is also a delightful place to live in and we are enjoying it.

Lt. George D. Zuidema, MC, USAF (*S.* 1954) has sent us this note:

Thanks so much for sending me the recent copy of The News. I will give you my new address now, to bring your files up to date. I am at the Wright Air Development Center, Box 8696, Area B, Wright-Patterson Air Force Base, Ohio.

My date of commission was August 28, 1954, and my date of active duty was October 8. My first permanent duty station was here at Wright-Patterson AFB, Ohio, where I am assigned to the Aeromedical Laboratory, Biophysics Division, where our research interests center on cardio-vascular physiology.

THE NEWS

No. 142 Boston, Mass. February 1955

SOCIAL SERVICE DEPARTMENT

In October of 1905 a somewhat disturbing event occurred in the Out-Patient Department of the Massachusetts General Hospital. A courageous physician, Dr. Richard C. Cabot, dared to say that something was lacking in our care of patients and that his remedy for filling this gap was to bring into the Hospital a strange, lay person—a social worker. His first annual report of the Social Service Department, entitled "Social Service *permitted* at the Massachusetts General Hospital", vividly states his concept of the situation: "In the Out-Patient Department of the Massachusetts General Hospital (and I suppose in most other hospitals) there occurs many times each year a scene not unlike that described in *Alice in Wonderland:*

'Have some wine, said the Hatter.
I don't see any wine, said Alice.
There isn't any, said the Hatter.'

Without any sense of the humor and pathos of the situation, we say (in substance) to many patients, take a vacation or get a job. There is none in sight and no means of getting any. What do we do then? We pass cheerfully to the next patient."

Through friends, Dr. Cabot raised funds and employed a social worker to help him and other physicians make medical care more effective. Sir William Osler, one of the contributors, wrote to Dr. Cabot in 1909: "I have just spent fifteen minutes reading your third 'Annual report' and I must send a line of congratulation, not only to you but to all members of your staff. That is what I call real work—getting at the problem at the right handle. How splendid it would be if every out-patient department in the country could have attached to it a similar organization. Practical sympathy is what is needed, so I send you $25.00. I wish I could add two or three figures to that sum. . . ."

This Hospital, always willing to try anything—even social workers—which might mean improved patient care, offered heat, light, and a circumscribed space in the Out-Patient Department, set off by a white screen and limited to one window. It was not long before it spread beyond that window—indeed, throughout the Hospital—at the request of clinicians who wanted this service for their patients. News spread outside, and hospitals elsewhere started similar departments.

In 1919, after fourteen years of testing and demonstration, the Trustees voted "that the Social Service Department become an integral part of the Hospital", and they then assumed its financial support. Dr. Cabot's annual report that year was entitled "Formerly a Territory, now a State in the Hospital".

The Department was fortunate in having from 1907 to 1945 Miss Ida M. Cannon as its Chief—a leader of understanding, patience, sound judgment, and broad vision. To her more than to anyone else this social movement is indebted for its growth and development. Countless workers, students, volunteers, doctors, and visitors have been influenced by her and the service here at the Massachusetts General Hospital. Many have become leaders in this country and abroad in medical social programs.

Dr. Martha Eliot, Chief of the Children's Bureau, an apprentice social worker here in 1914, recently wrote in a foreword to a Children's Bureau publication, *Medical social service for children:* "I had seen at first hand what the vision of that great pioneer, Dr. Richard Cabot, had meant in terms of the social component in medical care to patients in the hospital. The impact of my contacts with Ida Cannon and her staff carried over into the years of my medical training, hospital and teaching experience, and community activities. It is easy to see why, when I came to Washington in 1935 to administer the Maternal and Child Health and Crippled Children's Services, I knew it would not be possible to develop these programs effectively without consideration of the social aspects of medical care. For this reason I asked Edith Baker (a former member of the M.G.H. Social Service Department) to join the Children's Bureau staff."

What are some of the services requested and given to patients? Perhaps a typical illustration or so may best tell the story:

> Doctor A: "Good morning, Miss B. I have just seen in the clinic a 35-year-old woman. Came from Damascus, the land of milk and honey. Thought there'd be more milk and honey here. Not so! Not only that, but she has a husband and two children who are a great worry, and she has a pain in her stomach. There you are! Come in and meet her."

Time does not permit elaboration of how, through interviews and visits, the worker grew to know the patient, her husband, and the children; how she assisted the family to make use of community resources available to supplement the family income while the handicapped husband was being retrained for work he could do within his physical limitations; how she helped the family arrange for treatment in Child Psychiatry for the young son who, caught in the tensions and unhappiness of the family situation, was showing severe behavior problems. Through this helpful, friendly relationship with the doctor and social worker the patient learned that some of her reality needs could be alleviated, that some of her fears and disappointments could be understood and accepted, and that these problems all, somehow, bore relation to the pain in her stomach which was not cancer, as she feared.

Old age and chronic illness present social problems: An 80-year-old lady with severe heart failure was referred to us by the ward physician because she could no longer care for herself in her small apartment. The social worker talked with the patient and her Old Age Assistance Public Welfare visitor about plans for chronic care. One day an interested clergyman came, saying that the church wanted to continue to help financially as they had been doing. It developed that neither the Old Age Assistance visitor nor the clergyman was aware of the financial assistance being given by the other. When the social worker discussed this ethical question with the patient she said quickly, "Why, that's no problem. I get my authority from the Bible. It says don't let your right hand know what your left hand is doing." The patient, the doctor, the public welfare visitor, the clergyman, and the social worker arranged together a satisfactory joint plan for her care in a nursing home.

Let us look at the Department as it now is, forty-nine years after its inception and on the threshold of our Fiftieth Anniversary. Six hundred eighty-four patients were served in 1905, while approximately 9,000 were served in 1954. There is now a staff of 49 workers—one for each year of existence. Social workers are now assigned to every service in the Hospital. We are particularly proud of the unit in Psychiatry—both adult and children's—where 8 workers are assigned to carry on services, teaching, and research.

Two rather distinctive services have been developed here at M.G.H. Since 1930, at the request of the doctors, a social worker has been assigned to full-time service for the private patients in Baker Memorial and Phillips House. The problems there are no different. Illness and handicap bring disruption of personal and family life, irrespective of social and financial status. Assistance in care of children, plans for chronic or convalescent care, and help with other personal and family social problems are asked of the social worker. Many staff physicians use the service for their private office patients.

Three years ago, in the interests of better care to patients and their families in the traffic center of the Hospital—the Emergency Ward—the Administration asked for a full-time social worker there. At her desk, just inside the entrance to the Emergency Ward, she is available to help patients and families face the anxieties and the readjustments which have to be met quickly and many times dramatically when sudden accident, illness, or even death occur.

The training of from 10 to 14 social service students from 4 schools of social work goes on yearly. There is teaching of the social aspects of illness to those in allied professions—such as medical students, nurses, dietitians, and others. There are research activities. Several workers have participated in clinical research projects. In the study of children with arthritis and in Dr. Graham's study of optimal treatment of patients with cancer of the cervix, social workers are at present contributing to the social understanding and treatment.

In 1905, when Dr. Cabot brought social workers into the Hospital, the ideas of illness and patient care were narrower than they are today. Disease was conceived largely as organic pathology which could be identified through physical examination and tests. Hospital Social Service was one of the earliest manifestations of the swing toward a broader approach.

The concept of disease has grown to include physical, emotional, and *social* aspects, all of which must be understood and dealt with if medical diagnosis and treatment are to be effective. Thus, many specialists within and outside of medicine are required. Teamwork is becoming the method in the hospital of today.

Social work has grown. It has developed to a professional level in its knowledge of human behavior and its skills in helping people with social difficulties. In the medical team all members are concerned with the social aspects, but it is the social worker whose service is directed toward the interrelationships of the psycho-social and medical factors.

The Fiftieth Anniversary celebration which is to take place this year is being planned by a committee appointed by the Trustees. Dr. J. Howard Means is Chairman. The other committee members are: Miss Harriett M. Bartlett, former staff worker and educational director here, now Associate Professor at Simmons College School of Social Work; Miss Josephine C. Barbour, Chief of Social Service; Mrs. Robert Homans, member of the Board of Trustees of the Hospital; Dr. John P. Monks, Assistant Physician; Dr. Edward L. Young, member of the Board of Consultation and Chairman of the Social Service Advisory Committee; Dr. Oliver Cope, Visiting Surgeon; Dr. Dean A. Clark, General Director of the Hospital; and Mr. David C. Crockett, Associate Director for Resources and Development of the Hospital. The dates for the celebration are October 20, 21, and 22. There will be a reunion of alumnae, a day of preplanned workshops, a panel luncheon discussion with outstanding speakers, and a banquet and a final summing up in a paper to be presented which will be chiefly concerned with future developments and activities in the Department.

At this Fiftieth Anniversary we shall hope to evaluate the development of the past years, but, more importantly, to look forward to the growth which may take place in the half-century which lies ahead. A program committee, under Miss Harriett Bartlett, has tentatively formulated these questions which we may be considering with our medical colleagues at the Anniversary and in the years ahead:

1) What is good comprehensive care of the patient and what are the *essential social* components in such care?

2) How can the professions integrate their services to patients, to families, and to the community?

3) What is the essential contribution of the social worker as a member of the clinical team?

Thus, have the past fifty years seen the growth of a new professional service in medical care. It was fortunate in its leader and in the place where it was nurtured. Always friendly, though at times skeptical, the Administration, the Social Service Advisory Committee, and the Medical Staff have offered fertile soil, a warm climate, and helpful support.

Josephine C. Barbour,
Chief of Social Service

* * *

THE STANLEY COBB FUND
AT THE HARVARD MEDICAL SCHOOL

A wide circle of MGH graduates, colleagues, and friends will be interested to hear, I think, that a fund has been set up aiming at the endowment of a Professorship of Psychiatry in honor of Stanley Cobb. While the fund is accumulating, the income may be used for urgent needs of the Department of Psychiatry, or added to the fund's capital. It seems right that this fund should be started soon after Dr. Cobb has become *"emeritus"* and yet is still at the height of his activity. The affection and respect of his friends and associates, young and old, may find expression in this undertaking.

The members of the Fund Committee are: Charles P. Curtis, Ralph Lowell, Dr. Harry C. Solomon, Dr. LeMoyne White, Dr. Henry S. Forbes, chairman, Hildegarde B. Forbes, secretary.

We hope that several advantages will result from the Professorship: better coordination between the teaching of psychiatry and other courses of instruction at the Harvard Medical School; greater opportunity for research; a closer tying together of work at children's centers, and mental and general hospitals, with work at the School; and finally a wider application of the knowledge gained to help solve problems of mental and social health.

The fund is off to a good start, but has a long way to go. Dr. George P. Berry, Dean of the Faculty of Medicine at the Harvard Medical School, has been a warm supporter from the beginning. Dr. Alan Gregg is most enthusiastic, and has allowed us to publish a letter from him in our descriptive leaflet. This may be obtained from the School or from committee members.

H. S. F.

[Henry S. Forbes, M.

Additions to the fund, by gift or bequest, may be made out and sent to the Treasurer of Harvard University, 140 Federal Street, Boston, Massachusetts.

Dr. Dean A. Clark, our General Director, has added his endorsement of the Cobb Professorship in these words:

On behalf of the Massachusetts General Hospital, I wish to say how pleased we are that this fund is being raised in honor of our much-admired former Chief of Psychiatry Service, Dr. Stanley Cobb. I am confident that many of you who read this will be eager to contribute to the fund.

* * *

Brief bits:—

On November 17, Dr. Edward B. Benedict attended the meeting of the American College of Surgeons in Atlantic City, where he took part in the postgraduate course on Surgery of the Lower Esophagus, Stomach, and Duodenum. He also presented a paper on "The value and limitations of Endoscopy in the differentiation of benign and malignant ulcer".

On December 15, Dr. Stanley Cobb delivered the Fifth Annual Lecture by the Leopold Stieglitz Visiting Professor, presented by New York University College of Medicine at the Bellevue Medical Center. His subject was "Multiple etiology in Psychiatry and Medicine".

Dr. Sheridan S. Evans (*E.S.* 1945) announces the removal of his office to 619 South Broadway, McAllen, Texas.

Dr. James M. Faulkner (*E.M.* 1925), Dean of Boston University School of Medicine, has been appointed Medical Director of Massachusetts Institute of Technology.

Dr. Reed Harwood delivered a lecture on "Diabetic acidosis" at the Postgraduate Course on Diabetes and Basic Metabolism Problems, given by the American Diabetes Association, at Lankenau Hospital in Philadelphia.

Dr. Bernard M. Jacobson spoke to the Lowell Medical Club on December 9, on "Why the patient bleeds and what to do about it".

Dr. Earl M. Wedrow announces the opening of his office for the practice of Psychiatry, at 205 Beacon Street, Boston, Massachusetts.

* * *

Mr. George E. Hamilton, custodian of the doctors' parking lot, tells us that Dr. Marian W. Ropes won his 1954 award for careful parking.

* * *

[Due to the illness of the editor, we are obliged to omit the staff publications column this month. This issue contains only such material as the editor had already prepared for publication, plus (fortunately) a large amount of overset which had been held over from the January number. The omitted titles will appear next month.]

MASSACHUSETTS EYE & EAR INFIRMARY

A meeting of the Eastern Section of the American Trilogical Society was held at the Hotel Warwick, Philadelphia, on January 7. Members of the Infirmary staff who attended included Dr. LeRoy A. Schall, Dr. Moses H. Lurie, Dr. Daniel Miller, and Dr. John R. Richardson. Dr. Robert Gohd, Research Virologist at the Infirmary, presented a paper, by invitation, on "The common cold".

The Council Meeting of the Trilogical Society was held on January 8 at the Waldorf-Astoria in New York City, and was attended by Dr. Schall.

Dr. Giulio Pestalozza, associate of Professor L. Pietrantoni of the University of Milan, Italy, spent a week recently in the Department of Otolaryngology. On January 5, Dr. Pestalozza presented to the staff Dr. Pietrantoni's film on pharyngolaryngectomy combined with block dissection.

Dr. Louis E. Griffey began his residency in Otolaryngology on November 1, and is at present in the Mosher Laboratory.

Dr. Baruch Sachs, son of Dr. Benjamin Sachs, Consulting Surgeon on the Infirmary staff, began his residency in Ophthalmology on January 1.

Members of the Infirmary staff were the guest lecturers at the Private Duty Nurses Section of the meeting of the Massachusetts State Nurses Association, held on February 3.

At the morning session, the speakers were Dr. George F. Reed—"Laryngectomy: Cancer of the larynx"; Mrs. Mary Gontarski, R.N.—"Postoperative care of laryngectomy patients"; Mrs. Mary Doehler—"Instruction in osophageal voice"; and Dr. Robert R. Trotter—"Glaucoma".

In the afternoon, Dr. Charles L. Schepens spoke on "Recent progress in retinal surgery"; Mrs. Katherine Pendergast, R.N., on "Nursing care of patients with detached retina"; and Mrs. Patricia Huddleston on "The value of Occupational Therapy in the care of retina patients".

The Board of Trustees, at their meetings on December 17 and 31, voted:

To accept the resignation of Julie S. Crocker, Assistant Resident in Anesthesia, effective December 31, 1954;
To accept with regret the resignation of Dr. David S. Kahn, Assistant Pathologist, effective December 31, 1954.

To promote:

Dr. Sylvester B. Kelley to the position of Visiting Urologist.

To appoint:

Dr. Herbert S. Cline as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Walter C. Cotter as Second Assistant Resident in Neurosurgery, beginning January 1;
Mr. Joseph W. Degen as Assistant Director, beginning December 16, 1954;
Dr. Michael J. Franzblau as Assistant Resident in Dermatology for one year, beginning July 1;
Dr. Wallace F. Haley, Jr. as Assistant in Psychiatry, beginning January 1;
Dr. Joshua J. Hurwitz as Assistant in Urology;
Dr. Edward Karamanoukian as Assistant Resident in Dermatology, for six months, beginning January 1;
Dr. Albert L. Rosenthal as Assistant Resident in Dermatology for one year, beginning July 1;
Dr. Harold A. Rudy as Assistant in Urology;
Dr. Paul M. G. St. Aubin as Assistant Radiologist, beginning January 1.

At their meetings on December 15, 22, 29, and January 5, the General Executive Committee voted:

To extend the appointment of Dr. Salomon Hakim as Research Fellow in Neuropathology, for six months, beginning January 1.

To promote:

Dr. Alfred J. Luessenhop to the position of First Assistant Resident in Neurosurgery, for a period of six months, beginning January 1;
Dr. Fleming McConnell to the position of First Assistant Resident in Radiology for one year, beginning January 1;
Dr. Bernard B. Stone to the position of Resident in Neurosurgery, for six months, beginning January 1;
Dr. Frederick S. Tomchik to the position of Resident in Radiology for one year, beginning January 1;
Dr. Setrag A. Zacarian to the position of Resident in Dermatology, for the period January 1 through June 30.

To reappoint:

Dr. Winnifred P. Chase as Clinical Assistant in Medicine for one year, beginning January 1;
Dr. William B. Clapp as Clinical Assistant in Medicine for one year, beginning January 1;
Dr. James A. Flagg as Assistant Resident in Anesthesia for one year, beginning January 1;
Dr. John W. Irwin as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning January 1;
Dr. Irving H. Itkin as Clinical Assistant in Medicine for one year, beginning January 1;
Dr. John W. Keller as Clinical Assistant in Medicine for one year, retroactive to July 1, 1954;
Dr. Louis Kunian as Clinical Assistant in Medicine for one year, beginning January 1;
Dr. Winifred Liu as Research Fellow in Surgery, assigned to Gynecology, for one year, beginning January 1;
Dr. Marc P. Moldawer as Clinical and Research Fellow in Medicine for one year, beginning January 1;
Dr. William E. Reynolds as Clinical and Research Fellow in Medicine for one year, beginning January 1;
Dr. Raymond J. Savignac as Clinical Assistant in Medicine for one year, beginning January 1;
Morris Soodak, Ph.D. as Assistant Biochemist for one year, beginning January 1;
Dr. Giles D. Toll as Third Assistant Resident in Surgery, beginning January 1;
Dr. Thorkild Waino-Andersen as Clinical Fellow in Anesthesia, retroactive to May 18, 1954;
Dr. Gordon DuF. Winchell as Clinical Assistant in Medicine for one year, beginning January 1.

To appoint:

Dr. Thomas C. Hall as Clinical Assistant in Medicine for one year, beginning January 1;
Dr. Stephen M. Krane as Clinical and Research Fellow in Medicine, beginning January 1;
Dr. Jacques H. Lebrun as Clinical and Research Fellow in Surgery, beginning January 1;
Dr. Robert P. Smith as Clinical and Research Fellow in Medicine, beginning January 1;
Dr. Uthai Sri-Aroon as Graduate Student Assistant in Orthopedics, for the period November 15, 1954 through February 14, 1955;
Dr. Christopher H. Wood as Clinical Fellow in Medicine for one year, effective as of December 1, 1954.

The General Executive Committee also voted:

That Dr. John B. Graham's request for an appropriation of $250 from the End-Result and Follow-up Study Fund for the work of Dr. Winifred Liu in following up post-menopausal bleeding cases treated with a D & C be approved;
That in addition to Dr. Guillermo C. Sanchez's title of Research Fellow in Anesthesia, he be granted the title of Clinical Assistant in Medicine, with the privilege of assisting Dr. Daniel S. Ellis in the Baker Memorial and Phillips House;
That Dr. Chiu-chen Wang's title be changed from that of Clinical Fellow to that of Research Fellow in Radiology, through March 31.

* * *

IMPRESSIONS ON INDIA

Having spent the better part of the last ten years in the States, it took time and effort to adjust myself to the new perspectives, scales, and relations in India. Leaving there after a six-months' stay, I carried the over-all impression that wholesome influences were at work, that the country was in good hands, that vital problems were being faced head on, and that the achievements to date had exceeded one's highest expectations. India today is sounder, healthier, more prosperous and vigorous than the India I knew ten years ago.

In 1947, after nearly two centuries of British rule, independence came to India. The country was partitioned on a purely religious basis and the new State of Pakistan, whose people are like Indians in every respect except in the matter of religion, was launched. The government of India passed into the hands of people poorly equipped to run a nation. Administrators with training and experience were few. They found their hands full of a multitude of manifold problems and challenges inevitably brought on by the termination of the protracted British rule. And, as if these were not enough, new disasters struck immediately—the most serious ones being massive dislocation of population and fierce religious riots.

Many of the 30 million Hindus in the newly created Muslim State of Pakistan (total population 100 millions) wanted to move over the border into India. Many of the Muslims in India (total population 370 millions, Muslims 30 millions) felt the same way about joining Pakistan.

As a result, there began the "greatest interchange of population in history". In the middle of a hot, blazing summer, more than 12 million people set out, mostly on foot, often traveling through deserts, to seek their new homeland. The government was caught with a problem of enormous magnitude. In a matter of weeks, the population of Calcutta and Delhi increased 3-fold or more. People were without homes. They slept on streets and in gutters. Food was meager and they foraged in garbage. Epidemics threatened. Rehabilitation of refugees became the primary concern of the young, inexperienced government—not yet sure of its moorings. Already up to its neck, it had more troubles ahead. A new series of disasters rocked the nation. Fierce religious riots broke out in various parts of India. Massacre on a mass scale took place and the number of the killed ran into several hundred thousands. The entire country was engulfed in gloom. The pervading feeling all over India was one of insecurity, frustration, and defeat. Gandhi, trying to inspire a new hope into the nation, was murdered by a fanatic. Large parts of Eastern India were ravaged by floods; Central and Western India suffered droughts. For three years in succession, crops failed. Food supply became critical. The Nehru Cabinet worked tirelessly, without a moment's breathing space, against seemingly insurmountable odds, and the country and the government survived. Against this background, India's accomplishments in the seven formative years since independence have been nothing short of miraculous. With similar and worse odds, Pakistan's spirit and enterprise have already won the world's respect.

What is the record of India's accomplishments in the past seven years since independence? A stable, constitutional government in action during this period is, in itself, no mean achievement. A constitution incorporating the best democratic principles of the western countries was written and put into operation. A free, democratic general election with wide franchise was held, probably for the first time in an Asiatic country.

A comprehensive Five-Year Plan—aimed at all-round improvement, with emphasis on agricultural and industrial progress—was introduced in 1951. Many experts characterized it as a dreamy plan at the time. With two years still to go, the results have been beyond expectations, and many of the targets set for 1956 have been achieved two years ahead of time.

About 75 percent of India's 370,000,000 persons living in about 47,350 agricultural communities derive their livelihood from agriculture. Agriculture produces roughly half the national income. As a result of the Plan, agricultural production has risen one-fourth in the last three years. The government has been prompt in introducing land reforms. Absentee landlordism has largely been done away with. Industrial production has gone up more than one-third under the impact of this measure. In the first three years, the national income of India has increased by 14 percent. The immediate program includes about 140 large irrigation and 100 power projects.

But aside from the financial and economic progress resulting from it, the Plan has a deeper significance. In India, where disruptive forces are many, it exerts a unifying influence on the country. Enthusiasm for self-improvement is very much in evidence all over India, and this fact constitutes the greatest success of the Plan.

The driving force behind all that India has gained so far and is likely to gain in the next few years is Nehru. More than 300 million Indians love him. Working tirelessly, traveling continually throughout the country, whizzing from one village to another through dust and heat, literally rubbing shoulders with his people, speaking a dozen or more times a day—Nehru, almost singlehandedly, has rallied 370,000,000 people into a nation under its own flag for the first time in several centuries. This task of enormous magnitude can be appreciated only when one thinks of the marked differences in the looks, languages, dresses, foods, customs, and religions in various parts of India. Nehru's greatest mission lies in the uniting of the country. India without Nehru is unthinkable. Realizing the unhealthiness of this situation, he recently proposed to step down, at least temporarily, from the prime minister's office. Entire India was in an uproar. The matter was dropped.

Nehru is a volcano of energy, in constant eruption. His day begins at 6:15 and ends at 1:00 the next morning. In between, he is constantly on the go, attending to his numerous duties as Prime Minister, Foreign Minister, Defense Minister, Chairman of the Planning Commission and of the National Development Council, and, until recently, the President of India's most powerful political party —the Congress Party.

Nehru is a much misunderstood man in America. He has been accused of being soft on the communists. His neutrality has been viewed with suspicion—often called "phony" and given names like "anti-western neutrality" and "nehrutrality". However, many American politicians of weight and influence have visited him in the past few years and have come back with the conviction that there is nothing "phony" about this man. Nehru dislikes communism. He has modeled India along strictly democratic lines. He has ruthlessly dealt with communists at home and, under his leadership, the communist party in India has remained a nonentity. Recently, on his return from Red China, he characterized Indian communists as "anti-India, anti-people, anti-progress, dazzled by Russia and China, but ignorant of India". He added, "They are without moorings in the land of their birth. They are pledged to a policy of creating mental and physical conflicts. They indulge in a cult of disruption." He further went on to say, "When I visited China, I refused to be swept off my feet. Our achievements are as great and our methods are much better." He was referring to democratic methods which are having their first large-scale trial in an Asiatic country, and Nehru has had the sole responsibility for their amazing success so far. He is no dreamer. He is well aware of the international character of the world communist movement and is skeptical of the Red Chinese pledge of non-interference in the affairs of other Asiatic countries. He realizes that communism is an ever-present threat to India, that a fight against communism is a fight against poverty. He continues to work hard to raise the living standards of his people. He believes that Indians must rely on their own resources, capabilities, and productive capacities to pull themselves up from economic servitude. On the other hand, he knows that India needs capital and know-how in order to expedite progress, and he has repeatedly expressed his deepest gratitude to America for all the U. S. funds and skill flowing out to India to dam great rivers and dig new mines.

Short of a war, Nehru will not join camps. He sees no useful purpose being served by doing so. Nehru's neutrality does not consist of watching events from the side lines. On every major international issue, he has taken a definite stand and active steps to reach what he thinks to be the right solution. He honestly believes that he can best serve the cause of peace by acting as a mediator between the two camps.

The problem of raising the deplorably low standard of living is so paramount that progress in other fields has been understandably slow or held up. Although top leadership is devoted to the program of furthering education, particularly at the primary and secondary levels, the gains have been minimal and the picture remains a gloomy one. The over-all illiteracy rate in India is 85 percent. Free and compulsory education through the age of fourteen is the government's goal, which is not likely to be attained in the near future. Other needs are so great that school budgets are still woefully small. The scale of pay for teachers is so low that primary and secondary schools do not attract adequately trained instructors. Physical equipments are generally poor. Children of school age in the rural areas stay out of school because they are needed at home to help run the family and the farm.

Overriding as they are, economic problems are not the only ones that bedevil the educational system. With emphasis shifting from English to the local languages in secondary and high schools, the language situation has become very complex. Some dozen languages are being used in various parts of the country as the medium of instruction. In large cosmopolitan cities like Calcutta, Bombay, Delhi, or Madras, it is not unusual to have schools in the same city using different languages — one for Bengalee-speaking, another for Marathi-speaking, and a third for Gujarati-speaking children.

The recent establishment of "basic

schools" represents a radical departure from the usual classroom type of teaching in the primary and the secondary schools. The aim is a lofty one, for under the new program children will "learn through activity", with a strong emphasis on trades and crafts. The curriculum calls for "instruction in agriculture, mechanics, handicrafts, and domestic skills". Again, shortage of trained teachers and inadequate facilities have stood in the way. Instead of learning the skills included in the program, the students spend their time sweeping floors and ploughing fields. When they graduate from high school, they are pathetically ignorant of such basic subjects as literature and mathematics and, for lack of equipment, they have acquired none of the skills mentioned in the curriculum. Deterioration in the quality of teaching in the post-independence period is quite striking and is a matter of great concern to the educationists. Commenting on basic schools, one embittered educationist remarked, "Let us not improve education out of existence."

While quality has gone down, numbers have gone up and now, each year, about three times as many students graduate from high schools as they did ten years ago. The vast majority of these want to go to college and, in order to accommodate them, many liberal arts colleges have mushroomed into existence. Poorly staffed, lacking in talents and facilities, these colleges turn out huge numbers of graduates each year. There is no more pathetic a creature than a liberal arts graduate in India. He considers it below his stature to take any manual job, to work in villages, or in the fields. He lacks the initiative to enter business. His entire horizon is limited to one aspiration: landing a well-paid government job. During the British rule, when the number of such graduates used to be small, he had a fighting chance of getting one. Today his chances are less than one in fifteen and, failing to get a government job, he withdraws to a life of bitterness, frustration, and defeat. The increasing surplus of liberal arts graduates has led to increasing unemployment among them, and radical changes in university education are urgently needed to check this unhealthy trend.

Judged by American standards, technological institutions in India can be called such by courtesy only. By any standards, they are ill-equipped, in both talents and materials, to impart any decent technological training.

The medical educational system in India retains its English pattern. The resemblance, however, is in superficial details only. In fact, the Indian medical schools are poor imitations of those of the British. During my few months in India, I was associated with the Patna Medical College and the attached Patna General Hospital. This gave me an excellent opportunity to see things from the inside. The school, with its attached hospital, easily ranks among the top six medical institutions in the country and is fairly representative of the best that India has to offer in teaching, research, and medical practice. In it, I saw an inspiring and, at the same time, a most dismaying challenge.

The school is a part of the Patna University, which is autonomous and supposedly free from governmental interference. However, the university depends entirely upon State governmental grants for its upkeep, and a constant source of irritation is the petty politicians' frequent meddling with the affairs of the school. The attached hospital is controlled and run by the State government, and very often the school and the hospital pull in opposite directions. In staff appointments, the important thing is often not merit but how much political influence one can summon. Promotions are by seniority only, and one has to be very careful not to offend the politicians. In a moment of despair, the current vice-chancellor of the Patna University, sighed, "Seniority, senility, and servility are what count here."

In the clinical departments, the top men are usually members of the Royal College of Physicians or Surgeons, having passed the membership examination from either London or Edinburgh. The number of good doctors being limited, such men have their own large private practices in addition to their hospital duties. In fact, private practice claims so much of their time that they have little left in which to do any reading in their fields and they cease to grow quite early in their careers. Their interest in teaching flags. They have no time to think of research, so research does not exist. There was not a project going on in any of the clinical departments during the months I was there.

Teaching is didactic—almost entirely by lectures. Superb teaching material on the wards is left untapped and students derive no benefit from it. They are given no encouragement to participate in ward activities. The atmosphere is one of learning-by-rote, which is not stimulating. It is pathetic to see eager students memorizing the characteristics of mitral stenosis murmur without having listened to one. Without having taken care of a single patient and with no real feeling for medicine, they graduate from medical school and, without any further clinical training, the vast majority of them enter into private practice. For no fault of their own, they are doomed to mediocrity for the rest of their lives.

On the general wards, patients receive very inadequate care. The ward physician, almost surely a busy private practitioner, may not get around to seeing even the seriously sick patients for days or even weeks, so they just lie there without any medical attention and with little nursing care. Not infrequently, death may precede the physician. The house staff—they have nothing in common with MGH interns and residents—lack the training, knowledge, experience, and judgment to give effective medical care.

Diagnostic facilities are meager. A patient who has routine blood, urine, and stool studies done is supposed to have been intensively studied from the laboratory point of view. There is no chemical laboratory worth anything. A chloride determination is a major procedure. Other electrolytes are just not done. A visocardiette exists, but half the time it is out of order and it is seldom if ever used on the wards. A radiology service exists, but it is too busy taking care of paying ward patients to take care of general ward patients. Lack of facilities is not due to lack of money, for grants to medical institutions are generous. It is lack of organization and interest that is responsible for this sad state of affairs, and the chief of service must take the blame for it.

If such is the state of affairs in what is regarded as one of the best hospitals in the country, what happens in the lesser hospitals is best left to the imagination. The feeling among the public is that one goes to hospitals only to die. Such a feeling is well justified. Only the very-well-to-do can afford good private doctors and good medical care. Indian doctors do not enjoy the affection or respect of the public. They are regarded as a mercenary lot and, I think, rightly so. The majority have little feeling or sympathy for the patients whom they treat. They often make the saving of a man's life seem like an insult.

This is a gloomy picture of education and medicine in India. There is confusion of ideas and deterioration in standards. On the other hand, perhaps this picture is colored by my own high—and unrealistic—expectations in these fields. In a country where the paramount problem is physical survival and the raising of terribly low living standards of 80 per-cent of its 370,000,000 inhabitants, it is perhaps futile to think — so soon after 1947 — in terms of research, academic medicine, modern diagnostic aids, and first-class medical care. I did meet some fine, scholarly, zealous men in both the ministries of health and education, who are imbued with a keen appreciation of the great magnitude and complexity of the educational and medical problems facing them. There is certainly no tendency on their part to ignore the situation or let it go by default. And with Nehru in the vanguard and a unified population behind him, the educationists and the medical men must inevitably quicken their pace in the march toward India's bright future.

Madan M. Singh, M.D. (*M.* 1952),
Clinical and Research Fellow in Medicine

For a detailed survey of the culture and religion of India, we refer you to the excellent article by Dr. Singh which appeared in our January 1953 issue.—*Editor.*

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

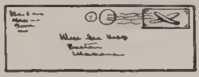
We were very sorry to hear of the death on January 8 of Mrs. Abraham L. Finesinger, who was one of our Staff Wives. Mrs. Finesinger had been of great help to us in many ways, particularly in arranging the music programs for the Staff Wives Music Committee.

MEMBERS OF THE MEDICAL AND CHILDREN'S MEDICAL HOUSE STAFF

DISTAFF CLUB

On December 9, the Distaff Club held its annual cake sale in the Brick Corridor. It was a great success. Mrs. Farahe Maloof was the chairman.

Our Christmas Party was held in the Penthouse on December 16, with Mrs. Thomas C. Peebles as the chairman. This was a festive occasion, with new and old members present to celebrate the Christmas season.



New addresses:—

Dr. Arlie V. Bock (*W.M.* 1917), 13 Holyoke St., Cambridge, Mass.

Dr. Wilma J. Canada (a.r.p. *Path.* 1951 & r.p. *R.* 1954), St. Luke's Hospital, New Bedford, Mass.

Dr. Lincoln D. Clark (*M.* 1948), 33 Canterbury St., Andover, Mass.—after April 1.

Dr. Ira A. Ferguson, Jr. (*S.* 1953), 353 Argonne Drive, N.W., Atlanta, Ga.

Dr. Joseph A. Freidberg (*Or.* 1926), 2939 Vernon Place, Cincinnati 19, Ohio

Mr. Francis W. Hatch, *Trustee,* 462 Boylston St., Boston 16, Mass.

Dr. Robert W. Hopkins (*S.* 1948), Pennsylvania Hospital, Philadelphia, Pa.

Dr. David S. Kahn (r.p. *Path.* 1950), St. Mary's Hospital, Montreal, Canada

Dr. Arthur S. Keats (a.r.p. *An.* 1951), Department of Anesthesiology, Jefferson Davis Hospital, Houston, Tex.

Dr. Walter S. McClellan (*W.M.* 1925), 406 Whitehead Circle, Chapel Hill, N. C.

Dr. Jost J. Michelsen (a.r.s. *N.S.* 1938), Box 328, Back Bay Post Office Annex, Boston, Mass.

Dr. George F. Odland (*M.* 1947), 1523 Medical Dental Bldg., Seattle, Wash.

Lt. John C. Rowe, MC, USAR (*M.* 1952), United States Army Hospital, 8162nd Army Unit, APO 45, San Francisco, Calif.

Dr. Stanley Sober (a.r.s. *Or.* 1953), 707 Waterloo St., London, Ontario, Canada

Dr. Alexander L. Zaoussis (a.r.s. *Or.* 1954), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Clark received this letter from Dr. Anne P. Forbes (a.p.):

Here is a brief outline of our activities this year in France.

We began with a month of sheer vacation at Annecy, near the Swiss border—not only to enjoy the loveliness of that beautiful medieval town and its surrounding mountains and to get good sunburns and bicycling muscles, but also to acquire as much familiarity as possible with French prices, customs, expressions, traditions, etc. before setting up shop seriously in Paris.

From there I made a few trips to Geneva to listen to rounds and conferences in Dr. René Mach's department. I was much impressed by the work there. They have a supply of the new adrenal steroid aldosterone for clinical trial, and have found out some interesting things about it. They are doing good steroid assays by several methods on blood and urine. I met many of the younger people in Dr. Mach's department who have spent some time at the M.G.H.—Alex Müller, Jacques Chatillon, Pierre Ducommun, for example. Bernard Jacot has moved from Geneva to Lausanne. These boys are unanimous in their enthusiasm for the M.G.H. and even sometimes homesick for it. I have had the same reaction in Paris from some of the doctors who have studied at the General.

My first job here is to be visiting physician in charge of two female wards on the medical service of the Laennec Hospital. This I have only just begun and so far, of course, I am more of a burden to the staff than anything else, but it is going to be very instructive and lots of fun. The assignment was arranged for me by Dr. Albeaux Fernet, the chief of the service, whose main interest is endocrinology. In addition, I spend one day a week seeing endocrine cases in Dr. Camus's clinic at the Cochin, and I am going to try to spend some time in Dr. Jayle's laboratory. This laboratory is thought to be the most advanced and reliable for steroid assays of all sorts.

Happily, I am not going to be obliged to work full time. This would be a mistake in a sojourn of only one year. There is an infinite amount to do, see, and learn in this extraordinary city—which it would be a crime to ignore—and we all intend to profit by it. A year is a very short time to spend abroad. This has been the reaction of many of the people who came to work with us at the Massachusetts General. They found themselves just getting under way when it was time to go. Short-time visitors need a lot of help and showing about if they are to begin to profit in the time allowed.

THE NEWS

No. 143 Boston, Mass. March 1955

ORTHOPEDIC SERVICE

About three years ago there were well-founded fears that the patient census on the Orthopedic Service, both House and OPD, was in an alarming decline. The situation remained rather critical through much of 1953, with the ward census at times down to nearly 50% of capacity.

To remedy this serious situation a variety of steps were taken. Physicians who referred their paying patients to our staff were informed that we would also welcome their patients who could not pay for the costs of care. The Admitting Office liberalized its policy and made every effort to admit all worthy applicants. Vigorous steps were taken to improve the quality and efficiency of service in the OPD (now called the Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary). An appointment system was installed, the physical setup was remodeled, and the Orthopedic Clinic was shifted to afternoon hours so that the entire House Staff and the assigned Visiting Staff could complete the operating schedule and other duties which so often caused their absence from morning clinic hours.

We believe that these measures helped to reverse the declining census. In any case, the picture in 1954 was much improved. Total Orthopedic Clinic visits increased 22% over 1952. The wards on White 5 were filled to capacity much of the time. This was due to an increase in both fracture and orthopedic patients. The work load of our House Staff is now extremely heavy. Is the load so heavy that it is endangering the quality of patient care and the quality of training afforded our House Staff? They must have time to think and read as well as to act. The Hospital Administration's efforts to keep our beds filled and to utilize our magnificent plant at maximum efficiency deserves the full cooperation of the professional staff.

One of the most difficult tasks of the Services is to meet the fluctuating requirements of patient load without over- or understaffing with Interns and Residents. The patient load for which our House Staff was responsible this past year is indicated in this table:

1954 Orthopedic Service patient load

Admissions (Wards, P.H., B.M.)	2,097
Operations (Wards, P.H., B.M.)	1,639
Ambulatory visits (Clinics)	10,028

Our House Staff consists of one Senior Resident, five Orthopedic Assistant Residents (4th year level), one Surgical Resident (3rd year level), and one Surgical Intern (1st year level).

Certain types of disability require specialized, intensive, and prolonged care. Paraplegics, amputees, severe poliomyelitics, arthritics with multiple joint involvement, etc. are examples of these problems. They should not be cared for on an acute surgical ward. Certain other surgical patients—viz. burns, postoperative cardiacs, etc.—might also fall into this group. A unit has been opened on White 8 to offer better care to these patients. In place of the conventional larger wards, the space assigned has been subdivided into four-bed rooms. This permits grouping of patients by age, sex, and disability, for maximum efficiency in nursing care and for improvement in patient morale.

A number of patients with paraplegia have been brought together on this ward. Although the Orthopedic House Staff is responsible for their care, an interservice team supervises their efforts. Weekly rounds are held, in which members of the Urology, Neurosurgery, Physical Medicine, General Surgery (Plastic), and Orthopedic Services participate (Drs. Leadbetter, J. C. White, Watkins, Cannon, and Barr).

In similar fashion the amputee rehabilitation program is supervised by Drs. Record, Burbank, and Watkins.

The concept of an interservice unit, devoting itself to the more difficult rehabilitation problems related to surgery, holds promise of improved patient care, improved teaching, and improved research opportunities. It should help to promote interdepartmental cooperation and restrain "empire building".

The teaching load of the Service remains heavy. Harvard Medical School third year students, under Dr. Thornton Brown's expert eye, learn to strap an ankle, apply a cast, reduce a Colles' fracture, and, most important of all, they learn the art of adequate history taking and the technique of examination of the locomotor system. A few Harvard Medical fourth year students come back for an elective month on our wards.

Our most avid students are the Residents. During the past year Dr. DeLorme arranged for a distinguished list of guest speakers to participate in an extremely interesting series of Residents' Seminars.

A restricted number of foreign graduate students enrolled through Harvard Medical School for study in our department. Among them were Dr. U Ba Pu, from Burma, Dr. Meeran Rowther, from Pakistan, Dr. Luis Irigoyen, from Venezuela, and Dr. Uthai Sri-Aroon, from Thailand.

The annual one-week intensive postgrauate course "Treatment of fractures and other traumatic conditions" was given in November to an enthusiastic group of forty-eight surgeons from all parts of the United States.

Ever since publication of the "MGH fracture book" in 1938[1], it has been obvious that sooner or later we would have to face the task of revising it or of making a new effort. Under the leadership of Dr. Cave, the task has been undertaken and, if the timetable can be adhered to, the manuscript and illustrations will be ready to forward to the publishers within the next few months. It is a formidable undertaking, but the division of labor is such that no one has an impossible task. We trust that the new "Fracture book" will add luster to the Massachusetts General Hospital and be of real value to those who are responsible for the management of patients suffering from acute trauma.

The sudden death of Dr. Armin Klein on April 3, 1954 came as a shock to all of us. A loyal and tireless member of our group since 1922, he had just reached the age at which he could lay down the responsibilities of membership on our Active Staff. We cannot properly list or evaluate his many contributions to the M.G.H., to medicine, and to orthopedics. He was faithful, industrious, wise, and kindly. Scores of orthopedic surgeons (the writer included) are proud to say he was our teacher. The annual dinners which he gave for the Resident Staff were always memorable occasions. His contributions to the advancement of orthopedics were many, but the outstanding one concerns the entity of slipped capital femoral epiphysis. For many years he studied this difficult problem and was the recognized leader in the development of modern effective treatment of this potentially crippling affection of the adolescent hip.

Research

Almost every member of the staff is busily and happily (we trust) engaged in one or more clinical or laboratory studies. Dr. Brown's laboratory work on the dynamics of the lumbar spine is beginning to produce valuable new information with definite clinical implications.

Drs. Norton and Brown have completed an investigation of the immobilizing effect of various braces, corsets, and casts on the lumbo-sacral spine. None of the standard supports tested effectively restricted motion of the lower lumbar spine on the sacrum. They have designed and built a new type of brace which, on preliminary clinical tests, is performing well.

The detection and evaluation of psychologic factors in somatic disease is still very much of an art. A recently completed cooperative study[2] made on patients with low-back pain by a team from the Psychiatry and Orthopedic Departments sheds some new light on this important and difficult problem.

Dr. Elliott B. Sweet, on completion of his assistant residency, accepted a fellowship established by Arthur Godfrey to study arthroplasty of the hip and to evaluate the end-results of various techniques as used to alleviate the common hip disabilities. This critical and statistical study of the MGH end-results complements the pioneering work of Dr. M. N. Smith-Petersen and of his associates in the field of hip arthroplasty.

It may come as something of a shock to the reader that surgical materials designed to be left permanently within the human body are not routinely tested for their biological properties and physical fitness of design. In fact, there are essentially no recognized standards to help the surgeon in deciding on a proper choice of implant materials. This should be a matter of great concern to surgeons, manufacturers of surgical implants, hospital purchasing agents, liability insurance companies, and, in fact, to everyone who has been or may be a surgical patient. A Joint Committee for the Study of Surgical Materials, with representatives of the American Medical Association, the American College of Surgeons, and the American Academy of Orthopedic Surgeons, has studied this problem and has published a report in which it is recommended that "a new organization be set up for the purposes of research, development of standards, testing, evaluation of products, and provision of an information service—all in the field of surgical materials". The Committee recommendations have met with great approval except for the A.M.A., whose counsel has raised various legal questions which must be resolved by the Federal Trade Commission and the Department of Justice. We trust that patience, fortitude, and hard work will bring success to this important undertaking.

I cannot close without mentioning by name our two Senior Residents—Dr. Joe Tanner and Dr. Tom DeLorme, and our always faithful Mrs. Fritz of the Social Service Department, whose skill and devotion to duty have contributed so much to the smooth functioning of our Service during 1954.

This report has omitted much that would be of interest. We realize that there is always room for improvement, but we are proud of our past achievements and face the future with confidence.

Joseph S. Barr, M.D.,
Chief of Orthopedic Surgery

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2. Brown, T., Nemiah, J. C., Barr, J. S., and Barry, H., Jr.: Psychologic factors in low-back pain, New England J. Med. 251: 123-128 (July 22) 1954.
3. Barr, J. S., et al.: Report of the Joint Committee for the Study of Surgical Materials, J. Bone & Joint Surg. 36 A: 411 (April) 1954.

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The first "Videclinic"—a special closed-circuit television program to bring the advances in medicine to physicians quickly — was presented coast to coast on Wednesday evening, February 9, by the American Medical Association, in cooperation with the Smith, Kline and French Laboratories of Philadelphia. The televised scientific conference on "The management of coronary artery disease" was viewed by 18,000 physicians in 31 cities from coast to coast. The Massachusetts Medical Society cooperated in the Boston arrangements for a capacity audience of doctors in the Ballroom of the Hotel Statler.

Outstanding heart specialists from various parts of the country appeared on the program to give live and filmed clinical reports of their work in coronary disease. Dr. Paul D. White, our Consultant in Cardiology, participated in the program and presented eight patients in our Ether Dome. Others from Boston who took part in the scientific discussions were Dr. Howard B. Sprague, Physician on our staff and Clinical Associate in Medicine at Harvard University, and Dr. Frederick J. Stare, Chairman of the Department of Nutrition at the Harvard School of Public Health.

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New addresses:—

Dr. William P. Boger (a.r.p. 1942), Box 236, West Point, Pa.
Dr. Leland C. Brannon (a.r.s. *N.S.* 1954), Veterans Administration Hospital, 150 South Huntington Ave., Jamaica Plain, Mass.
Dr. Burdick G. Clarke (*E.M.* 1943), Pratt Diagnostic Clinic, 171 Harrison Ave., Boston 11, Mass.
Dr. Julie S. Crocker (a.r.p. *An.* 1954), Peter Bent Brigham Hospital, 721 Huntington Ave., Boston, Mass.
Dr. Henry Fuller (*W.M.* 1929), 210 Hibriten Way, Lakeland, Fla.
Dr. Frederick C. Goetz (*M.* 1947), University of Minnesota Hospitals, Minneapolis 14, Minn.
Dr. Richmond Holder (*M.* 1945), 274 Commonwealth Ave., Boston, Mass.
Dr. William N. Jones (a.r.s. *Or.* 1954), Worcester City Hospital, Worcester, Mass.
Lt. David J. L. Luck, MC, USAF (*M.* 1954), School of Aviation Medicine, PAMC 55a, Box #1, Randolph Air Force Base, Tex.
Capt. Federico Mora, MC, USAF (*M.* 1951), 3700th U. S. Air Force Hospital, Lackland Air Force Base, San Antonio, Tex.
Dr. John D. Reeves, Jr. (r.p. *R.* 1951), Radiation Branch, National Cancer Institute, Bethesda 14, Md.
Lt. Edwin W. Salzman, MC, USAF (*S.* 1954), WADC Area B, Box 8791, Wright-Patterson Air Force Base, Ohio
Dr. James M. Shannon (*S.* 1948), Salem Hospital, Salem, Mass.

OFFICIAL NOTICE

PHARMACY

It has been the practice in this Hospital for many years to use tetanus toxoid, alum-precipitated, for immunization against tetanus. This was predicated on the concept that three doses of fluid toxoid were necessary to provide the same protection as two doses of alum-precipitated toxoid. This concept was based on comparative antitoxin titer response in animals, using fluid toxoid and alum-precipitated toxoid. Animal experiments, using mice, indicated that about thirty times more fluid toxoid than alum toxoid was required to induce 50% immunity to challenge with toxin. Antitoxin production in guinea pigs indicated about a hundred-fold difference in potency.

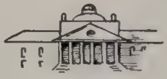
Because the State Biological Laboratory has distributed only fluid tetanus toxoid, it has been necessary to purchase the alum-precipitated toxoid from pharmaceutical houses. It is interesting to note that during 1953 and 1954 it was necessary to charge patients receiving this toxoid approximately $5,000.

Recently, however, Ipsen[1] demonstrated with human subjects that there is no significant difference between response to alum-precipitated toxoid and to fluid toxoid, and that two injections of fluid tetanus toxoid will confer ample basic immunity.

Accordingly, the Pharmacy will dispense, without charge to patients, fluid tetanus toxoid obtained from the Division of Biologic Laboratories, Commonwealth of Massachusetts, unless a physician insists upon the alum-precipitated toxoid. Also, the Pharmacy will provide, primarily for adult use, fluid tetanus and diphtheria toxoids, combined. This should be the preparation of choice when adults are to be immunized against tetanus, because immunity against diphtheria will be maintained at the same time.

John T. Murphy,
Pharmacist-in-Chief

(1) Ipsen, J.: Immunization of adults against diphtheria and tetanus, New England J. Med. 251: 459-466, 1954.



The Board of Trustees, at their meetings on January 14 and 28, voted:

To accept with regret the resignation of Dr. Lucie Jessner as Psychiatrist, effective April 15;

To accept with regret the resignation of Dr. Joe V. Meigs as Chief of the Gynecology Service, effective June 30, and to appoint him Consulting Visiting Surgeon, effective July 1.

To appoint:

Dr. Robert D. Breer as Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. John G. Freymann as Assistant in Medicine, effective as of November 1, 1954;

Dr. Theodore J. Haywood as Assistant Resident (exchange resident) on the Children's Medical Service, for the months of January and February;

Dr. Justin R. Hüppe as Resident in Radiology, beginning April 1;

Dr. John W. Keller as Assistant in Medicine, effective as of January 1;

Dr. Susanne J. Lamdin as Assistant Resident in Anesthesia, beginning September 1;

Dr. Thomas C. Leinbach as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. Robert S. Richards as Second Assistant Resident in Radiology, beginning July 1.

The Trustees also voted:

To increase the quota of Interns on the Medical Service by four for 1955, making a total of 16 Interns;

To increase the quota of Assistant Residents on the Surgical Service by one for 1955, making a total of 24.

At their meetings on December 15 and during January, the General Executive Committee voted:

To reappoint:

Dr. Robert S. Adams as Clinical Fellow in Psychiatry, for six months, beginning January 1;

Dr. N. Joel Ehrenkranz as Clinical and Research Fellow in Medicine for one year, beginning January 1;

Dr. Franz S. M. Herbst as Clinical and Research Fellow in Dermatology, beginning March 1;

Dr. Andrés Rosselli as Clinical and Research Fellow in Neurology for one year, beginning February 1;

Babette S. Whipple, Ph.D. as Research Fellow in Psychology, for the period January 2 through May 15.

To appoint:

Dr. Albert I. C. DeFriez as Clinical Assistant in Medicine, with the privilege of assisting Dr. Charles L. Short in the Baker Memorial and Phillips House;

Dr. Jean P. Fabre as Clinical Fellow in Medicine, for the period February 1 through June 30;

Dr. Sung J. Liao as Clinical Fellow in Physical Medicine, beginning March 1;

Dr. Olle G. A. Lundskog as Senior Fellow in Anesthesia, for a period of six months, beginning approximately February 1;

Dr. Carl V. Reichman as Graduate Student Assistant in Surgery, for a period of nine months, beginning January 3;

Dr. Arthur H. Shears as Clinical Fellow in Physical Medicine, beginning July 15;

Dr. Samuel J. Sunnenblick as Graduate Student Assistant in Surgery, for a period of nine months, beginning January 3;

Dr. Felix S. Vecchione as Clinical Fellow in Psychiatry, for a period of six months, beginning January 3.

* * *

THE RETINA FOUNDATION

It seems that in the last two decades, clinical centers have become increasingly propitious ground for the development of basic research. The fundamental reasons for this may be threefold. First, many of the diseases on which research is now focused cannot be investigated adequately in laboratories deprived of close hospital connections. Secondly, both the basic research workers and the research-minded clinicians derive immense stimulation from cooperative work. Thirdly, a very alert and productive research staff is indispensable to a forward-looking teaching hospital. It is its best advertising agency, it offers a more stimulating atmosphere to residents and students, and it attracts problem patients to the hospital. The last factor becomes increasingly important to help balance the teaching hospital's budget.

The following paragraphs describe another case of successful symbiosis between basic and clinical research connected with a hospital.

Origin and development

In 1948, the Massachusetts Eye and Ear Infirmary established a special clinic called the Retina Service. All cases suspected of retinal detachment were sent to this clinic for examination and advice as to treatment. The number of patients referred increased rapidly, and improvements in the diagnosis and treatment of retinal detachment resulted in an increase in the percentage of reattachments of the retina from about 45 to over 70 percent.

It soon became apparent that, despite the number of successful operations, the lack of data about the formation, structure, and metabolism of the vitreous body was retarding further progress in the treatment of retinal detachment and of other conditions. For instance, shrinkage of the vitreous body was recognized as an important cause of breaks in the continuity of the retina and, subsequently, of retinal detachment; but there were no clues as to the possible causes of the retraction of the vitreous gel *in vivo*. In order to find the answer to this and other related problems, it was decided that a program of basic research should be instituted. The Retina Foundation was created in April 1950, by Dr. Schepens, to carry out the program; this was made possible through the assistance of a few good friends, such as Mr. Ralph Lowell and Dr. Trygve Gundersen.

The Foundation purchased a tenement house at 30 Chambers Street, and proceeded to raise the funds necessary for the equipment of laboratories. Through the good offices of the Foundation's president, Dr. Paul Boeder, we received an electron microscope, light microscopes, and other equipment on loan from the American Optical Company. The late Mr. C. J. Maney, a former retina patient and a prominent Boston contractor, donated the remodeling of the Foundation building into laboratories.

The creation of the Retina Foundation actually resulted from the renewed interest of the clinicians at the Retina Service in problems connected with the retina and the vitreous body. The success of the project was entirely dependent upon the solution of an arduous problem: to gather a team of basic research workers who would fit into this program.

In December 1950, Dr. Endre A. Balazs came over from Sweden, where he had been working at the Karolinska Institute for the previous four years. His first duties were to help plan and supervise the remodeling of the Foundation's tenement house into laboratories, and to organize the first basic research unit of the Foundation—the Biochemistry Laboratory. Dr. Balazs also actively participated in the formulation of plans for future research activities.

In 1951, thanks to Dr. Dunphy's interest in our young organization, it became affiliated with the Massachusetts Eye and Ear Infirmary and the Department of Ophthalmology at the Harvard Medical School. The remodeled Retina Foundation building was dedicated on May 16, 1951, and on the same day, the Foundation learned that it had been awarded grants from the Kresge Foundation and the Hyams Trust, for a total of $62,700.

In July 1951, Dr. Marie A. Jakus left the Department of Biology of the Massachusetts Institute of Technology to join the Foundation's research staff and organize a laboratory for electron microscopy. At the same time, Dr. Fritz Wachendorf, a physicist interested in optics, arrived from Germany to head a three-year lens computing program at the Foundation. In September 1951, Dr. Laszlo Varga, who was Research Associate at the Department of Biology of the Massachusetts Institute of Technology, joined the Foundation's staff as a part-time investigator in the Biochemistry Laboratory; in collaboration with Dr. Balazs, he set up a program in physicochemical research. During the spring of 1952, Dr. Balazs organized laboratories for tissue culture and for radioactive isotope work. In the same year, two members of the Massachusetts General Hospital research staff became consultants to the Foundation: Dr. John Gergely and Dr. Gordon L. Brownell, in protein chemistry and nuclear physics, respectively. In July 1953, Dr. Arthur Howe, a biochemist from Yale University, and in January 1955, Dr. Natalie Mayer, a chemist from New York University, joined Dr. Balazs's team.

From the start, visitors from abroad have come to work with us for periods of time ranging from two months to two years. Among them are both basic scientists and clinicians who are interested in a fundamental approach to clinical problems: Dr. Antonio Grignolo, University of Parma (Italy); Med. Kands. Torvard Laurent and Ulla Helsing Laurent, and Miss Ann-Marie Allgoth, Karolinska Institute, Stockholm (Sweden); Dr. Carl Erik Zimen, Chalmers University of Technology, Göteborg (Sweden); Dr. Claes-Henrik Dohlman, University of Lund (Sweden); Dr. J. A. Szirmai and Dr. P. H. Mars, University of Leiden (Holland).

Parallel to this rapid expansion of our basic research, clinical research was developed, though on a more modest scale because it had to be tailored according to the space made available at the Massachusetts Eye and Ear Infirmary. Dr. Ichiro D. Okamura joined our clinical unit in November 1952, to perform research related to retinal detachment and to abnormalities of the vitreous; and in September 1954, Dr. Robert J. Brockhurst started a study of certain aspects of uveitis.

The Retina Foundation, not quite five

years old, has a staff of twenty-eight. The investigators are helped by the following ten research assistants: D. M. Bunney, B.S., M. C. Ciampa, M.S., A. E. Collins, B.S., E. A. Eckl, B.A., A. F. Feldman, H. T. McCarthy, B.S., R. E. McGovern, B.A., A. M. O'Rourke, A.B., M. T. Shannon, and M. G. Tobin, B.S. In addition, the investigators receive assistance from the Foundation's two instrument makers—Robert Thompson and Carl Nyholm.

As our organization is unendowed, we have to raise our yearly budget of $150,000 ourselves, through Federal agencies, private foundations, former patients, and friends.

Research activities

Unity in the activities of the Retina Foundation is fundamentally achieved by their orientation toward investigation of connective tissue. From a clinical standpoint, connective tissue in the eye plays a role of immense importance: it controls the transparency of the cornea and vitreous, and its disturbance is an important factor in the etiology of retinal detachment, uveitis, retrolental fibroplasia, and many degenerative conditions of the choroid and retina. Observation in the living eye of certain early alterations of connective tissue metabolism seems possible and deserves further study, as it may help elucidate problems of general importance in collagen diseases. The Foundation's present activities are carried out in four units: a laboratory for biochemistry, for fine structure, for tissue culture, and a clinical research unit.

The research training of Dr. Balazs and his team covers a wide field: biochemistry, physical chemistry, immunology, histochemistry, and experimental cytology. The cooperation and teamwork, on parallel projects, between investigators representing different scientific disciplines, form the basis of our *modus operandi.* The subjects for investigation are selected from four general fields of connective tissue research: the chemical composition of extracellular substance, the formation of mucopolysaccharides, the physicochemical properties of mucopolysaccharides, and the interaction between the ground substance and connective tissue cells.

An extensive study has been made by this group on the chemical structure and formation of the vitreous body, with emphasis on the hyaluronic acid, ascorbic acid, and protein content. The formation of the vitreous and the changes in its chemical composition were studied in cattle embryos and in calves (Balazs, T. Laurent, and U. Laurent). Electrophoretic and ultracentrifugal studies were made on the liquefied vitreous body (Varga and Balazs). Certain gel properties of the vitreous body are currently studied (Varga). Years ago, Drs. Balazs and Laurent observed that mucopolysaccharides are easily destroyed by ultraviolet light. Further investigation of the radiation effect on mucopolysaccharides has been initiated in Dr. Balazs's laboratory along two lines: (1) the effect of ultraviolet radiation on hexoses (T. Laurent); (2) the effect of ultraviolet light, x-rays, and cathode rays on the vitreous body—the simplest mucoid connective tissue—is now being studied by Dr. Howe. Investigations on the chemical composition of two other connective tissues—the corneal stroma and Descemet's membrane—were made in collaboration with Dr. Dohlman. Similar investigations are in progress on the mucoid tissue of the rooster comb. One of the most interesting components of the extracellular substance of the connective tissue is hyaluronic acid; the biosynthesis and physicochemical properties of this substance was investigated. An apparatus for radioactive carbon assay in gas phase was set up to facilitate the determination of C^{14} in small tissue samples or tissue components (Zimen, Brownell, Balazs). Incorporation studies of radioactive carbon-labeled glucuronic acid (a moiety of the hyaluronic acid molecule) in the developing vitreous and in the growing rooster comb are still in progress (Balazs, Szirmai, Mars). This group has an extensive interest in physicochemical studies of hyaluronic acid obtained from different connective tissues. The size and shape of this molecule were studied by means of a light-scattering method (Laurent, Gergely). The diffusion and sedimentation properties of hyaluronic acid are studied by Dr. Varga. Investigations are being carried out on the interactions between mucopolysaccharides and proteins or mucopolysaccharides and dye ions (metachromasia), by Drs. Balazs and Mayer. Quantitative tissue culture methods combined with cinephotomicrography are being used by Dr. Balazs to investigate the effect of mucopolysaccharides on the migration and mitosis of fibroblasts *in vitro.*

The laboratory for fine structure was established in order to investigate eye tissues. As Dr. Jakus had previously been interested in collagen, it was natural for her to start with a study of the cornea. After a suitable thin-sectioning technique had been worked out, the micromorphology of the different layers of the cornea was investigated, particular attention being paid to structural details not resolved by visible-light microscopes. Studies of the corneal epithelium, the stroma, the Descemet's membrane have already yielded fruitful results. Comparative studies of these structures in the adult are being carried out, as well as an investigation of their embryonic development. Parallel surveys of the sclera and of the lens have been begun and will be continued.

In the clinical research unit, there are three main areas of interest to Dr. Schepens and his team. The first is the improvement of methods for optical examination of the living eye. Instruments used for this purpose have not changed much for almost fifty years, probably because mathematical computation of new lens systems is a complicated and tedious process. High-speed computing machines have removed the tediousness by speeding up many phases of this computation. Dr. Wachendorf has been able to use the computing facilities of the Digital Computer Laboratory at the Massachusetts Institute of Technology, and of the Computing Unit of Dr. James Baker at the Harvard Observatory. Pilot models of new instruments are made at the workshop of the Retina Foundation under the guidance of our consultant in mechanical engineering, Mr. Charles V. Mahlmann.

The second area selected for clinical research is the improvement of surgical procedures for the treatment of retinal detachment. As this condition is caused by breaks in the retina, its cure depends entirely upon the surgeon's ability to detect and close the breaks. For the last twenty years, diathermy applications to the sclera overlying the retinal breaks have been used. In an effort to obtain better results, particularly in unfavorable cases, various methods for buckling the sclera and choroid, in the area of the retinal breaks, were developed by Drs. Schepens and Okamura, and proved successful. Experience gained with surgery of the sclera may open new possibilities, which are now being explored, for the surgical treatment of several other eye conditions.

The third area of activity in clinical research is a study of certain aspects of uveitis—one of the most frequent causes of blindness. During the last thirty years, investigation of infectious agents as possible etiological factors has been rather disappointing. Uveitis often resembles certain collagen diseases, and it seems probable that it may be caused by a complicated process in which the primary disturbance is localized in the perivascular connective tissue. The relationship between certain types of juvenile uveitis on the one hand and, on the other hand, rheumatic fever and rheumatoid arthritis in the young, are currently under investigation (Brockhurst).

Teaching is an important function of the Retina Foundation. In the laboratories for basic research, we have received a number of guests who came to familiarize themselves with special methods in biochemistry. Several members of our staff contribute to the teaching program of the Department of Ophthalmology at the Harvard Medical School. In the clinical field, young ophthalmologists have been trained and have later established retina clinics in their home cities, such as New York, Baltimore, San Francisco, Parma (Italy), Lyon (France), and Buenos Aires (Argentina). In April 1954, a fellowship was created by the Retina Foundation for the training of young ophthalmologists in certain aspects of clinical eye research, and in the diagnosis and treatment of retinal conditions. It was awarded to Dr. Silvio von Pirquet, from Austria, who joined our laboratories for one year.

At the joint meetings of the clinical and the research staffs extremely useful discussions are taking place; they have become a strong stimulus for original thinking amongst clinicians overburdened with urgent problems of patient care. In return, such contacts also remind basic research workers, in a vivid fashion, of the fundamental usefulness and importance of their work to patients.

During the second half of the 19th century, the investigation of the ophthalmoscope gave ophthalmology an era of enormous development, as it permitted the ophthalmologist not only to see blinding lesions, located behind the lens, but it also helped considerably in the diagnosis of systemic diseases—particularly vascular and intracranial conditions. Having marked time for nearly fifty years, is ophthalmology due for a comeback? New techniques have opened possibilities for research in areas where it is a distinct advantage to work with the eye. Probing by the Retina Foundation's staff into some of these areas has raised challenging problems, which cannot be adequately solved unless many other investigators become similarly interested. This would strengthen our effort and, we hope, help stimulate those research workers who explore the realms of connective tissue metabolism from other angles.

Charles L. Schepens, M.D.,
Director of the Retina Foundation

* * *

VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

Mrs. Edwin M. Cole was pleased to note the number of our visitors from other countries who came to take tea with the Staff Wives on January 18. There were physicians and their wives from the Mediterranean countries, the Near East, the Far East, South America, South Africa, Central America, and at least one representative from each of the European countries.

We wish to inform our foreign friends that the English Speaking Union offers the facilities of its organization to temporary British visitors and their families. They have teas once a month on Sundays, at 44 Commonwealth Avenue, and they hope that all British visitors will come. Also, there is the International Student Center at 33 Garden Street, in Cambridge. The activities there are many and varied—from ski trips to the nearby mountains to teas and suppers and interesting programs at the Center. In addition, there are classes in English, and the Americans can learn foreign languages.

Mrs. Cole wishes to express publicly her deep appreciation to Mrs. Soma Weiss and the staff of M.G.H., without whose generous cooperation none of these teas could be held—and so successfully.

The next tea will be on Monday, March 7, between four-thirty and six o'clock, in the Medical Staff Room of the Bulfinch Building. We hope to see all our old friends there, and many new ones.

Mrs. Richard H. Sweet of 27 Chestnut Street, Brookline, would be most grateful to receive household furnishings of any description—beds, tables, lamps, "white elephants", bottles to convert to lamps, chairs, couches—anything, in any sort of condition, that will help make a "home" for our physicians who are visiting from abroad. We will take mattresses, too, for we do them over, so that they are clean and fresh for our friends. The condition of the furniture does not matter, as our visitors can restore them to a new—even but temporary—life.

If it is impossible for you to get any of these things to Mrs. Sweet's barn, arrangements can be made to pick them up.

We wish to emphasize especially that there is no charge for any of these household effects.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. Despite the fact that this request has been made in each issue of THE NEWS for over four years—ever since we started this column—some few authors still fail to include that information. Consequently, we have had to adopt the procedure of returning the report to the sender whenever the classification is not obvious.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

This is the last issue in which 1954 titles will appear.

The following new titles have been received:

Dentistry

Thoma, K. H.
Medical progress: Oral surgery.
New England J. Med. 250:603-607.

Thoma, K. H.
Treatment of condylar fractures.
J. Oral. Surg. 12:112-120.

Thoma, K. H.
Tumors of the condyle and temporomandibular joint.
Oral Surg., Oral Med., & Oral Path. 7:1091-1107.

Endoscopy

Benedict E. B.
Endoscopic aids in diagnosis.
J. Maine M. A. 45:285-289, 292.

Benedict, E. B.
Gastroscopy with biopsy: Differential diagnosis of carcinoma of the stomach.
Missouri Med. 52:23-25.

General Surgery

McDermott, W. V., Jr., Morgan, W. S., Hamlin, E., Jr., and Cope, O.
Cancer of the thyroid.
J. Clin. Endocrinol. & Metab. 14:1336-1354.

Riddell, A. G., Kopple, P. N., and McDermott, W. V., Jr.
The etiology of "meat intoxication" in the Eck fistula dog.
Surgery 36:675-684.

Sarnoff, S. J., and Cope, O.
The effect of atropine and scopolamine on the subsequent injection of epinephrine in thyrotoxic and euthyroid patients.
Anesthesiology 15:484-494.

Gynecology and Obstetrics

Green, T. H., and Meigs, J. V.
Pseudomenstruation from posthysterectomy vaginal vault endometriosis.
Obst. & Gynec. 4:622-634.

Ingersoll, F. M., and Meigs, J. V.
Lymph node dissection for carcinoma of the endometrium.
In Proceedings of the Second National Cancer Conference, 1952, New York, American Cancer Society, vol. 1, pp. 747-753, 1954.

Meigs, J. V.
Fibroma of the ovary with ascites and hydrothorax—Meigs' syndrome.
Am. J. Obst. & Gynec. 67:962-987.

Meigs, J. V.
Pelvic tumors other than fibromas of the ovary with ascites and hydrothorax.
Obst. & Gynec. 3:471-486.

Laboratory Science

Jeanloz, R. W.
Synthesis of 4-*O*-methyl-*beta*-D-galactopyranose and 2,4-di-*O*-methyl-*alpha*-D-galactopyranose.
J. Am. Chem. Soc. 76:5684-5686.

Jeanloz, R. W., and Gut, M.
Methyl 3-*O*-methyl-*alpha*-D-glucopyranoside and derivatives.
J. Am. Chem. Soc. 76:5793.

Jeanloz, R. W., and Stoffyn, P. J.
4-*O*-methyl-D-galactosamine hydrochloride (2-amino-2-deoxy-4-*O*-methyl-D-galactose hydrochloride).
J. Am. Chem. Soc. 76:5682-5684.

Stoffyn, P. J., and Jeanloz, R. W.
Identification of amino sugars by paper chromatography.
Arch. Biochem. & Biophys. 52:373-379.

Neurology, Neurosurgery, and Psychiatry

Farnsworth, D. L.
Mental health—Keystone to education.
J. School Health (Dec.) 1954.

Waksman, B. H., Porter, H., Lees, M. D., Adams, R. D., and Folch, J.
A study of the chemical nature of components of bovine white matter effective in producing allergic encephalomyelitis in the rabbit.
J. Exper. Med. 100:451-471.

Ophthalmology

Balazs, E. A.
Studies on the structure of the vitreous body: I. The absorption of ultraviolet light.
Am. J. Ophth. 38, pt. II:21-28.

Jakus, M. A.
Studies on the cornea: I. The fine structure of the rat cornea.
Am. J. Ophth. 38, pt. II:40-53.

Schepens, C. L.
Clinical aspects of pathologic changes in the vitreous body.
Am. J. Ophth. 38, pt. II:8-21.

Varga, L., and Balazs, E. A.
Studies on the structure of the vitreous body: II. Electrophoretic and sedimentation properties.
Am. J. Ophth. 38, pt. II:29-37.

No. 53 in a series of Staff photographs
Mr. Joseph W. Degen, Assistant Director

Otolaryngology

Kelemen, G.
The tonsils in advanced age.
Eye, Ear, Nose & Throat Monthly 33:723-726.

Pediatrics

O'Keefe, E. S.
Cortisone and desensitization in allergic conditions—Infantile eczema.
M. Times, New York 82:861-864.

O'Keefe, E. S.
Cortisone and desensitization in infantile eczema.
Irish J. M. Sc., Nov. 1954.

O'Keefe, E. S.
Diarrhea in infancy: The importance of a high calory diet in the treatment of diarrhea in infancy.
M. Times, New York 82:241-246.

* * *

It took a good deal of courage for us to ask Dr. Carl Binger if we might use another of his unpublished verses in The News. We happened to know of one of his poems that would be most timely for this season of the year, and we are very grateful to Dr. Binger for giving us his permission to publish it.

RESURRECTION

Through leafy mold these firstlings pierce with push of spring:
Skunk cabbage and fern.
Each living thing bespeaks its turn
In this harmonious procession.
All is amove in the earth.
While red-wings flash their signals in the air
And rabbits dart across the road,
Deep in his lair the whiskered woodchuck
Stretches out his cold and sleepy limbs
To scratch himself behind the ear
And catch the freshening of the year.

* * *

Brief bit:—

Dr. John W. Smillie (*E.S.* 1944), Assistant Professor of Ophthalmology at the Medical School, University of Michigan, writes us that he has been elected to Fellowship in the American Academy of Ophthalmology, elected to the Vestry of St. Andrew's Episcopal Church, and appointed to the faculty of Michigan's Horace H. Rackham School of Graduate Studies.

MASSACHUSETTS EYE & EAR INFIRMARY

The Annual Meeting of the New England Otolaryngological Society was held on February 9, in the Upper Amphitheatre of the Massachusetts General Hospital. Dr. LeRoy A. Schall presided over the morning Clinical Conference. Dr. Charles I. Johnson presided at the afternoon session, during which the guest speakers included Dr. Edley H. Jones of Vicksburg, Mississippi, who spoke on "An otolaryngologist does his own allergy"; Dr. J. Brown Farrior of Tampa, Florida, on "Provincial ear surgery"; and Charles R. Williams, Ph.D. of Boston, on "The legal and compensation aspects of industrial acoustic trauma".

On February 16, the meeting of the New England Ophthalmological Society was held at the Infirmary. The guest speaker at the afternoon session was Dr. C. B. Favour of Palo Alto, California, who spoke on "Bacteriological allergy of the eye". "An immunologist's approach to problems of ocular allergy" was the subject of Dr. Byron H. Waksman of the Massachusetts General Hospital — the evening guest lecturer.

During the week of February 21, Dr. Edwin B. Dunphy, Chief of Ophthalmology, was Visiting Professor in Ophthalmology at the University of Louisville School of Medicine, Louisville, Kentucky.

The Massachusetts Lions Eye Research Fund has awarded a fellowship of $4,000 to Dr. Rameshwar L. Pahwa for the further continuation of his studies of the retina and cornea. Dr. Pahwa has been working in the Howe Laboratory, and has recently entered the Retina Service.

Dr. Robert Gohd, Research Virologist at the Infirmary, took part in a symposium on February 11 and 12, at the National Health Institute in Bethesda, Maryland. This meeting was sponsored by the National Health Institute and the Common Cold Foundation.

Recent Staff changes:

Dr. Hugo D. Angelini, who completed his training at the Infirmary in 1951, has been appointed an Assistant in Otolaryngology.

Dr. Robert J. Herm, who has just completed his residency in Ophthalmology, will be working with Dr. David D. Donaldson in the Howe Laboratory for the next six months.

THE NEWS

No. 144 Boston, Mass. April 1955

VOLUNTEER DEPARTMENT

A woman of 45 strides purposefully through the doorways and corridors of the Massachusetts General Hospital and enters the office of the Volunteer Department. A student of 18, a man of 70, a woman who has a family, a member of a junior organization, a premedical student, secretaries, school teachers, and many others follow the same pattern. Age is irrelevant — it's spirit that counts.

What do all these people have in common? It is this: An interest in the welfare of this Hospital and its patients, and a desire to give a definite amount of their time in service for others. Above and beyond the hours they serve, they bring to the Hospital the warmth of community life, and to the patients and the Hospital personnel the feeling of family, friends, and home.

The foresight and pioneering direction of the Ladies' Visiting Committee, back in 1869, provided the impetus for this most important Department. Although not formally organized until 1941, it had its early beginnings in 1905 in the Out-Patient Department. The opportunities for volunteer service have vastly changed from the days when the primary idea was to bring care and comfort to the individual patient at the bedside. Today the manifold indirect services which are so necessary in maintaining ideal patient care are of inestimable value.

The purpose of the Volunteer Department is threefold:

1. To supplement the activities of the regular Hospital staff by releasing professional personnel from duties that do not require professional training, thus increasing effective and broadening service to the patient.
2. To augment services to staff and patients which would otherwise be impossible through the routine program and budget of the Hospital.
3. To further the public relations of the Hospital through the message which an active, informed, and satisfied volunteer will carry to others.

Throughout the year there has been an increasing appreciation and understanding of volunteer services. As a result, many new areas have been opened for volunteer work.

The following comparative statistics are of interest:

Year	No. of Volunteers	Hours	Areas
1916	70	12,050	4
1938	85	12,834	7
1950	497	45,180	18
1954	475	48,146	25

There are 34 Volunteers who have served this Hospital for over 5 years; 21 for over 10 years; and 83 completed 100 hours or more this year.

The following educational institutions send Volunteers to us — some of them on a field-training level:

Harvard University
Radcliffe College
Boston University
Simmons College
Tufts College
Bouve School
Bennington College
Garland Junior College
Wheelock College
Wellesley College

Volunteers also come through the Boston Chapter of the American Red Cross and the Junior League of Boston, Inc. Many other individuals are recruited by our own Volunteers and the Hospital personnel.

In picturing the hospital Volunteer at work today, one realizes that planning is a basic prerequisite to effective volunteer service. Thorough indoctrination, observation, on-the-job training, and supervision equip the Volunteers to carry out their responsibilities toward meeting present hospital needs. There are approximately two million hospital beds in the United States. Without the many thousands of volunteers who are regularly giving their time and acquired skills, hospitals could not approach the degree of ideal patient care achieved today.

Here at the M.G.H., the mutual respect between the personnel and the Volunteers has made our record of 85 years of service possible. No matter how small his service might appear to the Volunteer at times, it is the sum total of all these services, contributed *when needed,* that is more than compensating.

VOLUNTEERS ARE HERE TO MAKE TIME LIVE.

Mary Ruth Wolf,
Director of Volunteer Unit

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The Staff Wives are proceeding with their plans to open the Reception Center for the professional visitors to the Hospital—not only for visitors from foreign countries, but for those from other parts of the United States.

A letter will soon go out to each member of the Staff Wives, explaining in detail the plans for the Reception Center, which will be manned by volunteers.

Through the Reception Center the Staff Wives hope to coordinate their efforts toward providing housing hospitality and furniture for the furniture exchange for our visitors from foreign shores.

The Annual Meeting of the Staff Wives will be held on May 3, at 10 A.M., in Bartlett Hall.

* * *

Drs. Benjamin Castleman and Fritz Lipmann were recently elected to the Alpha Omega Alpha Honor Medical Society by the students of the Harvard Chapter.

* * *

The 25th Anniversary of the opening of the Baker Memorial was observed on Thursday, March 3. Some 250 members of the Hospital's staff and employees enjoyed morning coffee and a birthday cake in the Baker Lounge from 9 to 11 o'clock.

The honored guests were Dr. W. Franklin Wood, Director of McLean Hospital, Mrs. Helen H. Cushing, Miss Helen M. Daly, Mr. William J. MacNair, and Miss Walborg L. Peterson, now at the Massachusetts Eye and Ear Infirmary —all of whom were working in the Baker Memorial at the time it was opened and who are still associated with the Massachusetts General Hospital or its affiliates.

Patients were included in the celebration. Birthday card announcements and miniature cakes decorated with the traditional silver brightened their dinner trays.

The Baker Memorial was made possible through the generosity of many friends. Its chief benefactor was Mrs. Mary Rich Richardson who died in 1924. Mrs. Richardson's will provided $1,000,000 to establish a hospital for people of moderate means, as a memorial to her father and mother, Mr. and Mrs. Richard Baker, Jr.

The Board of Trustees, at their meetings on February 18 and March 4, voted:

To accept the resignation of Dr. Theodore L. Badger and to appoint him to the Board of Consultation;
To accept the resignation of Dr. John F. Gibbons, Assistant Radiologist, effective April 2;
To accept the resignation of Dr. Thomas A. Warthin, Assistant Physician;
To grant Dr. Edwin O. Wheeler, Assistant Physician, leave of absence for a period of two years, for service in the U. S. Public Health Service;
To grant courtesy privileges to Drs. Louis I. Skirball, Channing S. Swan, and Roy R. Wheeler.

To appoint:

Dr. Tucker A. Barth as Assistant Resident on the Orthopedic Service, beginning January 1, 1956;
Dr. William R. Blade as Second Assistant Resident in Radiology, beginning January 1, 1956;

Herman DeWilde, D.M.D. as Assistant Dental Surgeon;

Dr. David Gitlin as Assistant to the Children's Medical Service;

Dr. Robert L. Kirkpatrick as Assistant Resident in Surgery, to serve in Baker Memorial and Phillips House from April 1 through June 30;

Dr. Frederick S. McAlpine as Assistant Resident in Anesthesia, beginning July 15;

Dr. Murray E. Pendleton as Assistant to the Children's Medical Service;

Dr. John D. Reeves, Jr. as Assistant Radiologist, beginning April 2;

Dr. Ernest A. Sneddon as Clinical Associate in Anesthesia;

Dr. Mark McN. Walter, Jr. as Assistant in Psychiatry at McLean Hospital.

The Trustees also voted:

To establish the position of Second Assistant Resident on the Children's Medical Service for physicians who have had an internship but who are serving their first year on the Children's Medical Service.

At their meetings on February 16 and 23, and March 9, the General Executive Committee voted:

To promote:

Dr. Richard C. Austin to the position of Resident in Surgery, beginning July 1.

To reappoint:

Dr. John W. Littlefield as Clinical and Research Fellow in Medicine for one year, beginning March 1;

Mr. Thomas F. Lohr as Research Fellow in Anesthesia for one year, beginning February 1;

Dr. Dieter M. Schmid as Research Fellow in Medicine for one year, beginning February 1.

To appoint:

Mr. James U. Casby as Research Fellow in Anesthesia, beginning April 1;

Dr. Oscar Crocker as Graduate Student Assistant in Surgery, effective as of February 1;

Dr. Raymond N. Kjellberg as Clinical and Research Fellow in Neurosurgery, for the period March 1 through June 30;

Dr. Harry H. Korrodi as Clinical Fellow in Medicine, effective as of the date when he obtains a temporary license;

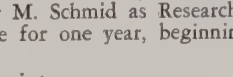
Dr. Luis Landa as Clinical and Research Fellow in Medicine for one year, beginning March 1;

Dr. Munir H. Shamma'a as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Richard Thors as Clinical and Research Fellow in Surgery, effective as of February 5.

The General Executive Committee also voted:

That the title of Dr. Bryan Williams, Jr. be changed from Clinical Fellow in Medicine to that of Clinical Assistant in Medicine, effective as of March 1.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. Again this month, and despite the fact that this request has been made in each issue of THE NEWS for over four years — ever since we started this column — several authors still failed to include that information.

Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Dermatology

Lever, W. F., Herbst, F. S. M., and Hurley, N. A.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. IV. Effects of prolonged administration of heparin on serum lipids in idiopathic hyperlipemia.
A.M.A. Arch. Dermat. 71:150-157.

Lever, W. F., Herbst, F. S. M., and Lyons, M. E.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. V. Analysis of serum lipoproteins by means of ultracentrifuge before and after administration of heparin.
A.M.A. Arch. Dermat. 71:158-171.

Gynecology and Obstetrics

Graham, J. B., and Graham, R. M.
The curability of regional lymph node metastases in cancer of the uterine cervix.
Surg., Gynec. & Obst. 100:149-155.

Graham, R. M., and Goldie, K. R.
Prognosis in irradiated cancer of the cervix by measurement of cell size in the vaginal smear.
Cancer 8:71-77.

Graham, R. M., and Graham, J. B.
Cytological prognosis in cancer of the uterine cervix treated radiologically.
Cancer 8:59-70.

Laboratory Science

Schmid, K.
Isolation of a group of alpha_2-glycoproteins from human plasma.
J. Am. Chem. Soc. 77:742-745.

Neurology, Neurosurgery, and Psychiatry

Bakay, L.
Studies on blood-brain barrier with radioactive phosphorus. V. Effect of cerebral injuries and infarction on the barrier.
A.M.A. Arch. Neurol. & Psychiat. 73:2-12.

Benda, C. E.
The role of neuropathology in modern anthropology.
J. Neuropath. & Exper. Neurol. 14:1-10.

Benda, C. E., and Mann, G. V.
The serum cholesterol and lipoprotein levels in mongolism.
J. Pediat. 46:49-53.

Ophthalmology

Murphy, J. T., Allen, H. F., and Mangiaracine, A. B.
Preparation, sterilization, and preservation of ophthalmic solutions: Experimental studies and a practical method.
A.M.A. Arch. Ophth. 53:63-78.

Pathology

Collins, H. D., and Dudley, H. R.
Agammaglobulinemia and bronchiectasis: A report of two cases in adults, with autopsy findings.
New England J. Med. 252:255-259.

Urology

Leadbetter, W. F.
The treatment of prostatic cancer.
Modern Med. 23:83-89.

EMOTIONAL FACTORS IN CHILDREN WITH BURNS

During the past year the Surgical Service and the Child Psychiatry Unit have collaborated in a pilot study of emotional factors in the care and management of children hospitalized with burns. Prior to this study, the Surgical Service had been impressed with the psychological factors in severely burned persons during their course of hospitalization. In some patients there were marked and sudden personality changes in the acute stages of the burn injury. This interest of the Surgical Service was shared by the Child Psychiatry Unit, where we had been studying the reactions of children to hospitalization and chronic illness. In line with this interest, several children with severe burns had been observed in the past. A review of these burn cases gave some orientation for the present study.

In January 1954, an attempt was made to study every child admitted to this Hospital because of a burn. Twelve burn children have been studied currently. Six have been seen on an intensive basis, and the remaining six were seen only for psychiatric evaluation. Concurrently with the study of the children, the mothers were seen by a social worker who obtained information on:

1. The family background
2. Developmental history of the child
3. Details concerning the burn accident

The following case report illustrates the nature of the case material and the method of study.

Tom was a fifteen-year-old boy, admitted with third degree burns on the left side of his face and left arm. The circumstances surrounding the burn accident were: Tom, who has had epilepsy since age four, had a nocturnal epileptic attack and awoke to find his bed wet. He spread his pajamas on a radiator to dry, but had another "spell", during which his face rested for a few minutes against the hot steam radiator. He was taken to the local hospital, but on the following day was transferred to M.G.H., as it was apparent that skin grafting would be necessary. On the day before this episode, his mother had been admitted to the same local hospital for ligation of varicose veins.

From the beginning of hospitalization, Tom had certain behavioral traits which at first only slightly, but later to a significant degree, seriously hindered his recovery. He was overly independent, suspicious, stubborn, and belligerent. He also had a nervous habit of picking at his face, especially around and underneath the edge of his bandage, with apparent disregard for the underlying wound.

During the next month and a half he underwent three skin grafting procedures. His behavior during this time became increasingly belligerent toward nurses and other patients. He threatened to kill one nurse. He tried to tear his bandage from his face on the day after one operation, and continually picked at the underlying wound. At the end of three grafting procedures there had been little successful take. His lower eyelid was forming a marked ectropion and his lip was drawn upward. At this point Tom had antagonized almost everybody. His interpersonal relationships were characterized by marked hostility, with strong self-destructive trends. To understand this, some knowledge of his background is necessary.

Tom lived at home with his mother, age thirty-five, and younger brother, age eleven. When Tom was two, an eight-months-old sister died. At the age of four a brother was born, following which his epilepsy started. When Tom was eight his father abandoned the family and went to live with another woman. At first he would see his father once or twice a year, but has not seen him for the past two years. After his father left, Tom became a behavior problem. He was seen infrequently at a child guidance center because of aggressive behavior toward his mother, as well as for his epilepsy.

In his psychiatric interviews Tom was initially suspicious and depressed, and he kept the therapist at a distance. He gradually talked more freely, spoke of his father, who had left five years ago, and of his mother, who was in the hospital.

In subsequent interviews he told with great feeling about his parents' divorce. He felt caught in the middle, wanting to like both parents and not wanting to take sides. When Tom went to the operating room for grafting procedures, his therapist went with him and remained until he was under anesthesia. He talked in a very anxious way about his absent father, and about his mother, who was in a hospital, too. He said that his real trouble was with his "spells" — his spells would kill him some day. After the second operation he said that he felt his burn was caused by a faint and not a spell. He said that he had ideas in his head that hurt him and he could not stand it to have these ideas, but he would not elaborate. He spoke also of several times when he had run away from home. He said angrily that his mother would never tell him where his father was, yet if he wrote a letter to him she would see that it was mailed. Tom felt her to be a censor in his relationship with his father. Periods of depression, with poor food intake, became more prominent.

At this point, because of the failure of three grafting procedures, a conference was held between the surgeons, pediatricians, and psychiatrists. It was felt that destructive trends in Tom's personality drove him to destroy the operative result. Feelings of guilt in Tom derived from his intense hostility toward his mother, and this hostility he redirected toward himself through destruction of the grafts. This was repeatedly interpreted to him. Following this conference a fourth operation was quite successful, due to Tom's insight, more understanding of Tom's problems on the part of hospital personnel, and to the special arrangements which were made to have his mother present on the day of the operation. On the third day after this operation, his mother visited here with a man who was a stranger to Tom. Although he had been unusually calm, on this day Tom became aggressive, refused to stay in bed, and began picking at his bandage. When questioned on this by his therapist, Tom asked, "Is this the way you mean I punish myself and destroy the grafts?"

Following discharge from the Hospital, Tom was seen approximately once per month. His hostile aggressive behavior toward his mother continued, and reached the point where placement outside his home seemed necessary. He has returned to the Hospital twice for further plastic procedures, but was in no way the behavior problem he had been earlier.

DESCRIPTION OF CASE MATERIAL

The clinical cases consist of eighteen burned children — twelve cases seen currently and six seen in previous years. Sixteen of the patients are boys and two are girls. The range in age is from nine months to seventeen years, with the following age grouping:

0-4 years — 5 6-11 years — 4
4-6 years — 2 11-17 years — 7

The severity of the burns varied from small minor burns, admitted only because of secondary infection, to major third degree burns involving large body areas, in which there was a serious threat to life. In thirteen cases, at least one, and often several, skin grafting procedures were necessary. The period of hospitalization varied from five days to fifteen months, with ten of the cases being hospitalized for a month or longer.

On the basis of psychiatric evaluation of the family unit and the child, the cases have been divided into three groups. The first subgroup, consisting of eight cases, is characterized by little or no evidence of serious emotional disturbance either in the family or in the child. The second subgroup of four patients is characterized by significant abnormalities in the family group, but with too little information regarding the personality of the child to make an adequate assessment of the adjustment. The third subgroup of six cases is characterized by significantly abnormal personality traits in the child which antedated the burn accident, and which often interfered with his medical and surgical management. In this last group there is also a disturbed family background.

In Group I, both parents were present in the home, and their marriage appeared to be stable.

In Group II, the period of hospitalization was too brief for intensive study, but evaluation interviews showed a family broken by death, desertion, or divorce. One twelve-year-old boy was admitted with a small third degree burn on his right arm where he had dropped some molten lead prepared for making a "Bull's Head" — an instrument used to wrap around one's knuckles in a fight. In the Emergency Ward he was anxious and afraid. When encouraged to talk, he broke into tears and said his father had died in this Hospital five years ago. Throughout this boy's hospital stay he referred to doctors as "butchers" and to the Hospital as "a prison". Subsequently it was learned that the father had died five years ago at the Massachusetts General Hospital from cancer of the lungs. The father had remained at his home until the very terminal stages of his carcinoma, was in a depressed state, and at one point had tried to commit suicide by gas.

Another twelve-year-old boy was admitted with a small infected burn on the dorsum of his left hand. His father was in jail because of attempted murder. This had occurred when the patient was three, and he had learned all the facts about his father when he was seven. His family refused psychiatric help, feeling this would be an admission of insanity.

A two-year-old boy was admitted because of minor burns. He came from a family where the father had deserted, and where an older brother and sister were in a reform school.

A boy who had had a severe facial burn when he was five years old was seen at age seventeen because of anxiety symptoms and school failure. Although the intervening years and other conflicts had obscured the effect of the burn on his personality, he is included because after many years of discord his parents had been divorced when the patient was fifteen. The discord had existed at the time of his burn injury.

In this group of four cases it is felt that the three boys whose burns were of recent occurrence will have significant problems of adjustment in their later years.

In Group III, all had evidence of emotional disturbance prior to the burn. The detailed case report already given belongs to this group.

One thirteen-year-old boy was admitted to the Hospital as a transfer from another hospital where he had been for six months. Despite numerous grafting procedures, there were still large uncovered areas of skin. His burn occurred when his oil-soaked trousers were ignited from a fire where he was warming himself. Both of his parents were alcoholic and he had been taken from them by court order. At various foster homes he had shown marked aggressive and, at times, destructive behavior, with several episodes of stealing. The burn occurred when he had left a new foster home to visit a former home that he had liked better.

A five-year-old boy was admitted with a fifteen percent burn of the trousers area incurred while tramping out a brush fire which he and some other boys had set. His parents appeared to be stable persons, but the patient had shown a sudden change in his personality following the birth of a sibling, one year prior to admission. This consisted of temper tantrums, irritability, disobedience, and repeated playing with matches.

One twelve-year-old boy was admitted with electrical burns of his right arm and scalp, requiring a subsequent amputation of his arm. The accident had occurred in the following manner: After illegally entering a school and climbing to the roof where he had found a birds' nest with eggs, which he promptly rolled from the roof to the ground, he remembered another nest in a tower which supported high-tension wires. In climbing the tower he fell, landing on some of the wires, breaking his fall but burning himself severely. During his hospital stay, after amputation of his arm, and with full awareness of a defect in his skull, he became angry with his therapist during one interview and jumped on a chair, from there to the window sill, and thence to a rickety table — all with an air of carelessness, as if inviting another fall.

Another ten-year-old boy was admitted with a severe burn involving his legs and trunk up to mid-chest. The burn had occurred while playing with matches around an oil drum. This boy had played with matches for years, against his parents' advice. He was caught stealing on several occasions, and had been before the Youth Service Board for breaking and entering at the local library, where he had stolen some pictures and a viewer. There was considerable marital difficulty in the family. The father had a history of alcoholism and had been arrested several times.

A ten-year-old boy was admitted with third degree burns of both lower legs, incurred while playing with matches and gasoline. He is the second oldest of four children, with an older brother, and a younger brother and sister, age seven, who are twins. At the age of two and one-half, when the mother was pregnant with the twins, the patient set a fire in the kitchen while the family was asleep, causing the house to burn. At age six, a bottle he had thrown into a fire exploded, irreparably damaging his right eye. At eight, he set the woods behind his house on fire. His father was a disturbed person, and was intoxicated on the day the patient was admitted to M.G.H. When the father was a boy, he had been left in charge of his younger brother at the beach, and this brother had drowned. The father had apparently never forgotten this, as it was among the first remarks he made to the social worker. This patient's hospital course was unusual, in that he was such a good patient. He did not complain about the dressing changes or operative procedures, but rather, as one nurse observed, he seemed to enjoy them. When he fell out of bed once he remained uncomplaining on the floor, reading a comic book until discovered. In this case, though his need for punishment aided his recovery, it was indicative, in view of his past, of serious emotional disturbance. One would feel better about him had he complained more.

SUMMARY AND DISCUSSION

In this small number of cases an evaluation of the psychological findings relevant to the family unit and to the child resulted in the cases being divided into three subgroups.

Group I (8 children)

These cases are characterized by an intact family unit, with both parents demonstrating a degree of stability and maturity not found in parents of Groups II and III. There were no delinquent or other grossly abnormal personality traits in the child prior to the burn injury and, with the exception of one case, these children adjusted well to their hospitalization.

Group II (4 children)

These cases are characterized by too little information for adequate psychiatric evaluation. However, all these families were broken by death, desertion, or divorce of the father, and it is felt that these children will all have significant problems of adjustment in later life.

Group III (6 children)

This group is characterized by gross personality disturbance in the child prior to his injury. This included delinquent behavior, stealing, and fire-setting. In five of these cases their disturbed personality was a significant factor in managing their adjustment to the Hospital and to treatment procedures. In four of these cases there was severe disturbance within the family unit.

In bringing together the factors of a disturbed family group and emotional difficulty in the child, a causal relationship to the burn accident is not implied. Not all children of broken homes and with emotional difficulty do show this self-destructive tendency. Rather, one would think of a confluence of events, such as the birth of a sibling or pregnancy of the mother, in a family group where there is excessive interpersonal tension, and where the child is a vulnerable person in his having shown previous personality difficulties. It seems significant that, of these eighteen burned children, eight should come from seriously disturbed family groups and six should show predelinquent or self-destructive behavior. In view of this, it seems justified to raise the question with all children treated for burns: Is there a more serious situation in this child's family setting which has led, in part, to this burn injury?

Disturbed reactions to hospitalization and treatment deserve consideration. Though the cases are too few, reactions to hospitalization can be viewed as a spectrum. In the middle of the spectrum are the "normal" cases, where mild depressive reactions, anxiety, and infantile behavior are not uncommon. Such reactions are perhaps incident to separation from parents, as much as to the injury itself. There is moderate complaining and uncooperativeness toward treatment procedures, but with ultimate compliance for their own benefit.

At one end of the spectrum would be those cases obviously disturbed. These show moderate depression and feeding problems, with open aggressive, and at times assaultive, behavior toward personnel, and only slightly veiled or overt self-destructive acts.

At the other end of the spectrum would be those cases where, in their excessive compliance and goodness, they mask more deeply seated personality trends of self-punishment and passivity. Although treatment of their burns is thereby helped, deeper emotional conflicts may be left untouched unless they are recognized.

Robert T. Long, M.D.,
Assistant in Psychiatry

Brief bits:—

Dr. Walter S. Burrage participated in the conference on "Hydrocortisone, its newer analogs and aldosterone as therapeutic agents", sponsored by the New York Academy of Sciences, on January 26 and 27. His topic was "Hydrocortisone in the therapy of asthma". On February 7, Dr. Burrage presented a paper on "Cortisone or hydrocortisone in the treatment of severe, intractable asthma", at the 11th Annual Meeting of the American Academy of Allergy in New York. On March 8, Dr. Burrage addressed the Georgia Medical Society, at its Centennial Anniversary Meeting in Savannah. His subject was "Allergy in Medicine".

Dr. Benjamin Castleman addressed the Academy of Medicine of Cincinnati on February 15. His subject was "Clinico-pathological aspects of parathyroid disease".

Dr. Edwin F. Cave attended the Sectional Meeting of the American College of Surgeons in Cleveland on February 24, and lectured on "Fractures of the wrist" and "Meniscal injuries of the knee".

Dr. Fletcher H. Colby was elected President of the Clinical Society of Genito-Urinary Surgeons at their meeting in Richmond, Virginia, on February 4.

Dr. John W. Irwin spoke on "The use of intravenous hydrocortisone in asthma" at the January meeting of the New York Academy of Sciences.

Dr. Laurence L. Robbins has been elected to the Board of Chancellors of the American College of Radiology.

Dr. Carter R. Rowe attended the February meeting of the American Academy of Orthopedic Surgeons, held in Los Angeles, and presented a paper on "Prognosis in dislocation of the shoulder".

New addresses:—

Dr. Henry H. Banks (a.r.s. *Or.* 1952), 1093 Beacon St., Brookline, Mass.
Dr. John F. Burke (*S.* 1952), Lister Institute of Preventive Medicine, Chelsea Bridge Rd., London S.W. 1, England
Dr. Richard A. Currie (*S.* 1950), 55 Cornwall Ave., Town of Mount Royal, Quebec, Canada
Dr. W. Hardy Hendren, III (*S.* 1953), Children's Medical Center, Boston, Mass.
Dr. Merrill J. King (*Oph.* 1932), 22 White St., Rockland, Maine
Dr. Farahe Maloof (a.r.p. 1952), 264 Beacon St., Boston, Mass.
Dr. Carlo A. Montagnani (res. fel. *S.* 1950), Clinica Chirurgica Pediatrica, Ospedale Meyer, Firenze, Italy
Dr. Russell M. Nelson (a.r.s. 1954), 974 13th St., East, Salt Lake City 5, Utah
Dr. Paul S. Russell, Jr. (*S.* 1949), Dept. of Zoology, University College, Dower St., London, England
Dr. James M. Shannon (*S.* 1948), 31 Chestnut St., Salem, Mass.
Dr. Robert S. Shaw (*W.S.* 1946), 264 Beacon St., Boston, Mass.
Dr. J. Garland Wood, Jr. (clin. fel. *R.* 1950), Radiology Dept., Jefferson-Hillman Hospital, Birmingham, Ala.

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. David D. Donaldson was named last month as winner of the 1954 Award given by the New England Ophthalmological Society for "the most valuable contribution in ophthalmic science by a resident of New England". This prize was inaugurated in 1950, and since then it has been awarded four times — each time to a member of the Infirmary staff. It was first given to Dr. W. Morton Grant, and then to Dr. Paul A. Chandler, and to Dr. David G. Cogan.

Dr. Donaldson finished his residency here in 1953, after which he returned to his work in the Howe Laboratory of Ophthalmology. He has just been appointed Assistant in Ophthalmology on the Infirmary staff.

Dr. Donaldson has perfected a stereoscopic camera with which he has made a unique collection of photographs of the angle of the anterior chamber of the eye. It is probable that advances in the understanding of glaucoma and other eye diseases will be made possible through his work of correlating the photographic findings with clinical aspects of the eye. In both 1950 and 1954, Dr. Donaldson was given the Blue Ribbon Award by the American Academy of Ophthalmology and Otolaryngology for his exhibits of stereophotographs of the eye.

Dr. Piero Perone completed his residency in Otolaryngology on March 15, and has returned to his home in Livorno, Italy.

Leona Zacharias, Ph.D., Head of the Retrolental Fibroplasia Study Group, lectured before the nurse interns of the Boston Lying-in Hospital on March 15, and again before the parents of blind children at the Perkins Institution for the Blind on March 17.

On February 28, Mr. Alan S. Feldman, Audiologist for the Winthrop Foundation for the Deaf, spoke before the Brookline Dental Society on "The relationship between speech pathology and dentistry".

Dr. Edwin B. Dunphy, Chief of Ophthalmology, lectured before the Yale Medical School Postgraduate Course on March 25 on "Diagnosis of malignant ocular tumors by radioactive phosphorus".

Dr. Daniel Miller presented a paper on "Cancer of the external auditory meatus" at the spring meeting of the American Trilogical Society, held on March 17 at the Hollywood Beach Hotel in Hollywood, Florida. Other members of the Infirmary staff who attended the meeting included Dr. LeRoy A. Schall and Dr. Moses H. Lurie.

Recent Staff changes:

Dr. Wallace F. Friedman, formerly of the Retina Service, is studying in Europe on a fellowship, and will return to the Infirmary in July.

Dr. Alfred Hurst, Resident in Otolaryngology, left last month to serve with the Air Force.

Dr. Albert Weiser has been appointed a Graduate Assistant in Otolaryngology.

Dr. Akira Sakudo has been appointed as Resident in Otolaryngology, and is now in the ENT Clinic and the Mosher Laboratory.

Dr. Ariah Schwartz has been appointed a Fellow in Ophthalmology, and at present is with the Retina Service.

The editor of THE NEWS has received a nice note from Dr. John D. Ragan (r. *Oph.* 1954):

> I should very much enjoy receiving THE NEWS at my new address—220 Vancouver Block, 736 Granville Street, Vancouver 2, British Columbia.
>
> Starting out in practice has little of the anticipated pleasures and many more tribulations than one ever expects. However, there are those who say that the tribulations will all "resolve into a dew", and let's hope they do! My practice is but a month old and one should scarcely expect it to be sitting up, let alone walking.
>
> It is most pleasant in Vancouver (when it isn't raining), and one can see snow on the mountains across the bay and boats plying their trade in and out of the harbor. There are so many things to do here that one needs only the inclination.
>
> Still, I cannot help but miss the companionship and sense of family ties with the MGH community. I hope to return in May for the annual reunion meeting.

BIOGLETS

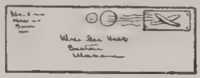
Dr. Norman W. Andrew, Assistant Resident in Anesthesia—born in Lawrence, Massachusetts, July 1, 1925; Lieutenant (jg), U.S.N.R., Communications Officer on destroyers, and Medical Corps (inactive), 1943-46; B.S., Tufts College, 1947; M.D., Tufts College Medical School, 1951; Intern in Medicine, Boston City Hospital, 1951-52; Assistant Resident in Surgery, Cleveland City Hospital, 1952-53; Assistant Resident in Medicine, Boston City Hospital, 1953-54.

Dr. Robert L. Brent, Intern in Children's Medicine—born in Rochester, N. Y., October 6, 1927; Research Associate, U.S. Atomic Energy Commission, Rochester, 1947; Laboratory Instructor, University of Rochester University School, Department of Biology, 1947-48; Research Assistant, University of Rochester, Physics Department, 1948-49; M.D., University of Rochester Medical School, 1953; Ph.D., University of Rochester Graduate School, 1954.

Dr. John W. Hayden, Assistant Resident in Orthopedic Surgery—born in Buffalo, N. Y., October 3, 1922; A.B., Hamilton College, Clinton, N. Y., 1943; M.D., Syracuse University College of Medicine, 1947; Intern in Pathology, Strong Memorial Hospital, Rochester, N. Y., 1947; Intern and Assistant Resident in General Surgery, Strong Memorial and Genesee Hospitals, 1948-51; U.S. Navy: St. Albans, N. Y., carrier *Midway* in Atlantic and Mediterranean areas, and Naval Academy, Annapolis, 1951-53; Assistant Resident, Orthopedic Surgery, Children's Medical Center, Boston, 1953-54; married; two children.

Dr. Mark R. Knapp, Assistant Resident in Anesthesia—born in New York City, November 10, 1923; B.A., Kenyon College, Gambier, Ohio, 1945; M.D., New York University College of Medicine, 1947; Intern, Kings County Hospital, Brooklyn, N. Y., 1947-49; private practice in La Plata, Missouri, 1949-51; Captain, U.S.A.F., Eglin Air Force Base, 1951-53; married; three children.

Dr. William E. Lassiter, Intern in Medicine—born in Wilmington, North Carolina, July 21, 1927; U.S. Navy: 1945-46; A.B., Harvard College, 1950; M.D., Harvard Medical School, 1954; home: Wilmington, North Carolina.



Another "singleton" has responded to our appeal for news concerning himself. (For those newcomers to the Hospital who may not understand what we mean by "singleton" — we have conferred that title upon those doctors who are the only MGH-ers practising in their particular communities.)

This letter is from Dr. Frank P. Gaunt (*W.S.* 1913), whose office is in Webster Groves, Missouri. He writes:

> It's a good many years since I was a House Pupil at M.G.H., but I recall that we did hustle around pretty lively on West Surgical in 1911-13.
>
> Drs. Hugh Williams, George W. W. Brewster, William M. Conant and others did their work so well that even now their appendix or gallbladder technique could compete with that of any modern surgeons and excel many of them.
>
> It would be a pleasure to greet Drs. Crabtree, White, Means, Marble and the others of my class personally, but next best is through THE NEWS.
>
> I went from the M.G.H. to China, taking my bride on that unusual honeymoon. We worked in hospitals in China before the days of the Communists.
>
> Three of our children were born in China and one in America. Both of our two sons are doctors. The elder chose Marissa, Illinois (population 1700) and loves being a country doctor. The younger son is specializing in internal medicine and is now entering his third year as a fellow at the Mayo Clinic. He recently completed two years' service in an Air Force hospital in France.
>
> We are blessed with eleven grandchildren. They are great fun, and we enjoy teaching them to swim.
>
> My work now is mostly general practice and office surgery, but I keep pretty busy.
>
> Best greetings to the Class of 1913.

This nice letter has come from Lt. Herbert L. Kraut, MC, USAF (a.r.p. *D.*), whose present address is 6110 USAF Hospital, APO 1054, c/o Postmaster, San Francisco, California:

> I have finally settled down long enough to send and receive mail, and I can now answer your pleasant letter, exchanging a whiff of Japanese air for the clean scent of Boston which your letter brought with it. Truly, a letter from Home!
>
> I accepted my commission on 5 September 1954; was called to active duty on 27 November 1954; spent three weeks at Gunter Air Force Base in Montgomery, Alabama, learning what the Air Force feels "Every Young Doctor Should Know"; then drove to

THE BAKER MEMORIAL 25TH BIRTHDAY PARTY

Left to right: Dr. Ellsworth T. Neumann, Dr. Dean A. Clark, Miss Walborg L. Peterson, Dr. W. Franklin Wood, Mrs. Helen H. Cushing, Miss Helen M. Daly, Miss Josephine C. Barbour, and Mr. William J. MacNair

Parks Air Force Base, from which I was sent to Tokyo; then to my present station in Nagoya, at a 200-bed hospital on the premises of what used to be the Japanese Central Communications Building during the war.

I don't know of any fellow MGH-ers here, but would be delighted to learn of any and to hear from and about MGH-ers via letters and the MGH NEWS.

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HISTORY OF THE BAKER MEMORIAL LABORATORY

The Hospital division known as the Baker Memorial Laboratory is more than a laboratory providing services to private patients. In addition to these obvious duties, it is the administrative and training unit for all clinical laboratory work in the Hospital, other than that performed by the professional staff.

What is referred to as clinical laboratory work includes certain minor chemical procedures, but the art of science of the work done by the clinical technician involves the use of the microscope.

Historically, the Baker Memorial Laboratory was the direct outgrowth of a tiny laboratory on the second floor of the Phillips House. In tradition, it had a much more distinguished beginning.

The first clinical pathologist appointed was Dr. John Bacon, Jr., in 1851. Although his duties would more closely coincide with those of the present Baker Laboratory, he is claimed by our chemists as the founder of their department. His official title was Chemist-Microscopist. Microscopy and chemistry were separated in 1871 with the appointment of Dr. Reginald H. Fitz as Microscopist. In 1894, Dr. Richard C. Cabot was appointed as Clinical Hematologist. The Pathologist of this period, Dr. James Homer Wright, also made many contributions to clinical hematology. In 1896, a central laboratory in the present location of the Pathology Laboratory was opened. In those days it was known as the Clinical Pathological Laboratory. The subsequent fate of the clinical component of this department is a mystery. From 1917 to 1927 what clinical microscopy was done, other than by the professional staff, was done by unsupervised technicians in widely dispersed small laboratories.

In 1927, it was felt that an important area of medicine had been long neglected at the Massachusetts General Hospital. Therefore, a physician with considerable interest and experience in hematology was put in charge of the one technician in the Phillips House. It was stated that "his salary was small, his duties commensurate with the salary." The man selected was Dr. Francis T. Hunter. Dr. Hunter, who had recently graduated from the West Medical Service, had also done extensive work in hematology with Dr. George R. Minot at the Collis P. Huntington Memorial Hospital. When the Baker Memorial Hospital opened its doors on March 3, 1930, Dr. Hunter and three technicians organized a new laboratory on the second floor of the new building. The Phillips House laboratory was closed in 1933 and its technician incorporated into the Baker team.

The early growth of the Laboratory was rapid. In 1931, an extra duty was added — that of keeping the professional blood donor list up to date, with frequent checks on the grouping and serology.

In 1931, arrangements were made for emergency Laboratory coverage for nights and week ends by medical students. This service was continued until 1942, and resumed again in 1952.

In 1934, the laboratory service of the Out-Patient Department was made the responsibility of the central Laboratory and the present chief technician, Miss Ellen Wood, replaced Mrs. Hickey.

In 1940, laboratory coverage for the surgical specialty services in the White Building was added to the other duties.

The opening of the Blood Bank in 1942 removed the professional donor work. This loss, however, was more than offset by the rapid development of blood chemistry that has taken place since the war.

The last added duties were for the private floors of the Vincent Memorial and the Burnham Memorial Hospitals in 1948.

The increase in the load of work in the Baker Memorial and Phillips House, not to speak of the numerous other duties, brought about a serious shortage of space. Although eight technicians were needed, only six microscopes were provided because there was room for only six people to work at one time. Dr. Hunter described a scene on December 28, 1937, in which fifteen blood donors were forced to sit on the stairs for several hours before they could be accommodated inside the Laboratory.

The space shortage was improved in 1938, when a room formerly used as quarters for the Eye and Ear residents was annexed. The acquisition of this room does not seem to have been uncontested, since it remained unused for a year before it was finally given to the Laboratory. It is said that although unused, beds were regularly made up and the towels frequently changed.

During Dr. Hunter's absence for Naval Service between 1942 and 1945, the Laboratory was efficiently directed by the late Dr. Wyman Richardson.

Since Dr. Hunter's untimely death last year, the Baker Laboratory has been supervised by Dr. Charles H. DuToit, who also directs the Chemistry Laboratory.

Dr. Hunter's many scientific contributions made in the Baker Laboratory were the subject of an article in the December 1954 issue of THE NEWS. This was the first laboratory to make extensive use of photoelectric hemoglobin measurements. Because of Dr. Hunter's special interests, the Laboratory was the center of spectroscopic and spectrophotometric work throughout the Hospital. Under the Robert Nye Fund, methods were developed for estimating the degree of exposure of x-ray personnel. Dr. Hunter worked tirelessly to promote the standards and working conditions of the laboratory technicians. The medical profession at large appeared relatively apathetic toward the importance of good laboratory work. As a result, this occupation lost its appeal to the type of individual with the education and integrity needed for satisfactory service. From 1946 to 1949, personnel shortage seriously threatened the operation of all laboratory services. However, in 1949, Dr. Hunter and Miss Wood were again able to recruit a first-class laboratory team.

Since 1949, the Baker Laboratory has maintained one of the Hospital's best records for the loyalty and stability of its organization. Many other institutions have not been so fortunate.

Charles H. DuToit, M.D.,
Assistant Physician

THE NEWS

No. 145 Boston, Mass. May 1955

OTOLARYNGOLOGY DEPARTMENT

Beginning last October, the Fruit Street activity—at first the excavations, the huge cranes, the steel girders, and now the scaffolding, the bricks, and the mortar—is producing a changing skyline in this area. The new laboratory facilities of the Massachusetts Eye and Ear Infirmary are under construction. This is the second phase of our long-range planning. The first was the face-lifting operation performed on our old building by the addition of a new floor and the modernization of our operating rooms, our wards, and our out-patient clinics. By the addition of three new floors to our present connecting building, we expect to greatly expand our laboratory facilities. We expect to occupy the new quarters this coming fall. The third phase which must be faced in the near future is a provision for increased private-room facilities. This may be resolved either by a building connecting with the Phillips House or by a new wing which would replace the old Gardner Building.

In the light of modern-day medicine, it seems incredible to look back to our facilities of fifteen years ago. In 1939 it was part of the residents' duties to do all laboratory procedures. These were limited to urinalyses and blood counts. Bacteriology was practically nonexistent. Tissue diagnosis was done in the laboratories of the Massachusetts General Hospital. Research was at a minimum. Dr. Harris P. Mosher studied the esophagus, and Dr. Moses H. Lurie worked on the temporal bone.

With the advent of the antibiotics, bacteriological service was essential; and in 1940, under Mr. Thomas Blake, we established our first bacteriological laboratory. When Miss Anita B. Mangiaracine, our present bacteriologist, became available upon the closing of Dr. Champ Lyons's laboratory, we were most fortunate in obtaining her services. Under Miss Mangiaracine's direction, our bacteriological service has become outstanding. It is indispensable in aiding us in the antibiotic treatment of diseases of the ear, nose, and throat.

The Mosher Laboratory, under the direction of Dr. Werner Mueller, has also proved to be of utmost value. Here, in addition to routine laboratory tests, all surgical material is prepared for pathological study; and Dr. Mueller is available, at all times, to the members of the staff who wish to discuss problems in pathological diagnosis. The first training of all residents in otolaryngology is given in Mosher Laboratory.

Research activities and problems

Advances in the treatment of viral diseases affecting the nose and throat have not kept pace with advances in surgery and medicine. Because of the lag, it was felt that a laboratory should be established and dedicated to increasing the body of knowledge regarding these viruses. This idea was translated into reality, and in July 1952 the Virus Research Laboratory came into being. Dr. Robert S. Gohd, who came from the Department of Bacteriology, Harvard Medical School, assumed the responsibility of outfitting a laboratory and for developing a program of research. Quarters to house the laboratory appropriately were provided by three infectious disease isolation units on the second floor of the old Gardner Building. By November of the same year, the physical plant was equipped and was functioning as a research arm of the Department of Otolaryngology.

The common cold is the virus that attacks the upper respiratory tract most frequently. Accordingly, a large portion of the research program of the Virus Laboratory is devoted to the common cold problem. The heart of the problem lies in the fact that there are as yet no research tools available for the study of this virus. Therefore, a study was directed toward the development of such tools as would facilitate the isolation and investigations of the cold.

In the course of this investigation, adenoids from ostensibly normal individuals were grafted to membranes of chick embryos. It was found that certain of the adenoids contained a factor that caused a marked stimulation of embryonic epithelium. The factor was small, soluble, and filterable substance, and, in some respects, resembled an infectious agent. The relationship between this factor and the newly recognized "adenoidal-conjunctival" viruses is being explored.

The recent development of methods of tissue culture and its successful application to virus research in polio and influenza have opened new areas of investigation. In the Virus Laboratory human tonsillar, adenoid, and turbinate tissues are grown in tissue culture. The effect of cold virus on squamous and ciliated epithelium, fibroblasts, and mucous glands derived from the nasopharyngeal tissues is being studied currently.

Another basic study of the Virus Laboratory is concerned with the influenza virus. This investigation is directed toward elucidation of nutritional factors required by tissue for the production of influenza in tissue culture. It has been found that the element calcium is essential for the multiplication of virus. In cultures, the binding of calcium by EDTA (ethylenediamine tetra acetic acid) or by phosphate prevents the normal growth of influenza. Addition of more calcium reversed the inhibition.

Another field of laryngological research concerns the possibility of papillomata of the larynx having a virus factor in its etiology. This, too, is under investigation.

Pathological research by Dr. George Kelemen in the Mosher Laboratory has included an ample variety of problems centered around the ear and the upper airways. In investigations on pathology of the hearing organ, a simplified method of microscopy under polarization helped in the discovery of an otosclerotic focus outside the otic capsule—an extremely rare finding. The rich material on injuries of the temporal bone resulted in an exhibit at the American Academy of Ophthalmology and Otolaryngology, while osteomyelitis studies formed the basis of a chapter in a textbook on otolaryngology, now in press. Meanwhile, the steady growths of temporal bones sectioned into continuous series—now over 70—are inviting everyone to use this opportunity to study the endless problems of aural pathology. This unusually rich material was utilized in instruction courses given at the Academy, and from it the selection of sections was made which is now the "official" test series in aural pathology in the examinations by the American Board of Otolaryngology. Delving into the past and remembering the important contributions of this department, beginning in the nineties of the past century, a historical bibliography of the fenestration operation on the labyrinth has been published.

One of the chapters of highest interest in the field of aural pathology deals with congenital deafness. While clinical data for many conditions resulting in a similar defect are known in abundance, their pathological basis is far from being firmly established, excepting, maybe, the truly hereditary forms. Consequently, attention has been focused on damage suffered by the progeny *in utero*. The difficulty in obtaining pertinent embryological material is evident. Observation on embryos with rubella and on an embryo of a diabetic mother yielded results which in both cases might be called "firsts". An observation on a very complex aural malformation could be added to these.

Approach to the problem of congenital deafness by animal experimentation was initiated by studying the damage done by x-rays, anoxia, Rh incompatibility, and fluoroacetate poisoning—the last named representing a potent antimitotic agent by enzyme prohibition. This project, together with the clinical experiences mentioned in the previous paragraph, expands rapidly with accumulation of a wide variety of material. As far as can be anticipated from the results of these studies, which are partly published, partly in press, and partly in preparation, the ear claims a quite distinct place among other deformations of the organism, with a tendency to a higher resistance against damaging factors, which are shown, e.g., by the brain or by the eye. Much interesting information is expected from these studies.

The very special knowledge as to the delicate techniques of aural histology continues to yield most satisfactory results, in the hands of our experienced technician, Miss Dorothy Linden.

When the studies on the problem of the pathology of the upper airways in their relation to obesity were started, almost insurmountable handicaps were encountered in spontaneous pathological manifestations in the nasal cavities of the common experimental laboratory animals. To be able to move on a safer basis, extensive investigations were necessary, and are now terminated, on the rat, the guinea pig, and the rabbit, including hereditarily obese animals. The result, even when expected to a certain degree, was a surprising amount of infection, making the evaluation of experimental changes extremely difficult. Moreover, even gross anatomical features hitherto unreported could be added to the factors which make the conclusions of many previous workers very precarious. These tabulations, now at general disposition, will have to be taken into consideration in all studies on the sense of olfaction in physiology and pharmacology, as well as in comparative psychology.

Lymphatic tissue occupies a prominent space in the pathology of the ear and the upper airways. In this direction, applying staining methods worked out for this special scope, the pathway of the tonsillar lymphocyte was followed through the epithelium of the crypts. On the basis of the information gained by these studies, a histological test of the activity of lymphatic tissue was elaborated, demonstrating the degree of participation, in a given period, of a given amount of tonsillar tissue in pathological changes of the surroundings. In connection with these studies, the complicated histological conditions around the pharyngeal orifice of the Eustachian tube are reinvestigated.

These explorations led into the field of geriatrics, with analysis of structure and pathology of the aging tonsil. As a by-product, a new geriatric phenomenon was found: a symmetrical enlargement of the submaxillary glands in advanced age.

Research of the larynx was reopened on the comparative line. The larynx of the chimpanzee offered highly interesting aspects, with peculiarities along the respiratory and phonatory functions. These examinations led to a conception regarding the controversial connection between structure and performance (phonation) in animals. Material for similar analysis of the larynx of the howler monkey is in preparation. As a next step, experience won along this line was applied to elucidate some clinical problems around the origin of congenital laryngeal stridor, in the human newborn.

A historical and analytical survey of the radiography of the supraglottic speech organs has been published, reporting on an important chapter in phoniatrics. A report has been commissioned and prepared—now in press—embracing the last ten years of progress in laryngeal physiology.

A very encouraging feature has been the establishment of collaboration with departments of the Harvard Medical School, departments of Harvard University, hospitals in Boston, and institutions outside our city, besides several departments of the Massachusetts General Hospital. For material furnished and discussion freely given, we are indebted to the following: Departments of Anatomy, Pathology, Obstetrics, and Pediatrics, of the Harvard Medical School; the Harvard School of Public Health; the Long Island Hospital of the City of Boston; the Joslin Clinic; the Departments of Comparative Anatomy, the Psychoacoustic Laboratory, and the Department of Slavic Languages of Harvard University; the Department of Pathology, School of Medicine, University of Illinois; the Department of Comparative Anatomy, School of Medicine, Johns Hopkins University; the Roscoe B. Jackson Memorial Laboratories, Bar Harbor; the Biological Research Station, Woods Hole; and the Curator of the Biological Reservation, Barro Colorado, Panama.

With its rich material and manifold problems, the Mosher Laboratory, which hopes shortly to occupy adequate quarters in the new Laboratory Building of the Massachusetts Eye and Ear Infirmary, is ready to welcome additional workers to participate in a satisfactory and promising activity.

Another laboratory which has been housed in the old Gardner Building and which will welcome the change to our new building is that on Atrophic Rhinitis, under the direction of Dr. Herman J. Sternstein. This disease, which is chronic and progressive, is characterized by an offensive odor, crusting, atrophy, anosmia, and eventual nasal deformity. Although many theories have been advanced since ozena was first described as a distinct clinical entity by Fraenkel in 1876, the exact cause remains unknown. Recent estimates on the morbidity of the disease indicate that it is more prevalent in the United States than is generally believed.

Evidence from Dr. Sternstein's studies suggests that ozena is a "target" disease which should be attacked from many directions, both local and systemic. The majority of cases now being studied show a combination of signs pointing to some subclinical, nutritional deficiency, as well as indications of metabolic and hematological disorders. Dr. Sternstein has enjoyed excellent cooperation from departments of the Massachusetts General in his nutritional, hematological, and metabolic studies. The plans of our Laboratory Building call for a transferral of this laboratory from its present inadequate quarters in Gardner to the new location.

Quarters will also be supplied for the fine, basic research of Dr. Francis L. Weille, in cooperation with Dr. John W. Irwin of the Allergy Clinic, on the vascular structures of the cochlea. For the first time in any laboratory, they have been able to photograph, in moving pictures, the changes in the living small blood vessels of the stria vascularis of the cochlea and to observe changes in those vessels caused by anaphylactic shock and histamine shock. This work has created great interest among the anatomists and the physiologists, and it is basic in the understanding of aural vascular phenomena and the nutrition of the organ of Corti.

The research problems in which Dr. Moses H. Lurie is interested at the present time are the effects of the antibiotics upon the organ of Corti and the vestibular apparatus. As a result of work being done by Dr. Robert Galambos at the Research Center in Bethesda, Maryland, on the possible effect of Rasmussen's bundle on the vestibular apparatus, a complete recheck is now being done of the medulla of the animals which have inherited deafness, in order to determine whether or not there is involvement of this bundle.

We also have a half-dozen whale ears which are to be studied for the work now being done on the noises made by porpoises and whales, in an endeavor to determine whether these animals respond to normal sounds as man hears them or whether they respond to high-frequency sounds. This is a long, tedious project which will take over a year to complete.

The future

In our present inadequate scattered quarters, working under severe handicaps, we are looking forward to the completion of our new laboratory addition. Although we know that many of the great discoveries which have influenced medicine came from small isolated laboratories and that it is the man who produces the results and not the bricks and mortar, it will nevertheless help to fulfill the desires of our Board of Managers to provide better working facilities for our research team.

LeRoy A. Schall, M.D.,
Chief of Otology and Laryngology

Miss Dorothy M. Tarbox, R.N., Director of Nursing and Nursing Education, retired on May 1, after 28 years of service at the Infirmary. A farewell coffee reception was held in her honor in the Surgeons' Parlor on April 28.

Mrs. Althea Brady, R.N. has been selected as the replacement for Miss Tarbox. Mrs. Brady is an MGH School of Nursing graduate, and will receive her M.A. from the Boston University School of Nursing this spring. She has served in varying nursing capacities at both the Infirmary and the M.G.H., and has been on the nursing staff at the Lying-in Hospital in Chicago. She also took a number of nursing courses elsewhere before going to Boston University.

On April 26, the annual Eye and Ear Alumni Meeting was held. Eight papers were presented during the day, the wives of the alumni were taken on a tour of the Infirmary in the afternoon, and in the evening the alumni dinner was held at the Harvard Club. Dr. Francis J. West was the dinner speaker. His subpect was "Of eyes and ears and men". Following this, Dr. LeRoy A. Schall spoke on the distinguished career of the late Dr. Harris P. Mosher, formerly Chief of Otolaryngology.

On April 27, the New England Ophthalmological Society held its monthly meeting, at which Dr. Paul A. Chandler and Dr. Frederick H. Verhoeff were the evening speakers.

Dr. Daniel Miller gave a series of lectures at the 28th annual Spring Congress in Ophthalmology and Otolaryngology of the Gill Memorial Eye, Ear, Nose and Throat Hospital in Roanoke, Virginia, held April 4-9 .

The Buffalo Ophthalmological Society and the Buffalo Eye Bank and Research Society have given their annual award in Ophthalmology to Dr. David D. Donaldson. The award was presented at their meeting on March 10, at which Dr. Donaldson was guest speaker. His topic was "Corneal dystrophies".

Dr. Julio Quedevo of Guatemala, who completed his residency in Otolaryngology here in 1941, has been appointed Professor of Otolaryngology at the University of San Carlos School of Medicine.

Dr. Joaquin Valcarce Avello of Spain is now working in the Howe Laboratory of Ophthalmology, under Dr. David G. Cogan. Dr. Avello came here on March 1, under the auspices of the Institute for International Education, and will remain for several months.

Dr. Lee Garron, Assistant Professor in the Department of Ophthalmology at the University of California, has been visiting here recently. Dr. Garron was formerly a Fellow in Pathology at the Infirmary.

Dr. Joseph L. Dowling, Jr. and Dr. Edward J. Bechtel began their residencies in Ophthalmology on April 1.

Dr. John Renner, graduate student in Otolaryngology, has completed his studies here and returned to his home in Ohio.

Dr. Samran Wangspa, who has been studying here for the past two years, has returned to his home in Bangkok, Thailand.

The Board of Trustees, at their meetings on March 18 and April 1, voted:

To grant six months' leave of absence to Dr. John B. Stanbury, effective as of February 25.

To appoint:

Dr. Phillips Hallowell as Assistant in Anesthesia;
Dr. Ruth C. Haynes as Assistant in Anesthesia;
Dr. Robert H. Richie, Jr. as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Hermann K. Schueler as Assistant Resident on the Urology Service, beginning July 1;
Dr. Judson A. Smith to the Board of Consultation;
Dr. Elbert P. Tuttle, Jr. as Assistant in Medicine, retroactive to March 15;
Dr. James L. Vanderveen as Assistant in Anesthesia;
Dr. Stephen L. Washburn as Assistant Resident in Psychiatry, beginning July 1;
Dr. Lionelle D. Wells as Clinical Associate in Psychiatry, effective as of March 14.

To appoint the following Interns for one year, beginning July 1:

Medical

Dr. A. Robert Arnstein
Dr. Stephen P. Clement, Jr.
Dr. John R. David
Dr. Roman W. DeSanctis
Dr. Leonard J. Friedman
Dr. Thomas G. Gabuzda
Dr. John F. Heggie
Dr. Charles S. Keevil, Jr.
Dr. John E. Mack
Dr. John T. Monroe, Jr.
Dr. Mitchell T. Rabkin
Dr. Ellis L. Rolett
Dr. Allan I. Sandler
Dr. Charles P. Summerall, III
Dr. Thomas A. Waldmann
Dr. James T. Wheeler

Children's Medical

Dr. John H. Dwyer
Dr. Vassilike A.-C. Forbes
Dr. David B. Shurtleff
Dr. Paul M. Veazey
Dr. Dorothy B. Villee

Surgical

Dr. William G. Austen
Dr. A. Erik Gundersen
Dr. Stephen E. Hedberg
Dr. Charles F. McKhann R
Dr. Donald A. Malt
Dr. Quentin R. Stiles
Dr. Harold C. Urschel
Dr. Clarence G. Wheeler

At their meetings during March and on April 6, the General Executive Committee voted:

To promote Dr. Adolf L. Gundersen to the position of First Assistant Resident in Surgery, beginning April 1.

To extend the appointments of:

Dr. Albert C. England, Jr. as Research Fellow in Neurology, from April 1 through September 30;
Dr. Edward Karamanoukian as Assistant Resident in Dermatology, for an additional six months, ending December 31;
Dr. Alejandro Y. Kuzmanic as Clinical and Research Fellow in Medicine, to June 30;
Dr. Chiu-chen Wang as Research Fellow in Radiology, through June 30.

To reappoint:

Dr. George A. Hyder as Clinical Assistant in Orthopedic Surgery, effective April 1;
Ann Ross, A.B. as Research Fellow in Psychology, for the period March 15 through June 30.

To appoint:

Dr. Ruth B. Beuscher as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Jimmie C. Brockman as Clinical and Research Fellow in Psychiatry, beginning April 1;
Dr. Geoffrey MacD. Coley as Clinical Fellow in Pathology, for a period of six months, beginning July 1;
Dr. Adolfo C. Coussirat as Clinical Fellow in Anesthesia, beginning September 1;
Dr. Spyros G. Macris as Clinical and Research Fellow in Anesthesia, beginning July 1;
Julio Mendizabal, Ph.D. as Research Fellow in Medicine, effective as of March 1;
Dr. Paul H. Nitschke as Graduate Student Assistant in Orthopedic Surgery, beginning March 1;
Dr. Harold S. Novey as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning August 1;
Dr. William J. Williams as Research Fellow in Pathology, for a period of four months, beginning March 1.

* * *

FRACTURE CLINIC

The last report from the MGH Fracture Clinic published in The News was seven years ago, in February 1948. Since that time the Clinic has continued to be as active as ever and has fulfilled the purposes for which it was established in 1917, namely: 1) segregation and adequate care of patients with injury, 2) instruction to undergraduate and postgraduate students, 3) research and publication of papers by members of the Visiting and House Staffs. The Visiting Staff is made up of representatives from the Orthopedic Service, the General Surgical Service, the Neurological, Urological, Dental, and Plastic Services. The Department of Physical Medicine aids materially in follow-up care and rehabilitation. The House Staff of the Fracture Clinic consists of the Chief Resident assigned from the Orthopedic Service, the Fracture Resident from the General Surgical Service, two Assistant Residents from the Orthopedic Service, and an Intern assigned from the General Surgical Service. The period of assignment of the Surgical Fracture Resident is for four months, and of the Intern for six weeks. By this system, members of the General Surgical Service are rotated through the Fracture Clinic as a routine procedure.

Patients in whom the major damage is to bone are admitted to White 5, and those who present difficulty with abdominal, chest, or other soft tissue are cared for on the other divisions of the Surgical Service. Head injuries are the responsibility of the Neurosurgical Service. When a patient presents a combination of injuries, his care is directed by representatives of the appropriate services in cooperation with one another.

The ultimate goal in caring for any traumatized patient is to restore the individual to normal functional and economic activity. These purposes are accomplished by: 1) early and adequate care of the injured, to preserve life and limb, 2) stabilization of the broken bone, 3) preservation and/or restoration of soft tissue, 4) rehabilitation of the injured part and the patient as a whole. Most fractures will heal satisfactorily if "set" and held sufficiently long with external splinting; but if open operation is necessary we can procede with confidence, because notable advances have been made in the operative management of fractures, due considerably to experience gained in two World Wars. These improvements are the result of better training of fracture surgeons, the standardization and manufacture of metals which are inert in human tissue, the production of antibiotic drugs, and the extensive use of whole blood, plasma, and other supporting agents which make permissible extensive surgical procedures not possible a few years ago.

Vitallium, an aluminum alloy, and certain grades of stainless steel in the form of nails, plates, screws, wires, and bands have for several years been used for stabilizing broken bone. Since World War II, however, many long bone fractures have been treated by the introduction of a long steel rod into the medullary canal of the bone. This form of treatment has allowed earlier return of function of the injured extremity and has diminished the long periods of hospitalization required for traction and other "conservative" forms of treatment.

Many of the modern methods of handling fractures could not have been accomplished without proper anesthesia, and to our Department of Anesthesia the Fracture Clinic of the M.G.H. owes much, particularly for its use of "regional anesthesia" or nerve blocks for management of fractures of the extremities. Over one thousand "Brachial Block" anesthesias have been used in the upper extremities at M.G.H. since 1945.

The Fracture Clinic is indebted to its patients, not only in the General Hospital wards but in the Baker Memorial as well, because by our treatment of these patients we not only benefit them but also we, ourselves, learn the best methods to be employed. The Follow-Up Clinic, where all patients are seen at the end of one year or longer, is one of the unique and very important functions of the Fracture Clinic. Were it not for the cooperation from our patients, such a Follow-Up Clinic would not be possible. The Postgraduate Course in "The management of fractures and other traumatic conditions", based upon our follow-up studies, first offered in 1928 and now in its 27th year, has been given without interruption every year since World War II. During these many years the Course has been attended by 1,305 students from every State in the Union and ten foreign countries. Many surgeons have taken the Course two or more times, and we have a loyal group of "alumni" scattered throughout the world.

Our teaching of postgraduate and undergraduate students and the administration of the Fracture Clinic are financed by money we earn by teaching in the annual Postgraduate Course. Such money is spent on secretarial help and for work done by the Art and Photography Departments. This method of financing the Clinic is possible because all instructors give their services without charge. Not one has ever been paid by the Medical School or the Hospital. No instructor retires from teaching in the Postgraduate Course because of the age limit which terminates the services of surgeons from their regular Hospital duties. Dr. Smith-Petersen taught for six years after his retirement in 1947; and Drs. Henry Marble, William Rogers, and George Van Gorder, although no longer on the active Staff, still continue to give their lectures in the Postgraduate Courses. Dr. Armin Klein did the same until his untimely death in 1954.

While our Fracture Ward is adequate and our instruments are of the best, the Out-Patient section of the Fracture Clinic desperately needs new quarters nearer the X-ray Department and the Emergency Ward. If such a move is not possible, we should at least have an X-ray unit in close proximity to the Clinic. At present we are located just about as far from these facilities as the physical set-up of the Hospital allows. This works a great hardship upon nurses and doctors, and upon patients—many of whom are litter cases or are on crutches. It is hoped that with some of the new buildings under construction, space can be found to accommodate a new "Fracture Unit", where the Out-Patient services can be combined with X-ray facility and Emergency Ward care.

The Out-Patient Fracture Clinic meets on Tuesday and Friday mornings. It is directed by a head nurse, Mrs. Ruth Lowell, and her assistant student nurses. The Fracture Clinic secretary, Miss Marion Melnick, ably assisted by Miss Katherine Sipple, record examinations of patients dictated by the Visiting and House Staffs. The Clinic could not function effectively without the help of our loyal volunteer secretary, Miss Ruth Clark, who has been in regular attendance for the past three years. The always faithful Mr. John McCracken renders valuable aid, not only in the Out-Patient Clinic, but on White 5 as well.

Fracture Rounds are held every Friday from 8 to 10 A.M., beginning with Ward Rounds and terminating with review of all Emergency Ward and follow-up cases seen during the previous week.

A new and important undertaking by members of the Fracture Clinic during the next few months will be the publication of a textbook on *The management of fractures and other traumatic conditions.* Our previous book, published in 1938 under the editorship of Dr. Philip D. Wilson, has been out of date for many years. Contributions to the new publication will be by more than thirty authors, all of whom have profound knowledge of the subjects about which they will write. While it is necessary that the book have an editor and an editorial board, the responsibility of the publication will be shared by all members of the Clinic, from many services of the Hospital. This will be entirely an MGH effort, written by members of the MGH Staff and illustrated by members of the MGH Art Department, headed by Mrs. Muriel Miller, and the Photography Department, directed by Mr. Donald Withee.

We believe that the management of patients with fractures and other injuries at the M.G.H. is fairly close to the ideal at the present time. The segregation of such cases into a separate Clinic has been accomplished with great benefit to the patients and with a minimum amount of friction between the General surgeon, the Orthopedic surgeon, and representatives from other divisions of the Surgical Service. Many civilian hospitals in our country have been reluctant to establish such clinics because of disagreement between staff members. Such has not been the case at M.G.H. Our arrangement is quite comparable to that used in Armed Service hospitals, where a division of bone and joint surgery is part of the General Surgical Service. Such an arrangement expedites the care of patients and promotes harmony between staff members, many of whom may be involved in caring for the same group of patients over a long period of time.

Edwin F. Cave, M.D.,
Head of Fracture Clinic

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. Again this month, and despite the fact that this request has been made in each issue of THE NEWS for nearly five years—ever since we started this column—not every author remembered to include that information. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Surgery

Huggins, C., Jr., and Taylor, G. W.
Carcinoma of the male breast.
A.M.A. Arch. Surg. 70:303-308.

Gynecology and Obstetrics

Liu, W.
Vaginal cytology in cancer patients treated by radical hysterectomy.
Am. J. Obst. & Gynec. 69:299-311.

Liu, W., and Meigs, J. V.
Radical hysterectomy and pelvic lymphadenectomy: A review of 473 cases including 244 for primary invasive carcinoma of the cervix.
Am. J. Obst. & Gynec. 69:1-32.

Stone, B. H., and Mansell, H.
Procidentia and cervical cancer.
Obst. & Gynec. 5:198-200.

Laboratory Science

Gergely, J., Gouvea, M. A., and Karibian, D.
Fragmentation of myosin by chymotrypsin.
J. Biol. Chem. 212:165-177.

Laurent, T. C., and Gergely, J.
Light scattering studies on hyaluronic acid.
J. Biol. Chem. 212:325-333.

Pathology

Dudley, H. R., Ritchie, A. C., Schilling, A., and Baker, W. H.
Pathologic changes associated with the use of sodium ethylene diamine tetra-acetate in the treatment of hypercalcemia: Report of two cases with autopsy findings.
New England J. Med. 252:331-337.

Books

White, J. C., and Sweet, W. H.
Pain: Its mechanisms and neurosurgical control.
Springfield, Ill., Charles C. Thomas.

ALOHA

One of the unique surgical societies of the world is the Pan-Pacific Surgical Association, for it always holds its meetings in the Hawaiian Islands—the Paradise of the Pacific. Any surgeon who lives in any country that borders on the Pacific Ocean may become a member for a very small fee. The scope of such an organization is, of course, tremendous when one considers the vast size of the Pacific and all the countries which border on it. Even we who live in Boston, looking out upon the Atlantic, are welcomed as members, and this year the Association honored one of our Massachusetts General Hospital senior surgeons, Dr. Arthur W. Allen, by electing him the new President of the Association at its Sixth Congress in Honolulu, on October 14, 1954. Dr. Allen has had many such honors conferred upon him, but I am sure this is a most welcome one and a challenge to him, especially since the Association is in need of new members—and what better man could they have chosen?

The Sixth Congress was held from October 7 to 15. The meetings were well attended by famous surgeons from many countries. Drs. Arthur W. Allen, William H. Sweet, and I represented the Massachusetts General Hospital at the Congress. The sessions were arranged admirably, starting with breakfast and panel discussions of various surgical topics at the Queen's Surf on famous Waikiki beach at 7:30 A.M. They carried on through until noon, when they were adjourned until the following morning. This left the afternoons free for us to see something of the Hawaiian Islands. Our evenings were spent with many of our gracious hosts—the doctors of the islands—at their various homes.

It is impossible in a short space to describe what a wonderful time was enjoyed by everyone, and to give the names of all those on the islands who made our stay such a pleasant and profitable one. We arrived by boat and air, and from the moment we set foot on the islands it was an exciting and stimulating experience. Dr. Lester Yee, West Surgical 1941, and his new bride greeted us as we stepped off the Pan American Stratocruiser at Honolulu. We were showered with beautiful leis and other things that go with them. It was also of interest and pleasure to have one of my former patients, on whom I had performed a splenorenal shunt, greet us at the air terminal and to see how well he looked.

In addition to taking part in the panel discussions, Dr. Allen presented a paper on "Cancer of the colon", Dr. Sweet presented a paper on "The uses of nuclear disintegration in the diagnosis and treatment of brain tumors", and I presented one on "The results obtained in the treatment of 120 patients with bleeding esophageal varices by portacaval shunts".

Before leaving the islands we were royally entertained by Dr. Samuel Yee (*H.M.S.* 1934), to celebrate the election of Dr. Allen as our new President. We had dinner at the most beautiful Chinese restaurant in the world—Lau Yee Chai, at Waikiki. A photograph taken at the banquet and reproduced on the last page of this issue of THE NEWS, shows Dr. and Mrs. Arthur W. Allen, Dr. and Mrs. Stanley Garber of Cincinnati, Dr. and Mrs. Harold L. Foss of Danville, Pennsylvania, Dr. and Mrs. Randolph Lovelace of Albuquerque, Dr. and Mrs. Robert R. Linton, and our hosts—Dr. and Mrs. Samuel Yee of Honolulu.

It is hoped, with this short introduction to the Pan-Pacific Surgical Association, that more of our Staff and Alumni will avail themselves of the opportunity of joining the Association. Needless to say, one will never regret a trip to the Paradise of the Pacific—even for a surgical meeting.

Robert R. Linton, M.D.,
Visiting Surgeon

New addresses:—

Dr. Craig S. Lichtenwalner (*M.* 1950), 11 Maple Ave., Newton 58, Mass.

Dr. Walter T. St. Goar (*M.* 1950), Department of Medicine, Queen Elizabeth Hospital, Birmingham, England

Dr. Boris Senior (*C.M.* 1950), 3 Third Ave., Lower Houghton, Johannesburg, South Africa

Brief bits:—

Dr. Benjamin Castleman was invited to conduct a Clinicopathological Conference at the American College of Physicians' meeting in Philadelphia on April 26.

Dr. Edward D. Churchill received a certificate of appreciation on March 17 from the Walter Reed Army Medical Center, Washington, D.C., "in recognition of outstanding contributions for the improvement of knowledge and surgical practice of importance to national defense and for the presentation of the third William L. Keller Lecture on the subject 'Gunshot wounds' ".

Dr. James A. Halsted (*W.M.* 1932) is returning to the East, after spending five years at the Veterans Administration Center in Los Angeles. He has been appointed Chief of Professional Services at the Veterans Hospital in Syracuse, N. Y., and a member of the Department of Medicine of the faculty of the State University of New York, Syracuse Medical Center.

Dr. John W. Irwin addressed the members of the American Otological Society, Inc., at their annual meeting in Hollywood, Florida, on March 18. His topic was "Small blood vessels during allergic reactions".

Dr. William P. J. Peete (*S.* 1948) of Warrenton, North Carolina, is doing chest surgery at a hospital in Stockholm, Sweden, by courtesy of a Moseley Scholarship.

Dr. James M. Shannon (*S.* 1948) is now associated with Dr. Walter G. Phippen (*S.S.* 1906) in the practice of surgery. Their office address is 31 Chestnut Street, Salem, Massachusetts.

Dr. and Mrs. George Gilbert Smith flew to Athens, Greece, on April 4, to attend the meeting of the Société International d' Urologie. Dr. Smith has been president of the society since 1947. They spent a few days at Lisbon, Rome, and Istanbul *en route*, and returned on May 1.

Dr. Howard B. Sprague delivered the third C. C. Birchard Memorial Lecture before the Montreal Medico-Chirurgical Society on April 1. His subject was "Clinical types of atrial fibrillation and their management".

Dr. Ellsworth H. Trowbridge, Jr. (a.r.p. *N.* 1940) announces the association of Dr. John D. DeMott in the practice of Psychiatry, Neurology, and Electroencephalography. Their office and E.E.G. laboratory are at 1405 Bryant Building, 1102 Grand Avenue, Kansas City 6, Missouri.

Dr. James C. White gave the first Albert Kuntz Lecture at Saint Louis University School of Medicine on March 23. These lectures are to be given annually in honor of Dr. Albert Kuntz, Professor of Anatomy. Dr. White's subject was "The role of the autonomic nervous system in chronic persistent pain".

Dr. Kazuo K. Kimura, Intern in Children's Medicine—born in Sheridan, Wyoming, September 16, 1920; University of Washington, Seattle, 1938-42; B.S. in Pharmacy, University of Washington, 1942; M.Sc. in Pharmacology and Physiology, University of Nebraska, 1944; Instructor in Pharmacology and Physiology, University of Nebraska, 1944-45; Research Fellow in Pharmacology, University of Illinois College of Medicine, 1945-49; Ph.D. in Pharmacology and Physiology, University of Illinois, 1949; Instructor in Pharmacology, St. Louis University School of Medicine, 1949-53; two years of medical school, University of Illinois; M.D., St. Louis University School of Medicine, 1953; Assistant Professor of Pharmacology, St. Louis University School of Medicine, 1953-54.

Dr. Arthur R. Kravitz, Intern in Medicine—born in Brooklyn, N. Y., November 10, 1928;

Dinner party at Waikiki—celebrating the election of Dr. Arthur W. Allen as President of the Pan-Pacific Surgical Association

Left to right: Mrs. Stanley Garber, Dr. Samuel Yee (*H.M.S.* 1934), Mrs. Arthur W. Allen, Dr. Stanley Garber (*H.M.S.* 1934), Dr. Robert R. Linton, Mrs. Randolph Lovelace, Mrs. Harold L. Foss, Dr. Harold L. Foss, Mrs. Robert R. Linton, Dr. Arthur W. Allen, Mrs. Samuel Yee, Dr. Randolph Lovelace (*H.M.S.* 1934)

A.B., Harvard College, 1950; M.D., Harvard Medical School, 1954; married.

Dr. Alfred J. Luessenhop, Assistant Resident in Neurosurgery—born in Chicago, Illinois, February 6, 1926; Yale University, 1943-44; U.S. Army: Pfc, Medical Corps, in general hospitals in France, 1944-46; Yale University, 1946-48; B.S., Yale University, 1949; M.D., Harvard Medical School, 1952: Intern in Surgery, University of Chicago Clinics, 1952-53; Research Fellow in Surgery at Harvard Medical School and Clinical and Research Fellow in Neurosurgery at Massachusetts General Hospital, 1953-54.

Dr. Donald B. Martin, Intern in Medicine—born in Philadelphia, Pennsylvania, July 24, 1927; U.S. Navy: Seaman 1st Class, 1945-46; A.B., Haverford College, 1950; M.D., Harvard Medical School, 1954; home: Ardmore, Pennsylvania.

Dr. Jule P. Miller, Jr., Assistant Resident in Psychiatry—born in St. Louis, Missouri, March 14, 1926; U.S. Navy: Electronic Technician, 1944-46; A.B., Washington University, St. Louis, 1949; M.D., Washington University College of Medicine, 1953; Intern on Ward Medicine, Barnes Hospital, St. Louis, 1953-54; married; home: St. Louis.

Dr. David B. Murray, Assistant Resident in Pathology—born in Darlington, County Durham, England, 1926; Oundle School, 1940-44; B.A. honours, 1947, M.A., 1951, and M.B., Ch.B., 1951, Cambridge University, England; Intern, Hospitals of East Suffolk, Ipswich, 1951, and Pembury, Kent, 1952; Junior Clinical Resident Pathologist, Guy's Hospital, London, 1952; Resident in Anatomic Pathology, General Hospital, St. John's, Newfoundland, 1953-54; Royal Canadian Air Force: Flight Lieutenant, Medical Auxiliary Unit, St. John's, 1953-54; married.

Dr. Barbara M. Orski, Intern in Children's Medicine—born in Warsaw, Poland, October 1, 1929; A.B., Hunter College, New York City, 1949; M.D., Harvard Medical School, 1953; Intern in Medicine, Peter Bent Brigham Hospital, 1953-54.

Dr. Demetrios A. Papadopoulos, Assistant Resident in Urology—born in Thessaloniki, Greece, June 8, 1924; M.D., Medical School of the University of Thessaloniki, 1951, following three years of service in the Medical Corps of the Greek Army; Assistant Resident in General Surgery, Laikon Hospital, Thessaloniki, 1951; Assistant Physician, Soldiers Home, Chelsea, Massachusetts, 1952; Assistant Resident in Urology, New England Center Hospital, Boston, 1953; home address: 4 Dragoumi Street, Thessaloniki, Greece.

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VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The Annual Picnic Supper for the house staff and visitors from other countries and their families will be held at the Bradford Cannons' in Lincoln on May 21, at 3 P.M. Each family is to bring its own supper and drinks. Dessert will be provided.

For those traveling out in their own cars, here are the directions: Take Route 2 out of Cambridge as far as the traffic light at the top of the hill in Lincoln. You will see a Socony Gas Station on the corner. Turn left to Lincoln Center, and then take the Weston Road on the left from Lincoln Center to the Cannons' driveway, which is on the left side of the road. You will see the sign "CANNON". It takes approximately 3/4 of an hour from Boston.

For those who have no transportation—this can be arranged for you. Be sure to let us know about this.

Also, BE SURE TO COME.

At the last tea which the Staff Wives gave for the staff and visiting doctors and their wives, we were pleased to note that 21 Staff Wives served as hostesses. There were 34 MGH doctors and their wives present, and at least 35 foreign guests. There were also two darling babies who were brought with their parents.

We are most grateful to Mrs. Greene FitzHugh for the beautiful flowers, which were arranged by Mrs. Samuel Morrill.

Mrs. Chester N. Frazier was most gracious in serving the sandwiches at all three teas this year—sandwiches which she had competently prepared.

Our thanks go to Mrs. Soma Weiss for making all the arrangements for our teas, and to Miss Louise Hatch for attending to the details each time.

These teas have been thoroughly enjoyed by all of us.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

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RETROLENTAL FIBROPLASIA

Part of the story of retrolental fibroplasia is past history, which tells of the slow accumulation of knowledge of the nature of the disease and the numerous efforts to discover its cause. The rest of the story is a statement of the present concept of retrolental fibroplasia and the present status of knowledge of its causation.

In 1942, Dr. Theodore L. Terry of the Massachusetts Eye and Ear Infirmary published the first report of retrolental fibroplasia, as an ocular disturbance found in premature infants of low birth weight, which resulted in partial or complete blindness. The chief features of Dr. Terry's description are: a vascularized grayish-white membrane behind each crystalline lens, microphthalmia, shallow anterior chamber, thin, elongated ciliary processes, fetal-blue color of the iris, searching nystagmus, and photophobia.

At the time of its discovery, and for the next few years, retrolental fibroplasia was relatively rare and little known. During the past decade, however, the number of cases has increased so markedly (while other causes of infant blindness have in large part been eliminated) that retrolental fibroplasia is now the most common cause of blindness in children.

Although the early reports were confined, for the most part, to a few regions in the United States (Massachusetts, New York, Illinois), in the last 5 or 6 years retrolental fibroplasia has appeared in parts of this country and in many other parts of the world where, in spite of systematic searching, it had not previously been found. And the manner of its spreading was puzzling. The locus of its appearance was sometimes a specific hospital, rather than a city or a region. There were many instances of its presence in one or a few hospitals in a city, and not in others. The hospitals in which it occurred were not invariably the large institutions where many patients are seen. In fact, in some cities, the large hospitals were relatively free of the disease, while cases were found in the smaller hospitals. In certain regions where it had been well established, it abated both quantitatively and qualitatively, so that cases became fewer and less severe, for no apparent reason. In some hospitals, the incidence showed wide fluctuations from year to year.

Past research

Interest in the cause of this disease has naturally grown with the alarming increase in its frequency and distribution, and numerous possible causes have been investigated. (Many of the etiologic factors studied by others were originally suggested by Dr. Terry, who was in the process of investigating their validity at the time of his death in 1946.)

Some research groups have sought the answer in factors relating to the parents. The various causes of prematurity (for example—multiple births, toxemia of pregnancy, premature separation of the placenta, placenta previa, premature rupture of the membranes) have been investigated. It is the conclusion of numerous authors that *prematurity itself,* and not the cause of prematurity, is a significant factor in the etiology of retrolental fibroplasia.

Investigators have failed to find a correlation between retrolental fibroplasia and maternal disease during or before pregnancy. Nor has an association with retrolental fibroplasia been found in any aspect of the mother's obstetrical history or treatment.

Other workers have directed their attention to factors relating to the infant. No association has been found between retrolental fibroplasia and the following: the season of birth, multiple birth, sex distribution, congenital anomalies, and the condition of the infant at birth.

It has been possible to rule out certain aspects of pediatric management, since it was demonstrated that the disease is not caused by the premature exposure of the retina to light, nor by the water-miscible vitamin preparations which have been in use during the past ten years, nor by a deficiency of vitamin E. It has been shown that weekly transfusions of blood from women in their last trimester of pregnancy will not protect premature infants from retrolental fibroplasia. And it has also been demonstrated that ACTH and cortisone have no effect on the course of the disease. (It should be mentioned that, in the experiments made with vitamin E and with ACTH and cortisone, the results at first looked very promising. However, when controlled experiments on sufficiently large groups of babies were done, it became evident that these agents were ineffective in either curing or preventing retrolental fibroplasia.)

The nature of retrolental fibroplasia

Although little progress was made during this period toward discovering the *cause* of retrolental fibroplasia, much was learned concerning its nature and clinical course. Before 1949, the disease was recognized only in its final stages when the retrolental membrane was a *fait accompli.* In 1949, however, ophthalmologists and pediatricians started to make routine regular eye examinations, from birth on, of all premature babies of low birth weight. From these repeated examinations they were able to see the disease start (usually between 3 and 6 weeks after birth) and then advance, stage by stage, to the completion of its active or acute phase (in 3 to 5 months). It was observed that the clinical course of the acute phase of retrolental fibroplasia includes retinal-vessel dilatation and tortuosity, vitreous clouding, retinal clouding, hemorrhage into the retina and vitreous, growth of new capillaries, progressive retinal detachment, and retinal membrane formation.

Mild and severe forms of retrolental fibroplasia

It was also observed that retrolental fibroplasia does not always run its full course to retrolental membrane formation (with resulting partial or complete blindness). In fact, in a large percentage of cases (about 60%), it subsides spontaneously during the early stages. When this regression occurs, the disease is designated as *mild;* in many instances, the affected eye appears to become entirely normal.

Our group, working at the Massachusetts Eye and Ear Infirmary, is investigating the possibility suggested by Dr. Merrill J. King that, even when regression appears to be complete, the visual function is often somewhat impaired. We have found, at preschool or school age, seriously defective vision in prematurely-born children who, as infants, showed signs of only the earliest stages of retrolental fibroplasia. On the other hand, children who, in infancy, showed the severe form of retrolental fibroplasia and for whom the most pessimistic prognosis was made, have sometimes been found to have a considerable amount of useful vision, when examined at nursery school or school age.

For this reason, our group is now engaged in a new, long-term study to evaluate the degree of visual damage which results from each stage of retrolental fibroplasia, mild or severe, whether regression has occurred or not. Formerly, if no evidence of retrolental fibroplasia was observed, babies were discharged from our study at the age of 3 months. If retrolental fibroplasia was present, examinations were continued for at least 5 months and often for a year. In the present study, we will continue to examine the children until they are 5 years old, since we feel it is not until then that it is possible to make a reliable estimate of their vision. In addition, we are now recalling the discharged members of the previous study, for visual testing, with the same idea in mind. We have complete records of the ophthalmoscopic examinations of all infants of birth weight 4 pounds or less, born at the Boston Lying-in Hospital since 1949, and will attempt to correlate any visual defect we find at the age of 5 years with what we know of the condition of the child's eyes in early infancy. Such information may aid in understanding and caring for the visual defects which are sometimes found in children of premature birth, and which may have been caused by mild forms of retrolental fibroplasia.

Pathology

Since retrolental fibroplasia is a disease which usually does not impair the general well-being of the infant, and since it is now seldom confused with diseases for which enucleation is indicated, the opportunities for examination of microscopic sections of eyes in the acute phase of retrolental fibroplasia have not been numerous. Nevertheless, enough pathologic material has been accumulated to establish the pathologic morphology of the disease. It has been found that retrolental fibroplasia is essentially a disturbance of the *developing* blood vessels of the retina, with abnormal growth of new capillaries. The subsequent complications of retinal detachment and retrolental membrane formation are evidently secondary to this initial effect on the developing blood vessels.

Present concept

The present knowledge of the clinical course and pathology of retrolental fibroplasia, of the possibility of spontaneous regression during its early stages, and of the existence of mild as well as severe forms, have made it necessary to revise the original concept of the disease. It is now regarded essentially as a disorder of the developing retinal blood vessels. It is also agreed that the presence of a retrolental mass is by no means the only indication that the acute phase of the disease has previously existed. All gradations of severity, from very slight damage to complete membranes, may be found, and the degree of damage depends upon the extent of involvement during the acute phase. In some cases the only findings are minute retinal folds or scarring which give almost no clinical signs. Other cases may show myopia. Visual defects (resulting from such residua as retinal pigment disturbance, optic atrophy, and dragged disc) may be found.

Most observers agree that the disease is bilateral, although there may be a difference in involvement in the two eyes.

Present knowledge of the causation of retrolental fibroplasia

Many investigators reasoned that, since retrolental fibroplasia has been increasingly evident during the past ten years, its cause might be found in some aspect of premature-infant care which had been introduced or more extensively used during that same period of time. One such form of treatment is, of course, oxygen therapy. Premature infants are predisposed to respiratory difficulties because their lungs are not fully developed at birth, and these infants often require additional oxygen in the air they breathe. Because pediatricians have felt that many very small premature babies have been kept alive by this treatment, oxygen therapy has become an almost universal practice in the last ten or fifteen years, in modern, well-staffed nurseries for premature babies.

Early in its use, oxygen was administered simply by means of a funnel or tent, so that it quickly became diluted by the room air, and the atmosphere breathed by the baby did not contain high concentrations of oxygen. However, in recent years, more efficient equipment for oxygen administration has been developed, in the form of closed incubators into which oxygen can be introduced and fairly well maintained at any desired concentration. It has therefore been the tendency, in recent years, to rear premature infants *routinely* in high concentrations of oxygen.

One of the earliest observations of a possible association between oxygen therapy and retrolental fibroplasia was made in 1949 by the group at the Massachusetts Eye and Ear Infirmary. It was found, on examining the hospital records of all the premature infants (of birth weight 4 pounds or less) born at the Boston Lying-in Hospital from 1938 to 1948, that the infants in whom retrolental fibroplasia subsequently developed remained in the premature nursery, the incubator, and in oxygen for longer periods of time than the infants in whom retrolental fibroplasia did not develop.

Following this, groups in Australia and in England reported: (1) that cases of retrolental fibroplasia had not occurred in their hospitals when oxygen was administered infrequently and simply, by means of tent or funnel, (2) that the disease started to appear only after efficient oxygen incubators had been put into use and oxygen was given routinely and liberally to all premature infants of low birth weight, (3) that when the use of oxygen therapy was restricted to those babies who showed definite clinical need for it, no further cases of retrolental fibroplasia appeared, and (4) that when they compared the rate of occurrence of retrolental fibroplasia from hospital to hospital, they found a higher incidence of retrolental fibroplasia in hospitals which used oxygen therapy liberally than in hospitals which used it sparingly.

Although such reports were interesting and suggestive, they were by no means conclusive, for several reasons. In the first place, the experiences being compared were not necessarily comparable. For example, comparison was made between the results of high oxygen therapy in one hospital and the results of low oxygen therapy in *another* hospital, and the difference in oxygen policy may have been only one of *many* differences between the two hospitals. Again, comparisons were made between events which occurred in different time periods, and there is no way of knowing whether some unknown causal factor existed during one period and not in the other. Finally, the reported changes in incidence of retrolental fibroplasia following changes in oxygen administration occurred over rather short periods of time (1-2 years). Those of us who have been observing the incidence rate of retrolental fibroplasia over a period of 15 years have seen wide fluctuations in incidence from year to year, for no accountable reason. Nevertheless, if these reports were not conclusive, they were at least highly suggestive that there might be a connection between high oxygen treatment and retrolental fibroplasia.

Therefore, a more precise kind of study was undertaken by Dr. Arnall Patz and his group, in Washington, D.C., to investigate this possible connection. This was a so-called controlled study in which the group of premature babies of birth weight 3 pounds 5 ounces or less, in one premature nursery (Gallinger Hospital), were divided into two subgroups. One subgroup received high concentrations of oxygen (80%) for long periods of time (28 days) and the other subgroup received low concentrations of oxygen (less than 40%) only when clearly needed, and then for only very short periods of time. In all other respects, identical pediatric care was given to both subgroups of infants. In the first subgroup (high oxygen), 25% of the infants developed severe retrolental fibroplasia and 36% more developed mild retrolental fibroplasia. In the second subgroup (low oxygen), no infants developed the severe disease, and 16% developed mild retrolental fibroplasia. It is clear that these results strongly suggest that high oxygen therapy is an important factor in the causation of retrolental fibroplasia.

It is important to point out that in this study, and in others like it, which were designed to investigate the possible relation of high oxygen therapy to retrolental fibroplasia, there was no danger of producing more cases of retrolental fibroplasia than would otherwise have occurred. Since high oxygen therapy was part of the universal *routine* method of premature-infant care, the infants who received high oxygen therapy were not being exposed to any more hazard than that facing any premature infant being reared, at the time, in any modern well-equipped premature nursery. It was, rather, the babies in the low oxygen group whose treatment was, in a sense, experimental, since restricted oxygen therapy was a departure from routine. However, pediatricians were beginning to suspect that there were fewer indications of need for oxygen therapy than was previously believed, and that, even when there was a definite need, lower concentrations of oxygen would probably suffice. And, indeed, it was found that the mortality rate in the low oxygen group was no greater than in the high oxygen group.

(It should be pointed out that it is not always possible to avoid the use of high concentrations of oxygen, since some infants require it for survival. The babies in the low oxygen group were, of course, carefully watched and those who gave indication of needing more oxygen received it, but were no longer considered members of the low oxygen group.)

Several other groups of investigators have made similar studies in their own hospitals and have obtained similar, confirming results, both as to the association of high oxygen therapy with retrolental fibroplasia, and the survival rate of premature infants in low oxygen.

These reports were all highly suggestive of a causal relationship between high oxygen therapy and retrolental fibroplasia, although each study dealt with relatively small numbers of babies. This was necessarily so because no one premature nursery has a very large group of infants of low birth weight. In order to accumulate data on a *large* number of premature infants, a Coordinated Study was planned and started, about a year and a half ago, in 18 hospitals throughout the country, by Dr. V. Everett Kinsey (formerly of the Howe Laboratory at the Massachusetts Eye and Ear Infirmary, and now of the Kresge Institute in Detroit). This study was designed to investigate the oxygen question in much the same way as had been done by Dr. Patz, but on a much larger scale. In the Coordinated Study, to be sure, many different hospitals were involved, but both high and low oxygen treatment was given in *each* hospital, and every effort was made to keep other conditions uniform in all 18 hospitals. Moreover, the studies were all going on simultaneously. The results of this large study showed that the incidence of severe retrolental fibroplasia was markedly higher in the group of infants receiving large amounts (so-called routine) of oxygen treatment than in the group which received very little (curtailed) oxygen treatment.

Since, in all of these studies, it has been demonstrated that many premature infants may be reared successfully with very little or no oxygen therapy, it is now felt that it can be safely recommended that the use of oxygen therapy be rigidly restricted to infants who show a definite clinical need for it and no longer be used as a routine treatment for premature babies. These recommendations are being widely publicized in editorials in medical and, particularly, pediatric journals, and in statements by numerous State health departments and governmental health agencies.

However, although it has been shown repeatedly that in most cases oxygen treatment for premature infants can safely be restricted, there are, and possibly always will be, some babies who require high oxygen treatment for survival, and who will therefore be exposed to its dangers as well as its benefits. This is perhaps less alarming than it sounds because there are indications, from the results of the Coordinated Study and some of the smaller studies, that it is possible to work out the safe limits of both amount and duration of oxygen therapy which will satisfy the infants' needs for oxygen and yet not expose them to the danger of retrolental fibroplasia. Also, there may well be certain methods of protection against the damaging effects of oxygen, when large amounts are required. It is hoped and expected, therefore, that in good medical hands, with the information that is constantly being collected, oxygen therapy can safely be used when needed.

Animal experiments

In establishing the relationship of a human disease to a possible causal factor, it is useful to be able to produce the disease in animals, by means of that factor. Such experiments with animals have been done by three separate groups of workers, in England, in Sweden, and in this country. Eye damage which very closely resembles human *mild* retrolental fibroplasia has been produced in the eyes of newborn animals (kittens, puppies, mice, and rats) by exposing these newborn animals to continuous high oxygen treatment. This is very convincing additional evidence that oxygen is an important factor in the causation of retrolental fibroplasia, although it is a little puzzling that these eye changes, for the most part, resemble *mild* retrolental fibroplasia, and almost no cases of *severe* retrolental fibroplasia (with retinal detachment and membrane formation) have been produced in animals this way.

All things considered, it seems clear that the research of these past few years has made real progress in an attack on the disease which is, at present, the major cause of infant blindness. The matter, however, is not entirely solved, and there remain some problems which require further investigation. For example, while it is true that many fewer cases of severe retrolental fibroplasia occur in the low oxygen groups, there are still some. In fact, there are even a few instances of severe retrolental fibroplasia in babies who have received *no* oxygen therapy at all. Furthermore, in the experience of many groups, cases of *mild* retrolental fibroplasia still continue to occur in considerable numbers, even when oxygen therapy is greatly reduced.

Moreover, the experience of our group (working with the infants of birth weight 4 pounds or less born at the Boston Lying-in Hospital) has been distinctly different from the experience of those groups who have reported that a reduction in incidence of retrolental fibroplasia followed restriction of oxygen therapy. We have not, in fact, found that the incidence rate of retrolental fibroplasia parallels the extent of oxygen therapy. Our study shows that at the Boston Lying-in Hospital there were wide fluctuations in incidence rate of severe retrolental fibroplasia between the years 1938 and 1948, with peaks in 1945 and 1948 of 32% and 27%, respectively. In 1949, the incidence rate of *severe* cases fell abruptly to less than 10% and has remained at this low level to the present time, in spite of the fact that the most extensive use of oxygen therapy at the Boston Lying-in Hospital occurred in 1949 and 1950. On the other hand, the curtailment of oxygen therapy, instituted in 1951, produced no further drop in the incidence rate of *severe* retrolental fibroplasia, and no change in the high incidence rate (40%) of *mild* cases. It is possible that the reduction in oxygen therapy was greater in those hospitals which reported a fall in incidence rate following restriction of oxygen therapy than at the Boston Lying-in Hospital.

Because of the problems which remain to be solved, many investigators feel that although it has been demonstrated that oxygen therapy is perhaps a major factor in the causation of retrolental fibroplasia, there may well be other factors, as yet unrecognized. Does excessive oxygen therapy actually cause the *mild* disease, as it does in animals, or does it produce *severe* disease by aggravating already existing mild cases which are the result of some other cause? Is it possible that any one of a number of ailments to which premature infants are susceptible, which perhaps *themselves* create a need for oxygen therapy, might give rise to the mild disease?

In spite of these unanswered questions, it is generally agreed that the evidence is good that high oxygen therapy is an important, if not the only, factor in the causation of retrolental fibroplasia. This knowledge, combined with the assurance that for many babies oxygen therapy can safely be reduced or even omitted, should result, within the next few years, in a striking reduction in the number of our preschool blind.

Leona Zacharias, Ph.D.,
Fellow in Ophthalmology

* * *

Resolution adopted by the Trustees at their meeting on May 13, 1955, on the death of John R. Macomber

We record with profound sorrow the death on May 11, 1955 of our fellow trustee John R. Macomber.

First elected to the Board in 1919, he served as trustee until 1932, when he resigned to take up business in New York. Returning to Boston in 1934, he was re-elected a trustee and in 1944 became President of the Corporation, serving in these capacities until his death.

Beloved by trustees, staff, and members of the Corporation—his keen mind and sound judgment commanded universal respect, and his warm and friendly personality endeared him to all. As a member for many years of the General Hospital Committee and the Committee on Finance, he gave full measure in both time and interest, but his devotion to the Hospital throughout the span of his service took form in many other ways. As a lover of animals, he was keenly interested in the arrangements for the care of the animal farm in the new Research Building. Always he kept a watchful eye on the trees, shrubs, and flowers on the Bulfinch lawn, and it is doubtful if anyone today could tell how many of these were planted under his guiding eye and paid for out of his own pocket. During the last few years he rejoiced in doing over the lawn between the Phillips House and the White Building, as always at his expense, and the yews and the bird bath which add so much to the beauty of that quadrangle were his idea and one of the last of his many generosities to the Hospital.

Nor shall we forget his interest in the Corporation and his delight in being the host at the annual dinner of its members.

Two years ago, under strong pressure from the trustees, he reluctantly agreed to sit for his portrait, and the painting of him and his two dogs now hangs on the Hospital walls. We value greatly this vivid picture of a great servant of the Hospital, while we cherish the memories of service with an associate whose unselfish and farsighted devotion to our beloved institution was an inspiration to us all.

[This Resolution was adopted by a standing vote of the Board.]

* * *

On April 11, at a dinner meeting of the Boston Surgical Society, Dr. Edward D. Churchill was presented with the Henry Jacob Bigelow Medal "for contributions to the advancement of surgery".

Following the presentation, Dr. Churchill gave an address on "The dark decades of Surgery, 1846-1886".

* * *

Dr. and Mrs. Nathaniel W. Faxon flew to Istanbul on May 18. The directors of the American Hospital of Istanbul, Inc., whose headquarters are in New York City, asked Dr. Faxon to go to Turkey in order to make an on-the-spot survey of conditions at the Hospital, to evaluate economic and social relationships between the Turkish government and the medical profession, and to study the problem of the attitude of Turkish women toward nursing.

The Hospital is commonly called the Admiral Bristol Hospital, in tribute to the man who was instrumental in getting the money to build the Hospital while he was our High Commissioner in Turkey after World War I.

The Faxons expect to be in Istanbul about a month.

* * *

The Coordinating Committee of the Massachusetts General Hospital played host to the members of the Committee of Hospital Auxiliaries at their Annual Meeting on April 13, in Bartlett Hall.

Mrs. Oliver Cope, Chairman of the Coordinating Committee, welcomed the members and their guests, who represented fifteen hospitals in the metropolitan Boston area. Mrs. Charles S. Bolster, Chairman of the Committee of Hospital Auxiliaries, presided at the business session which followed morning coffee.

A panel discussion on "The need for cooperation in patient care" was the high light of the morning program. Participating in the discussion were Dr. Oliver Cope, surgeon, Dr. Robert T. Long, psychiatrist, Miss Barbara Sprott, social worker, and Miss Mary Virginia Sellers, nurse.

At the conclusion of the meeting, the guests were conducted on optional tours of the Hospital.

The Board of Trustees, at their meetings on April 15 and 29, voted:

To grant one year's leave of absence to Dr. Bernard D. Briggs, in order that he may accept a Fulbright grant covering a year's lecture appointment at the Christian Medical College at Vellore, South India;

To change the title of Dr. John H. Dwyer from Intern to Second Assistant Resident on the Children's Medical Service, beginning July 1;

To rescind the appointment of Dr. Michael J. Franzblau, Resident in Dermatology, beginning July 1.

To appoint:

Dr. Howard S. Cameron as Assistant Resident in Orthopedic Surgery, beginning October 9;

Dr. Ralph C. Darling, Jr. as Second Assistant Resident in Surgery, beginning January 1, 1956;

Dr. Gerald S. Foster as Assistant in Medicine for one year, beginning July 1;

Dr. Benjamin F. Gill as Assistant in Psychiatry, beginning July 1;

Dr. Joan Kazanjian as Resident on the Children's Medical Service, beginning July 1;

Dr. J. Drennan Lowell as Assistant in Orthopedic Surgery, beginning July 1;

Dr. Walter Mann as Assistant in Psychiatry, beginning July 1;

Dr. Farrokh Saidi as Third Assistant Resident in Surgery, beginning July 1;

Dr. Alfred H. Stanton as Psychiatrist-in-Chief at McLean Hospital, beginning July 1;

Dr. Anne G. Tighe as First Assistant Resident in Pathology for one year, beginning October 1.

At their meetings on April 13, 20, and 27, the General Executive Committee voted:

To promote:

Dr. Benjamin D. Canlas, Jr. from First Assistant Resident to Resident in Pathology for one year, beginning July 1;

Dr. Raymond A. Justi from First Assistant Resident to Resident in Pathology for one year, beginning July 1;

Dr. Walter B. King, Jr. from Third Assistant Resident to Second Assistant Resident in Pathology for one year, beginning July 1;

Dr. David B. Murray from Second Assistant Resident to First Assistant Resident in Pathology for one year, beginning July 1;

Dr. Alexander B. Timm, Jr. from Assistant Resident to Resident in Dermatology for one year, beginning July 1.

To appoint:

Dr. José E. Arreaza as Graduate Student Assistant in Surgery, effective as of April 12;

Dr. Leonard Atkins as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Arthur J. Barker as Clinical Fellow in Surgery, assigned to the Tumor Clinic, beginning July 1;

Dr. Arthur Z. Mutter as Clinical Fellow in Psychiatry, beginning July 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. Again this month, and despite the fact that this request has been made in each issue of THE NEWS ever since we started this column five years ago, not every author remembered to include that information. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Preanesthetic medication. (Guest editorial)
J.A.M.A. 157:242-243.

Lasagna, L., von Felsinger, J. M., and Beecher, H. K.
Drug-induced mood changes in man. 1. Observations on healthy subjects, chronically ill patients, and "postaddicts".
J.A.M.A. 157:1006-1020.

von Felsinger, J. M., Lasagna, L., and Beecher, H. K.
Drug-induced mood changes in man. 2. Personality and reactions to drugs.
J.A.M.A. 157:1113-1119.

Cardiology

Clark, R. J., Tousant, E. S., and Sprague, H. B.
Heart disease in Massachusetts in relation to the Workmen's Compensation Act.
New England J. Med. 252:478-484.

Currens, J. H., McGinty, J. F., Khambatta, R. B., and Gordon, I.
The effect of intravenous protoveratrine on digital pulse volume and digital skin temperature in hypertensive patients.
Circulation 11:440-446.

Dermatology

Herbst, F. S. M., Lever, W. F., Lyons, M. E., and Hurley, N. A.
Effects of heparin on the lipoproteins in hyperlipemia. An electrophoretic study of the serum alpha and beta liproproteins after their separation by fractionation of the plasma proteins or ultracentrifugal flotation.
J. Clin. Investigation 34:581-589.

Endoscopy

Benedict, E. B.
Medical progress: Endoscopy.
New England J. Med. 252:709-719.

Gynecology and Obstetrics

Graham, J. B., and Graham, R. M.
Antibodies elicited by cancer in patients.
Cancer 8: 409-416.

Laboratory Science

Brodie, A. F., and Lipmann, F.
Identification of a gluconolactonase.
J. Biol. Chem. 212:677-685.
Jones, M. E., Spector, L., and Lipmann, F.
Carbamyl phosphate, the carbamyl donor in enzymatic citrulline synthesis.
J. Am. Chem. Soc. 77:819-820.
Lipmann, F.
Coenzyme A and biosynthesis.
Am. Scientist 43:37-47.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E.
The differentiation between mental deficiency and emotional disorders, and some therapeutic experiments with Rauwolfia serpentina (Koglucoid).
Arch. de pediat. d. Uruguay 26:32-46.

Orthopedic Surgery

Lawrence, G. H., Cave, E. F., and O'Connor, H.
Injury to the Achilles tendon: Experience at the Massachusetts General Hospital, 1900-1954.
Am. J. Surg. 89:795-802.

Otolaryngology

Kelemen, G.
Experimental defects in the ear and the upper airways induced by radiation.
A.M.A. Arch. Otolaryng. 61:405-418.

Social Psychology

Talland, G. A.
Task and interaction process: Some characteristics of therapeutic group discussion.
J. Abnormal & Social Psychol. 50:105-109.

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VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The Annual Meeting of the Staff Wives was held on May 3, at 10 A.M., in Bartlett Hall. Coffee was served before the meeting and greetings were exchanged between the Wives and Dr. Dean A. Clark, Mrs. Soma Weiss, and Miss Mary Ruth Wolf.

Mrs. Oliver Cope, our President, asked for reports from the various committees, and the following new officers were elected:

President—Mrs. Oliver Cope
Vice-President—Mrs. Charles B. Burbank, who is also our liaison with the Community Chairmen
Treasurer—Mrs. Charles L. Short
Secretary—Mrs. Joseph S. Barr
Publicity—Mrs. Morris H. Adler
Music Chairmen—Mrs. Milford D. Schulz and Mrs. John D. Crawford
Special projects—Mrs. Marshall K. Bartlett and Mrs. Richard H. Sweet
  Teas—Mrs. Jackson M. Thomas
  Housing—Mrs. Grant V. Rodkey
  Flowers—Mrs. Earle M. Chapman
Advisor to Distaff Club—Mrs. Reed Harwood
Community Chairmen
  Cambridge—Mrs. Robert N. Ganz
  Boston—Mrs. Wyland F. Leadbetter
  Brookline—Mrs. Benjamin Castleman
  Chestnut Hill—Mrs. John Homans
  Belmont—Mrs. Claude E. Welch
  Dedham—Mrs. Frederic Tudor
  Needham—Mrs. Frederic Tudor
  Milton—Mrs. Frederic Tudor
  Newton—Mrs. James H. Currens
  Lincoln—Mrs. Perry J. Culver
  Weston—Mrs. Perry J. Culver
  Watertown—Mrs. Perry J. Culver
  Waltham—Mrs. Perry J. Culver
  Lexington—Mrs. John P. Bunker
  Concord—Mrs. John P. Bunker
  Winchester—Mrs. Laurence L. Robbins
  Arlington—Mrs. Laurence L. Robbins
  Stoneham—Mrs. Laurence L. Robbins

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. Alexander S. Macmillan, Jr. spoke on "Sinusitis" at the Postgraduate Medical Institute which was held on May 10 at the Veterans Administration Out-Patient Clinic in Boston. Dr. Macmillan is head of the X-ray Department at the Infirmary.

Dr. David D. Donaldson presented a paper, by invitation, at the annual meeting of the Optical Society of America in New York City on April 7. His subject was "Optical instrumentation for examination of the eye".

Dr. Carl G. Freese, who will begin his residency at the Infirmary in July, is now working in the Howe Laboratory with Dr. David G. Cogan.

On April 13, Dr. Charles L. Schepens spoke about eye surgery on the Blue Cross-Blue Shield television program.

The February issue of *The American Journal of Ophthalmology* contained two articles written by Dr. William Stone, Jr. —"A study of the growth of the anterior corneal layer in relation to the plastic artificial cornea", and "Photography of the anterior segment of the rabbit eye", written in conjunction with Leonard Reynolds. Both articles were printed from a speech which was delivered to the Association of Research in Ophthalmology in San Francisco last June by Dr. Stone.

Mr. Raymond C. Jahrling, plastic technician of ocular prosthetics, is working with Dr. Stone. He is doing research on the plastic cornea, as well as fitting patients with artificial eyes.

At the meeting of the Society of American Bacteriologists on May 9 in New York City, Dr. Robert S. Gohd spoke on "Requirement of calcium for the growth of influenza virus in tissue culture".

On May 11, Dr. Edwin B. Dunphy, Chief of Ophthalmology, spoke to a group of Naval Reserve doctors at the Children's Medical Center, and on May 21, he discussed "Clinical use of radioactive phosphorus" in a symposium held by the Pennsylvania Academy of Ophthalmology in Atlantic City.

Dr. Christine Bothner-By, formerly with Dr. Roger W. Jeanloz at the Massachusetts General Hospital, has recently joined the staff of the Retina Foundation. Dr. Bothner-By received her degree in Organic Chemistry from New York University in 1951.

On Thursday evening, April 21, Miss Dorothy M. Tarbox, Director of the Nursing Service at the Massachusetts Eye and Ear Infirmary, and her assistant, Miss Hilda G. Blaisdell, were honored by 180 friends at a farewell dinner, held at the Boston Club.

Dr. Thomas Cavanaugh, of the Ophthalmology Service, presided throughout the evening as master of ceremonies, with wit and graciousness. A most felicitous toast was proposed to the honored guests by Dr. Vincent J. Kelley, of the Otolaryngology Service. Following dinner, Miss Sally Johnson, Director *Emeritus* of the MGH School of Nursing and Nursing Service, gave a delightful and inspiring talk of reminiscence. Dr. Edwin B. Dunphy, in presenting gifts of diamond and pearl earrings to Miss Tarbox and Miss Blaisdell, also spoke with humor and appreciation of the many years of association with both these ladies.

Dr. Frederick H. Verhoeff, unable to be present, sent a telegram of greeting, saying in part, "When Miss Tarbox and Miss Blaisdell leave, it will seem as if the foundations of the Infirmary have been weakened, and an ache will be left in our hearts."

Although it was a sad occasion for those who love Miss Tarbox and Miss Blaisdell, it was also a memorable evening because of the sincerity and depth of feeling expressed for these two women who have given so much of their lives to the Massachusetts Eye and Ear Infirmary, to its patients, and to their coworkers.

To use one of Miss Tarbox's oft-repeated expressions, we can only say—"Land sakes", we shall miss you both!

Henrietta I. Olsen, Chairman,
Committee for the Farewell Dinner

BIOGLETS

Dr. Peter R. Bally, Assistant Resident in Medicine—born on March 21, 1921; Military Service: Swiss Army, 1944-45; M.D., University of Zurich, 1948; Intern, Seattle, Washington, 1950-51; Fellowship in Medicine, Peter Bent Brigham Hospital, Boston, 1952-54; home: Zurich, Switzerland.

Dr. Dean LaR. Moyer, Assistant Resident in Pathology—born in Allentown, Pennsylvania, March 17, 1925; U.S. Navy, 1944-46; B.A., Lehigh University, 1948; M.D., Medical School, University of Rochester, N. Y., 1952; Intern in Pediatrics, Children's Hospital, Los Angeles, California, 1952-53; Assistant Resident in Pathology. Children's Hospital, Los Angeles, 1953-54.

Dr. Leonard H. Plotkin, Intern in Children's Medicine—born in Hartford, Connecticut, October 16, 1923; U.S. Army Air Force: United States and Okinawa, 1943-46; B.A., American International College, Springfield, Massachusetts, 1950; M.D., Tufts College Medical School, 1954; married; home: Springfield, Massachusetts.

LEONA ZACHARIAS, PH.D. — FELLOW IN OPHTHALMOLOGY
MASSACHUSETTS EYE AND EAR INFIRMARY

Dr. Henning Pontoppidan, Assistant Resident in Anesthesia—born in Copenhagen, Denmark, July 24, 1925; M.D., University of Copenhagen Medical School, 1952; intern, Centralsygehuset Hjorring, Denmark, 1952-53; married; one child.

Dr. Majic S. Potsaid, Assistant Resident in Radiology—born in Pittsfield, Massachusetts, November 20, 1916; U.S. Army: Medical ADM Corps (discharged as Major), 1941-46; B.S., Yale University, 1947; M.D., Yale University Medical School, 1951; Intern, Central Maine General Hospital, Lewiston, Maine, 1951-52; general practice, Pittsfield, 1952-54; married: four children.

Dr. Gerold L. Schiebler, Intern in Children's Medicine—born in Hamburg, Pennsylvania, June 20, 1928; B.S., Franklin and Marshall College, Lancaster, Pennsylvania, 1950; M.D., Harvard Medical School, 1954: married

Dr. Katharine E. Spreng, Intern in Medicine—born in Cleveland, Ohio, November 22, 1927; A.B., Oberlin College, Oberlin, Ohio, 1950; M D., Western Reserve University, Cleveland, Ohio, 1954; home: Cleveland.

Dr. Oscar E. Starobin, Intern in Medicine—born in Worcester, Massachusetts, August 9, 1928: A.B., Harvard College, 1950 (active in the Harvard Band); M.D., Harvard Medical School, 1954; married.

Dr. Richard J. Stenger, Assistant Resident in Pathology—born in Cincinnati, Ohio, December 13, 1927; A.B., Holy Cross College, Worcester, Massachusetts, 1949; M.D., College of Medicine, University of Cincinnati, 1953; Intern, Cincinnati General Hospital, 1953-54; married.

Dr. Albert Van Eerde, Assistant Resident in Anesthesia—born in Camden, New Jersey, October 4, 1922: A.B., Princeton University, 1947; M.D., University of Pennsylvania Medical School, 1947; Intern, Orange Memorial Hospital, Orange, New Jersey, 1947-48; general practice for two and one-half years in Linden, New Jersey; U.S. Air Force: active duty at Sampson Air Force Base, N.Y., 1951-53; married; four children.

Dr. Setrag A. Zacarian, Resident in Dermatology—born in Worcester, Massachusetts, December 26, 1921; B.S., Tufts College, 1943; M.D., Boston University School of Medicine, 1947; Intern, Beverly Hospital, Beverly, Massachusetts, 1947-48; Assistant Resident in Medicine, Malden Hospital, Malden, Massachusetts, 1948-49; Teaching Fellow in Pathology, Tufts Medical School, 1949-50; U.S. Navy: Pathology and Dermatology at U.S. Naval Hospital, Camp Lejeune, North Carolina, 1951-52; Assistant Resident and Senior Assistant Resident in Dermatology and Syphilology, Duke Hospital, Durham, North Carolina, 1952-54.

New addresses:—

Dr. Russell V. Fuldner (*Or.* 1939), 178 Sherman Ave., New Haven 11, Conn.
Dr. Robert S. Grier (*E.M.* 1942), 4925 Trinity Drive, Los Alamos, N.M.
Capt. Arthur Haut, MC, USAR (*M.* 1950), 8-0-31 #7 MFSS, BAMC, Fort Sam Houston, Tex.
Dr. John W. Hayden (a.r.s. *Or.* 1955), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Helmuth Hilz, Ph.D. (res. fel. *Biochem.* 1955), Chemischen Laboratorium der Universit Munchen, Biochemische Abteilung, Munich, Germany
Dr. Lucie J. Jessner (r.p. *Psychiat.* (*McL.*) 1939), University of North Carolina, Chapel Hill, N.C.
Dr. J. Drennan Lowell (a.r.s. *Or.* 1953), 266 Beacon St., Boston, Mass.
Lt. David J. L. Luck, MC, USAR (*M.* 1954), 51st TAC Hospital, APO 235, c/o Postmaster, San Francisco, Calif.
Dr. Orville F. Rogers (*W.M.* 1913), 140 Ogden St., New Haven 11, Conn.
Dr. Warren R. Sisson (*C.M.* 1912), 203 Commonwealth Ave., Boston, Mass.
Dr. Henrik O. Tonning (clin. & res. fel. *M.* 1951), 44 Cobury St., Saint John, New Brunswick, Canada

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Brief bits:—

During the meetings of the American Academy of Orthopedic Surgeons, held in Los Angeles in January, Dr. Otto E. Aufranc gave a course on "Mold arthroplasty". On April 11, Dr. Aufranc gave a talk on "The present status of mold arthroplasty" before the Detroit Academy of Orthopedic Surgeons.

Dr. Henry K. Beecher was the Alpha Omega Alpha Lecturer at the University of Louisville Medical School in April. He spoke on "New work on narcotics". At the dinner meeting he spoke on "Specialism as a problem in medical schools". Dr. Beecher was elected to membership in the American Surgical Association at their recent meeting in Philadelphia.

Dr. Edward B. Benedict gave a talk on "Endoscopy" to the Dorchester Medical Club on April 14.

Dr. Walter S. Burrage gave the Staige Davis Blackford (*E.M.* 1927) Memorial Lecture at the University of Virginia School of Medicine on April 25. His subject was "The effect of allergic reactions on small blood vessels". On April 27, at the Annual Session of the American College of Physicians, held in Philadelphia, Dr. Burrage spoke on "Guides to the use of cortisone and hydrocortisone in allergy". Dr. John W. Irwin joined Dr. Burrage, by invitation, in the lecture.

Dr. Edwin F. Cave lectured in Philadelphia on April 22, in a Fracture Course given by Professor Lorenz Bohler, from Vienna. Dr. Cave's subject was "Fractures involving the knee joint".

Dr. John H. Gibbon (Dalton Scholar 1935) presided as President of the American Surgical Association at the April meeting in Philadelphia.

Dr. William H. Horwitz (r.p. *Psychiat.* (*McL.*) 1951) announces the opening of his office for the practice of Psychiatry, at 82 Marlborough Street, Boston.

Dr. Roger W. Jeanloz of the Robert W. Lovett Memorial Laboratories has been invited by the Chemical Institute of Canada to deliver lectures before the sections of Montreal, Quebec, Deep River, and London (Ontario).

Dr. Russell M. Nelson (a.r.s. 1954) has finished his residency at the Minnesota University Hospital, and is now Assistant Professor of Surgery at the University of Utah.

In a "Brief bit" received from Dr. John W. Smillie (*E.S.* 1944) and published in the March issue of THE NEWS, an incomplete name of the organization to which Dr. Smillie has been elected as a Fellow was given us. Dr. Smillie says, in a later note, that the full name of the organization is the American Academy of Ophthalmology and Otolaryngology.

Dr. John D. Stewart (*E.S.* 1930) has recently been elected Chairman of the American Board of Surgery. Dr. Stewart succeeded Dr. Thomas H. Lanman (*E.S.* 1918). This is one of the most responsible assignments in surgical education.

Dr. Edward S. Welles (*E.S.* 1921) presided as President of the American Association for Thoracic Surgery at their meeting in Atlantic City in April.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 147 Boston, Mass. July and August 1955

PSYCHIATRY SERVICE

1954 - 1955

This has been a year of transition from the active and vigorous leadership of Dr. Stanley Cobb to the guidance of Dr. Erich Lindemann. An important addition to our staff during this period of transition has been Dr. Carl Binger, who has supervised the work on consultations and has been very helpful in the teaching program. The essential service units of the ward, the Psychiatry Clinic, the Alcohol Clinic, and the Child Psychiatry Unit are continuing unaltered at present. Some new services have been added—consultants for the Family Health Program, for the Adolescent Endocrine Clinic, and for medical-social service rounds. The research program developed by Dr. Cobb has continued, and plans are under way for enlarging this.

Service to patients

The actual number of admissions to the ward has increased during the year because a larger number of patients were admitted for diagnostic work-ups. Thus, the number of patients getting intensive treatment on the ward has decreased somewhat. Our aim is to enlarge the Clinic to provide for a larger load of patients needing long-term care. The ward would serve such purposes as intensive, diagnostic studies, brief periods of intensive therapy, or protective care during crises that may arise during psychotherapy on the outside. The physician who refers a patient for care during a crisis continues his interest during the patient's hospitalization, even though provisions for care and therapy are in the hands of a resident at the time. This plan has been especially helpful to patients with alcoholism and neurotic character structures, who are having intensive therapy in the Alcohol Clinic. The great tendency of these patients to "act out" leads to crises of medical care which can be handled well by short admissions to the ward.

Another development leading to somewhat reduced time of hospital stay of individual patients has been our growing effort to find solutions for special problems of very "dependent" patients who formerly were prone to stay for a considerable time, having developed a clinging dependence upon their particular physician. As a result of Dr. Lindemann's work in Public Health and Dr. John C. Nemiah's experience with rehabilitation problems, we have become much concerned with the specific methods which go into helping a patient who is defective in "social skills" and remains in a dependent role, not so much because of neurotic conflicts but because of lack in ability to deal with human relations in an adequate manner. Both on the ward and in the Clinics the re-educational side of psychotherapy has been emphasized, and we are beginning to envisage modifications of the ward care program and an occupational therapy structure to facilitate "social learning".

We have also had this year an increase in the number of boarders from other services, who represent the acute psychotic episodes in the Hospital referred for quick appraisal and temporary care. Some of these patients have been of interest in connection with the effects of treatment with ACTH or cortisone. Other patients of equal interest developed states of behavioral disorganization in the course of treatment for psychosomatic disorders. We feel there is a very important place in a general hospital for the intensive study and care of such "casualties" and we hope to be able to enlarge and improve our facilities for this phase of the program.

The Clinic, under the direction of Dr. Peter E. Sifneos, has continued to serve primarily the other departments of the Hospital. New patients are evaluated by an intake team consisting of a senior psychiatrist, a resident, a social worker, a psychologist, and medical students. This plan was devised several years ago by Dr. Elizabeth R. Zetzel and Dr. Henry H. Brewster and has been helpful in making it possible for patients to have thorough evaluations shortly after their referral. For a while this system eliminated the waiting list in the Clinic, but the number of referrals has increased this last year beyond our capacity to handle all of them immediately.

Our Child Psychiatry Unit continues with an active program of service and research. Dr. Lucie N. Jessner left this spring to start a child psychiatry service and take an important part in the training program at the University of North Carolina. We regret losing her and are grateful to her for her work in establishing the Unit here. Dr. Gaston E. Blom acts as the general coordinator of the program, and we expect Dr. Samuel Kaplan of the James Jackson Putnam Children's Service to help as a senior supervisor. This year an arrangement has been made with Dr. Nathan B. Talbot for Dr. John H. Lamont to participate in work of the Adolescent Endocrine Clinic.

The Alcohol Clinic, under Dr. Alfred O. Ludwig, is now able to carry about 50 patients in active treatment. As its work has become known, the referring agencies are increasing in number. An intensive program of investigations concerning the background and adjustment patterns of these individuals is in progress.

The other research activities of the Department have continued vigorously. We temporarily lost a very good man in Dr. Gardner C. Quarton who, with his great skill and enthusiasm, was a key person in our laboratory and clinical activities. We expect him to return from the Navy next spring and resume his work on psychotic states resulting from endocrine disorders and from the administration of certain cortical steroids.

Dr. Nemiah's work, which started with the evaluation of patients who suffer from protracted back pain after accident or surgical procedures, has become significant for the Rehabilitation Program, not only on our Service, but in the rest of the Hospital. Dr. Nemiah has become an advisor to the Paraplegia Ward in the surgical building and Associate Physician in the Bay State Medical Rehabilitation Clinic. The initial observation that predictions can be made concerning probable protracted convalescence of patients who are undergoing surgery after fractures or other impairment has led to the consideration of specific psychotherapeutic approaches to these patients and also pointed to a new direction of thinking in terms of prevention of the depressive and emotionally decompensated states which offer obstacles to successful treatment once they are established. It appears that for certain individuals with psychological make-up requiring a considerable amount of vigorous activity in order to maintain emotional equilibrium, the enforced passivity of the hospital stay is a real hazard. A revision of the surgical program to reduce inactivity to a minimum, and an enrichment of the occupational therapy program to provide activities which are meaningful for the patient in the sense of genuine achievement, are being given a good deal of thought. It is not surprising that out of this joint concern with the Orthopedic Department we are developing a consultation program at the Peabody Home for Crippled Children. In general, we are approaching a program of which intensive psychotherapy and systematic steps for the care of psychoneurotic patients is still the focus, but which is expanding its horizon to include systematic consideration of rehabilitation and preventive psychiatry as part of an overall health program.

Of other research projects now in progress, Dr. Maria Lorenz is continuing her studies on language. She is broadening her interest to include expressive behavior in the study of language and gesture as it differs from patient to patient group, and to try to isolate the communicative, symbolic, on one hand, and the expressive quality of the language production on the other. Dr. Stanley Cobb has maintained a keen interest in these studies and is continuing his own investigative work on the neurological aspects of speech production.

The studies concerning psychosomatic disorders, in both the adult and child psychiatry fields, are proceeding most satisfactorily. Dr. Nemiah and Dr. Frances J. Bonner are continuing the study on the personality structure of patients who develop two different psychosomatic disorders. The child psychiatry group have been interested in the social determinants of psychosomatic disorders in children, particularly children with asthma and rheumatoid arthritis. They made intensive studies of the mothers of such children, which suggest a rather characteristic relationship between mother and sick child.

There is finally current a lively interest in the different reactions shown by individuals at various ages to severe stress. The group started with a study of children's reactions to surgical procedures, such as tonsillectomy. During the past year Dr. Robert T. Long has concerned himself with the emotional reactions and psychosocial backgrounds of children suffering from severe burns. His interest in the reactions of the children and the patterns of their emotional convalescence from the traumatic experience was shared by Dr. Oliver Cope.

One of the very important areas of reactions to overwhelming stress seems to us to be the field of attempted suicide. Dr. Sifneos has systematically reviewed the life histories and adaptive problems of a series of patients who attempted suicide, and he is trying to make a formulation of the critical situations which in our culture are often followed by suicidal attempts.

Dr. Morris E. Chafetz has been working with Dr. Joseph Stokes, III, of the Family Health Program, helping to develop a design for psychiatric participation in this important program. He is also continuing his studies in electroencephalography.

We have this year been building up our resources in experimental psychology by adding to our staff Dr. John M. von Felsinger, who has done interesting work with Dr. Henry K. Beecher in the Department of Anesthesia on the behavioral effects of a variety of sedative and intoxicating drugs. He is spending half of his time with us, and his experiences are immediately applicable to studies of the effect of more endogenous substances, such as the corticosteroids. Experimental psychology was further strengthened by having the half-time services of Dr. George A. Talland, who was trained at the Maudsley Hospital. He is dividing his time between the Neurology Service and our program. He is concerned with tachistoscopic studies concerning motivational determinants of cognitive functions. Dr. Talland, who worked in the Department of Social Relations at Harvard during the past year, also has considerable interest in the diagnosis of social behavior of psychoneurotic individuals in task-oriented groups. We hope that his studies will be of much relevance for our rehabilitation program, in connection with deficits in social skills mentioned above. Dr. Lovick C. Miller, Jr., Dr. Babette Whipple, and two fellows in psychology have assisted in the studies being done in child psychiatry. Dr. Gene M. Smith has been added to the team working in the Department of Anesthesia.

Future plans

One of the most urgent needs is the improvement of facilities for the care of patients who develop states of behavioral disorganization in the Hospital. At present our facilities for the care of the increased number of patients are far from adequate and necessitate excessive restraint of patients. Larger space, additional rooms for beds, and accommodations for recreation and occupational therapy are needed. This would enable us to keep some of these patients here longer, both for study and for treatment. We are working on plans for the improvement of this section of the ward, and for improving our facilities in the clinics, where the need is also great.

One important development for the future is the appointment of Dr. Alfred H. Stanton as Psychiatrist-in-Chief at the McLean Hospital. Dr. Stanton and Dr. Lindemann, whose interests in psychiatry coincide at many points, are planning joint programs at the McLean Hospital and at the Massachusetts General Hospital for service, teaching, and research.

Dr. George Saslow, formerly a Professor of Psychiatry at Washington University in St. Louis, will start work here on a full-time basis in July. His main area of interest will be in a program of comprehensive medicine, to be carried out in the Medical Clinic. He will also be active as a teacher, and will continue his research on measurement of human interaction in relation to psychiatric diagnosis and therapy.

Dr. Walter Mann, who has training in biochemistry and psychiatry, will start work on certain biochemical aspects of disordered behavior—disorders of certain phases of metabolism, states of depletion or insufficient presence of certain specific compounds.

Dr. Benjamin F. Gill, who has training in internal medicine in addition to his background in psychiatry, will do much to strengthen our liaison with the Gastrointestinal Clinic.

Our program will be enriched by the addition of a Mental Health Service, directed primarily toward services and research in Preventive Psychiatry. Generous support for this work has been provided by the Grant Foundation. This project involves the development of a service team for diagnosis and, if necessary, preventive intervention, plus an investigative team concerned with the origins of social maladjustment and with the spectrum of reactions to emotional crises. This team will include psychiatrists, psychologists, social workers, and social scientists. An important aim of this program will be the study of the mental health needs of the neighborhood surrounding the Hospital.

Erich Lindemann, M.D.,
Chief of Psychiatry Service

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Mr. John T. Murphy, Director of our Pharmacy Department, was awarded the honorary degree of Doctor of Pharmacy at the annual commencement exercises of the Massachusetts College of Pharmacy in June.

Mr. Murphy was also presented with a $100 bond by the Gray Pharmaceutical Company for his "outstanding contribution in the field of pharmacy".

The resignation of Dr. Joe Vincent Meigs as Chief of Staff of the Vincent Memorial Hospital and Chief of the Gynecology Service of the Massachusetts General Hospital, effective July 1, has been announced by the Board of Trustees of the two Hospitals. This will relieve Dr. Meigs of his time-consuming administrative duties and allow him more time for his private practice and for his continuing responsibilities as Clinical Professor of Gynecology at Harvard Medical School and as Gynecologist at the Palmer Memorial Hospital and the Pondville State Cancer Hospital. In recognition of Dr. Meigs's distinguished and devoted service in the field of gynecology, he has been appointed, effective upon his retirement, Consulting Visiting Gynecologist at the Vincent Memorial Hospital and Consulting Visiting Surgeon at the Massachusetts General Hospital.

Before the appointment of Dr. Meigs as Chief of Staff of the Vincent Memorial Hospital in 1930, women doctors had always held this position. This small Hospital was founded in 1892, "for the purpose of establishing a hospital for the diseases of women, as a memorial to the late Mrs. J. R. Vincent". Mrs. Vincent was a generous and much-beloved actress of the famous Boston Museum Stock Company, and the Hospital has always received support from theatrical performances. Among its generous contributors were the actors Edwin Booth and Edward H. Sothern. In recent years it has received much of its support from the annual Vincent Club Show. The Vincent Club was formed in 1893 by a group of twenty-five young women, for the purpose of raising money for the Vincent Memorial Hospital. The most recent contribution to the Hospital from members of the entertainment field was a check for $15,000 from the Damon Runyan Fund, for work in the laboratory on cancer research.

As modern medical and surgical treatment and laboratory techniques make a small isolated hospital in this field impractical, the Vincent Memorial Hospital, in 1940, accepted the invitation of the Massachusetts General Hospital to become its gynecology unit, while still retaining its own identity and staff. In 1941, upon the affiliation of the two institutions, Dr. Meigs, a Visiting Surgeon at the Massachusetts General Hospital since 1938, became the Chief of its Gynecology Service. The following year he was appointed Clinical Professor of Gynecology at the Harvard Medical School.

That Dr. Meigs has an international reputation for his work in the field of gynecology is evidenced by his honorary membership in the Royal College of Surgeons of Edinburgh, the Royal College of Obstetricians and Gynecologists of London, and the Swenska Lakaresallskapet of Stockholm. In addition, he is an honorary member of the Edinburgh Obstetrical Society, the Society of Obstetricians and Gynecologists of Canada, the Sociedad de Obstetrics y Ginecologia de Buenos Aires, the International Society of Surgery, La Sociéte-Française de Gynécologie, the Athens Obstetrical and Gynecological Society, and the Sociedad Cubana de Obstetricia y Ginecologie.

Among the numerous American medical, surgical, and scientific associations with which Dr. Meigs is affiliated are: the American Surgical Association, the American Gynecological Society, the American Association for the Advancement of Science, the American Association of Gynecologists, Obstetricians and Abdominal Surgeons, and the Southern Surgical Association. He has served on the Board of Governors of the American College of Surgeons since 1947. He is a Diplomate of the American Board of Obstetrics and Gynecology, and of the American Board of Surgery.

Dr. Meigs graduated from Princeton University in 1915 and is the holder of the 1915 Merit Cup, presented to him by his Class in 1949. He graduated from Harvard Medical School in 1919. His publications include *Tumors of the female pelvic organs,* published by Macmillan in 1934; *Progress in Gynecology,* volumes I and II, which he edited with Dr. Somers H. Sturgis; and his recent book, *Surgical treatment of carcinoma of the cervix,* published by Grune and Stratton in 1954. In addition, Dr. Meigs has contributed many sections to various gynecological treatises and has written over one hundred fifty medical papers. He is on the advisory editorial committee of the *American Journal of Obstetrics and Gynecology,* the editorial board of *Fertility and Sterility,* and the advisory board of *Cancer.*

On Tuesday evening, May 10, a dinner was given at the Sheraton Plaza in honor of Dr. Meigs by the Trustees of the Vincent Memorial Hospital, the Board of Managers of the Vincent Memorial Hospital, and the Board of Managers of the Vincent Club. It was attended by about 300 of Dr. Meigs's friends and well-wishers. Dr. Thomas H. Lanman was Toastmaster. The speakers were Dr. Arthur W. Allen, Dr. Langdon Parsons, Mr. Henry C. Everett, Jr., and Mr. Louis Curtis. A few skits were presented by members of the Vincent Club. Dr. Meigs was presented with a Vincent Medal by Mrs. James F. Hunnewell, President of the Vincent Club, and a beautiful silver tray by Mrs. Nelson W. Aldrich, President of the Board of Trustees of the Vincent Memorial Hospital. It was a delightful dinner, enjoyed by all who attended.

The joint appointment of Dr. Howard Ulfelder as Chief of Staff of the Vincent Memorial Hospital, Chief of the Gynecology Service at the Massachusetts General Hospital, and Clinical Professor of Gynecology at the Harvard Medical School has been announced. The announcement was made by Mr. Louis Curtis, Chairman of the Board of Trustees of the Vincent Memorial Hospital, Mr. Francis C. Gray, Chairman of the Board of Trustees of the Massachusetts General Hospital, and Dr. George P. Berry, Dean of the Harvard Medical School.

Dr. Ulfelder graduated from Harvard College in 1932 and from the Harvard Medical School in 1936. He served both his internship and residency at the Massachusetts General Hospital.

During the war, Dr. Ulfelder was attached to the United States Army Medical Corps as Chief of the Surgical Service of the 55th General Hospital in England and later in France.

In addition to his work on the staff of the Massachusetts General Hospital, the Vincent Memorial Hospital, and on the faculty of the Harvard Medical School, Dr. Ulfelder is also Gynecological Physician at the Pondville Hospital and Consulting Surgeon at the Massachusetts Eye and Ear Infirmary.

Dr. Ulfelder is the author of many scientific publications in surgery and gynecology. He is co-author, with Dr. Langdon Parsons, of a textbook, *An atlas of pelvic operations,* published in 1953.

Dr. Ulfelder is a member of many scientific and medical societies, including the American College of Surgeons, the American Surgical Association, the Society of University Surgeons, and the Massachusetts Medical Society. He is the Secretary-Treasurer of the Eastern Surgical Society and the Society of Pelvic Surgeons.

The Board of Trustees, at their meeting on May 27, voted to appoint:

Dr. Joseph Albert as Assistant Resident in Dermatology for one year, beginning July 1;
Dr. Donald V. Baker, Jr. as Clinical Associate in Surgery, beginning May 16;
Dr. Kenneth E. Liffmann as Intern on the Dental Service for one year, beginning July 1;
Dr. James M. Shannon as Clinical Associate in Surgery, beginning May 15;
Dr. Joseph M. Stolman as Intern on the Dental Service for one year, beginning July 1;
Dr. Norman Trieger as Assistant Resident on the Dental Service for one year, beginning July 1.

At their meetings on March 9 and during May, the General Executive Committee voted:

To extend the appointment of Dr. Mary Smyth Coley as Intern on the Children's Medical Service from June 30 through December 31;
That the promotion of Dr. Adolf L. Gundersen to the position of First Assistant Resident in Surgery be made retroactive to July, 1, 1954.

To reappoint:

Dr. William R. Brewster, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning March 15;
Dr. George Eisenman as Research Fellow in Anesthesia for one year, beginning June 1;
Dr. John F. McGinty as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning May 27;
Dr. Donald O. Rudin as Research Fellow in Anesthesia for one year, beginning July 1;
Dr. Kurt F. Schmidt as Clinical and Research Fellow in Anesthesia for one year, beginning June 4;
Dr. Thorkild Waino-Andersen as Clinical Fellow in Anesthesia for one year, beginning May 18.

To appoint:

Dr. Walter H. Caskey as Clinical Assistant in Medicine, with the privilege of assisting Dr. John R. Graham in the care of his patients in the Baker Memorial and Phillips House;
Dr. Leo J. Cass as Clinical Assistant in Medicine, with the privilege of assisting Dr. John W. Cass, Jr. in the care of his patients in the Baker Memorial and Phillips House;
Dr. John L. Decker as Research Fellow in Medicine, beginning July 1;
Dr. Donald A. Hillman as Clinical and Research Fellow on the Children's Medical Service, beginning July 1;
Dr. Toshio Inahara as Clinical and Research Fellow in Surgery for one year, beginning July 1;
G. G. Krishna Murty, Ph.D. as Research Fellow in Biochemistry, beginning March 1;
Dr. John H. Sisson as Clinical Assistant in Medicine, with the privilege of assisting Dr. Richard P. Stetson in the care of his patients in the Baker Memorial and Phillips House;
Dr. John R. Ward as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Edward J. Welch as Clinical Assistant in Medicine, with the privilege of assisting Dr. Dwight L. Siscoe in the care of his patients in the Baker Memorial and Phillips House.

* * *

Dr. James C. White's 60th birthday was observed in a very special manner on June 11. Drs. William H. Sweet, H. Thomas Ballantine, Jr., and Louis Bakay, along with the neurosurgery house staff and fellows, were the hosts for the occasion. The guests included Sir Geoffrey Jefferson of Manchester, England, Dr. Wilder Penfield of Montreal, and Dr. Francis Grant of Philadelphia, as well as former residents in neurosurgery who had trained under Dr. White, and present and past members of the neurosurgery visiting staff.

Neurosurgical operations were performed in the morning. A luncheon was served in the Penthouse, with the resident staff acting as hosts. In the afternoon, there were visits to the clinical and research facilities of Dr. White's Neurosurgery Service, followed by a scientific session in the Bigelow Amphitheatre. Ten papers were presented, ending with Dr. White's talk on "The extent of cordotomy lesions as verified at postmortem examination". At 5:30, cocktails were served at the home of Dr. and Mrs. William H. Sweet in Brookline, after which the group repaired to the Aesculapian Room at the Harvard Club for dinner. Dr. William B. Scoville acted as toastmaster at the dinner.

Among the "old boys" who came to join in the celebration were Dr. Robinson LeR. Bidwell, II, of Portland, Maine, Dr. Samuel Brendler of Washington, D.C., Dr. John T. B. Carmody of Worcester, Dr. Raymond M. P. Donaghy of Burlington, Vermont, Dr. Hannibal Hamlin of Providence, Dr. Henry L. Heyl of Hanover, New Hampshire, Commander William J. James of USNH, Chelsea, Dr. Manucher Javid of Madison, Wisconsin, Dr. Samuel Lowis of Boston, Lieutenant Commander Robert W. Mackie of Bethesda, Maryland, Dr. Jost J. Michelsen of Boston, Dr. Federico Mora, now with the U.S. Air Force in San Antonio, Texas, Dr. Edwin H. Mulford, II, of Bridgeport, Connecticut, Dr. Richard G. Nilges of Gary, Indiana, Dr. William B. Scoville of Hartford, Connecticut, Dr. Bertram Selverstone of Boston, and Dr. D. Lawrence Sutherland of Windsor, Ontario.

Letters or telegrams expressing their regrets at not being able to come were received from "old boys" now practising in South Africa, England, France, Germany, Japan, and several far-away States in this country.

It was in every way a most rewarding and enjoyable party, and we venture to surmise that all those who were present wished that Dr. White might have another birthday celebration in the not-too-distant future.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Lever, W. F.
Fortschritte in der diagnose und behandlung des pemphigus.
Fortschr. d. Praktischen Dermatologie & Venerologie 2: 118-127.

Lever, W. F.
Primäre hypercholesterinämische xanthomatose und idiopathische hyperlipämie.
Fortschr. d. Praktischen Dermatologie & Venerologie 2:186-194.

Endoscopy

Benedict, E. B.
Medical progress: Endoscopy. (Continued)
New England J. Med. 252:759-767.

Benedict, E. B.
Medical progress: Endoscopy. (Concluded)
New England J. Med. 252:809-813.

General Medicine

Hardy, H. L.
Epidemiology, clinical character, and treatment of beryllium poisoning.
A.M.A. Arch. Indust. Health 11:273-279.

General Surgery

Waddell, W. R., Geyer, R. P., Olsen, F. R., Andrus, S. B., and Stare, F. J.
Clinical experience with intravenous infusion of emulsified fat.
J. Lab. & Clin. Med. 45:697-710.

Laboratory Science

McDermott, W. V., Jr., Adams, R. D., and Riddell, A. G.
Ammonia levels in blood and cerebrospinal fluid.
Proc. Soc. Exper. Biol. & Med. 88:380-383.

Neurophysiology

Brazier, M. A. B.
Studies of electrical activity of the brain in relation to anesthesia. (Josiah Macy, Jr. Foundation, New York, N. Y.)
In Neuropharmacology, Madison, N.J., Madison Printing Co., pp. 107-144.

Otolaryngology

Kelemen, G.
The nasal and paranasal cavities of the rabbit in experimental work.
A.M.A. Arch. Otolaryng. 61:497-512.

Brief bits:—

On May 19-22, at the invitation of the Mount Sinai Hospital of Greater Miami, Dr. Edward D. Churchill participated in the Fifth Annual Postgraduate Seminar on "Recent advances in diagnosis and therapy", held at the Fontainbleau Hotel, Miami Beach, Florida.

At the meeting of the American Psychosomatic Society in Atlantic City, May 5, Dr. Stanley Cobb was elected President for next year. The next meeting will be held in Boston, the last week in March, 1956.

Dr. Bernard M. Jacobson addressed the members of the Belknap County Medical and Dental Society in Laconia, New Hampshire, on May 10. He discussed bleeding disorders. On May 26, Dr. Jacobson made his annual trip to the Veterans Administration Hospital at Togus, Maine, where he participated in a teaching program and delivered a lecture.

During the week of June 6, Sir Geoffrey Jefferson, retired Professor of Neurosurgery at the University of Manchester, England, was Chief of Service pro tempore on the Neurosurgery Service.

Dr. Richard C. Webster attended the meeting of the American Association for Cleft Palate Rehabilitation on May 13, and presented a motion picture entitled "Posterior pharyngeal wall flaps in rehabilitation of complicated palate cases".

MASSACHUSETTS EYE & EAR INFIRMARY

The Harvard Medical School announces the appointments of Dr. David G. Cogan as Professor of Ophthalmology and Dr. W. Morton Grant as Associate Professor of Ophthalmology.

At a meeting of the Board of Managers, held on May 18, the following appointments were made:

Dr. Robert L. Goodale—Consulting Surgeon in Otolaryngology;
Dr. Donald K. Lewis—promoted from Assistant Surgeon to Associate Surgeon in Otolaryngology;
Dr. Daniel Miller—promoted from Assistant Surgeon to Associate Surgeon in Otolaryngology;
Dr. Charles L. Schepens—promoted from Assistant to Assistant Surgeon in Ophthalmology.

Additional appointments:

Dr. Fred C. Arragg—Graduate Assistant in Otolaryngology;
Dr. Tawfik F. Girgis—Resident in Otolaryngology;
Dr. Robert J. Herm—Assistant in Ophthalmology;
Dr. William W. Montgomery—Chief Resident in Otolaryngology;
Dr. Alvaro Rodrigues—Fellow in Ophthalmology, to work in the Retina Service;
Dr. Sidney R. Wilker—Graduate Assistant in Otolaryngology;
Dr. Arthur S. Woodward—Resident in Otolaryngology.

Dr. Richard B. Chapman has completed his residency in Ophthalmology and will be taking a year on the Eye and Ear Plastic Service. He has recently opened an office in Quincy, Massachusetts.

In the library of the Harvard Medical School there is an exhibit of neuroanatomical stereoscopic photographs. These are pictures of dissections done by Dr. David D. Donaldson of the Howe Laboratory, to illustrate visual and ocular motor pathways in the brain.

On May 24, Dr. George L. Bayadi of Cairo, Egypt, came to observe the Retina Service.

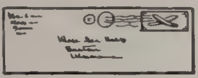
Dr. Edwin B. Dunphy and Dr. Paul A. Chandler attended the meeting of the American Ophthalmological Society in White Sulphur Springs, Virginia, June 1-5.

The Spring Meeting of the New England Oto-Laryngological Society was held on June 8, in the Upper Amphitheatre of the Massachusetts General Hospital. Dr. LeRoy A. Schall presided over the regular morning clinical session. During the afternoon session, seven papers were presented and the progress report of the

Winthrop Foundation was given.

On May 14, Dr. Philip E. Meltzer, Surgeon in Charge of the Winthrop Foundation at the Infirmary, was the principal speaker at the first convention of the Massachusetts Parents' Association for the Deaf and Hard of Hearing. His talk was on the medical aspect of deafness.

The March issue of the *Annals of Otology, Rhinology and Laryngology* was dedicated to the memory of Dr. Harris Peyton Mosher, former Chief of Otolaryngology at the Infirmary. In three biographical sketches—one by Dr. LeRoy A. Schall—Dr. Mosher is portrayed characteristically as an outstanding world figure in Otolaryngology. This presentation of the life history, personal philosophy, and motivation of Dr. Mosher, by men who knew him well, is truly a fitting tribute.



New addresses:—

Dr. Allan St. John Dixon (clin. & res. fel. *M.* 1955), Dept. of Rheumatology, Manchester Royal Infirmary, Manchester 13, England
Dr. Gerald S. Foster (*M.* 1952), 1101 Beacon St., Brookline 46, Mass.
Dr. John F. Gibbons (a.r. 1955), 20 Elmwood Rd., Cape Elizabeth, Maine
Helmuth Hilz, Ph.D. (res. fel. *Biochem.* 1955), Institut für Zell Chemie, Kraepelinstrasse 2, Munich 23, Germany
Dr. Merrill Lineback (*Otolar.* 1952), 28 8th St., N.E., Atlanta, Ga.
Dr. B. Harrison Ragle (*E.M.* 1917), 222 Marlborough St., Boston, Mass.
Dr. Stanley Sober (a.r.s. *Or.* 1953), 481 Colbourne St., London, Ontario, Canada
Dr. Robert H. Vose (*E.S.* 1897), 374 Commonwealth Ave., Boston, Mass.
Dr. Lester P. K. Yee (*E.M.* 1939 & *W.S.* 1941), 1641 Nuuanu Ave., Honolulu 17, H.I.

BIOGLETS

Dr. Justin R. Hüppe, Resident in Radiology—born in Oldenburg, Germany, October 24, 1921; University of Marburg, 1940; Military Service: Medical Corps of the German Army, 1941-45; Medical School, University of Göttingen, 1944-49; M.D., Göttingen, 1949; Intern in Medicine, Medizinische Klinik, University of Göttingen, 1950-51; Assistant Resident in Medicine, Marienkrankenhaus, Hamburg, 1952; Assistant Resident in Neurology, Neurologische Universitäts-Klinik, Hamburg-Eppendorf, 1952-53; Fellow in Radiology, Universitäts-Klinik, Hamburg-Eppendorf, 1953; Assistant Resident in Radiology, Buffalo General Hospital, 1954-55.

Dr. Edward Karamanoukian, Assistant Resident in Dermatology—born in Aintab, Turkey, March 23, 1915; junior college, Aleppo College, Aleppo, Syria; one year of college and five years of medical training, American University of Beirut, Lebanon; M.D., American University of Beirut, 1938; six months as Resident, Hamlin Tuberculosis Sanatorium, Lebanon; Resident, American Mission Hospital, Deirel-zor, Syria, 1939; general practice, Aleppo, 1940-55; home since 1920: Aleppo, Syria.

Dr. Donald P. Pederson, Assistant Resident in Anesthesia—born in Geneva, N.Y., November 22, 1926; A.B., University of Rochester, Rochester, N.Y., 1946; M.S., University of Rochester, 1950; M.D., University of Rochester, 1951; Intern in Surgery, Strong Memorial Hospital, 1951-52; Assistant Resident in Surgery, Strong Memorial Hospital, July-August 1952; U.S. Navy: Flight Surgeon, Atlantic Fleet Helicopter Squadron 2, 1952-55; married; three children; home: Melrose, Massachusetts.

Dr. John D. States, Assistant Resident in Orthopedic Surgery—born in Rochester, N.Y., June 16, 1925; A.B., University of Rochester, 1946; M.D., Harvard Medical School, 1949; Intern and Resident in Surgery, Rochester General Hospital; Military Service: Captain, U.S. Air Force, 1951-53; Assistant Resident in Orthopedics, Children's Medical Center, Boston, 1953-54; married; one son.

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THYROIDOLOGICAL JOURNEY TO SOUTH AMERICA

A few months ago (November 19-December 12, 1954, to be exact), in the delightful company of John Stanbury and Gordon Brownell, I made a quick air tour to points in Peru, Chile, Argentina, and Uruguay.

The primary purpose of this trip was to make a project site visit to the Goiter Institute (Instituto del Bocio) of the University of Cuyo at the Central Hospital, Mendoza, Argentina. This had originated from the Andean Goiter Expedition of 1951, in which Stanbury, Riggs, and Brownell from the Massachusetts General Hospital joined forces with Perinetti, Itoiz, and del Castillo at Mendoza. This affair has already been mentioned in the September and December 1951 issues of THE NEWS, and the findings have been reported in full under the title "Endemic goiter—The adaptation of man to iodine deficiency" by the Harvard University Press, 1954. In contrast to the expedition of 1951, the Goiter Institute is a continuing enterprise led by Professor of Surgery, Hector Perinetti, and staffed entirely by members of the Faculty of Medicine of the University of Cuyo.

Our recent tour, however, had additional objectives. For one thing, we wanted to contact, in all the countries visited, as many as possible of our friends who had worked at the M.G.H., particularly in the Thyroid Clinic, in order to keep active our friendship with them and to promote scientific collaboration.

The timing of the tour was fixed so that we might also participate in the Third International Endocrinological Congress, which was held in Santiago, Chile, November 2-27. Finally, at the close of the Congress we gave a three-day course on "The use of radioactive isotopes in Medicine" at the Hospital del Salvador in Santiago.

Briefly, the progress of our tour was as follows: After a dazzlingly beautiful flight along the high Andes, we arrived at Lima on a Sunday morning. We foregathered with Dr. Alberto Hurtado (Harvard 1924), and saw his physiological laboratory for the study of problems of altitude. He has two laboratories—one in Lima at sea level, another at Morococha, high in the mountains at an altitude of about 16,000 feet. We were not able to get to the latter. Dr. Hurtado will be recalled as Harvard's Dunham Lecturer of 1952. We also had some all too hasty glimpses of the architectural and art treasures of both pre-Columbian and colonial Peru. This experience was of enormous interest to me because my brother, the late Philip A. Means, was an outstanding scholar in the archeology of this area, and this was my first visit to it.

After three days in Lima we flew to Santiago—a very beautiful city in a broad plain completely surrounded by mountains. The atmosphere of the place, as with all the cities we visited, is far more that of Europe than of North America. The Endocrinological Congress was held in the fine modern Hotel Carrera, with a finale at the coastal resort of Viña del Mar, near Valparaiso, reminiscent of the French Riviera. The meetings, which had been admirably planned, were very successfully carried out with skilled interpreters who overcame the difficulties of four official languages (Spanish, Portuguese, English, and French).

Fuller Albright was the guest of honor of the Congress. Slightly delayed by weather at the take-off in New York, as were we, he arrived, accompanied by Mrs. Albright, in his usual wonderful spirit, and joined heartily in all the activities of the Congress. His paper was in the place of honor at the end of the program. He had two sets of lantern slides (one in English, one in Spanish), two lanterns, two screens, two operators who put in the corresponding slides in unison. At the close he received a splendid ovation. Stanbury and Brownell also presented papers.

At Viña del Mar the authorities threw a glamorous banquet for us, with speeches, floor shows, señoritas with long black eyelashes, castanets, and all the Latin appurtenances. Professor Houssay responded to the greetings for South America, and Means for North America. We received, indeed, most wonderful hospitality in Chile from more people than can be mentioned in this brief account. Particular thanks are due to Professor A. Garretón Silva, Dean of the Faculty of Medicine, University of Chile, to Professors H. Alesandri Rodriquez, R. Armas Cruz, and Joaquin Luco, and to Doctors A. Atria, S. Middleton, R. Gazmuri, A. Jadresic, and J. Zañartu.

Throughout our stay in Chile our most intimate and devoted guide, counsellor, and friend was Dr. José Barzellato, who had spent one year with Dr. Stanbury in the MGH Thyroid Clinic. Barzellato is the spark plug of a very promising thyroid research group at the Hospital del Salvador, the teaching clinic of the University of Chile. It was through his inspiration and leadership that, following the Congress, the course on radio isotopes was given. Stanbury, Brownell, and Means participated in this course, also Professor Itoiz of Mendoza and J. Correia of Lima, both of whom have been at the M.G.H.—the latter for two years

No. 54 in a series of Staff photographs
Dr. Howard Ulfelder—Visiting Surgeon—newly appointed
Chief of Staff of the Vincent Memorial Hospital

in 1951-53. This course was well received and we all profited by it.

As soon as the final delightful Chilean luncheon had drawn to a close, we took off on a pressurized Convair for Mendoza, Argentina. The flight takes less than an hour, but it involves crossing the highest range of mountains in the world outside the Himalayan region. The passes were full of clouds, so we had to go over the top. As we crossed, the chief sight was that of pointed peaks on all sides sticking out of a substrate of cloud—a bad place to feather an engine, but fortunately we escaped that. A steep glide down the eastern slopes of the Andes brought us to Mendoza airport, where friends led by Professor Perinetti awaited us. We were at once taken to call upon the Governor of the Province of Mendoza, Señor Don Carlos Evans, and the Minister of Public Health and Welfare. Señor Don J. A. Denegri. Both of these gentlemen showed us every possible courtesy during our four-day stay in Mendoza.

The Hospital Central, a magnificent modern hospital and the teaching clinic for the new medical school of the old University of Cuyo, was, of course, our main objective in Mendoza. Here we saw in detail the Instituto del Bocio and discussed its program with our friends, Professors Perinetti, J. Itoiz, Fasciola, and many others. Brownell and I were made honorary members of the Faculty of Medicine. Stanbury had received this honor in 1951. We made speeches—Stanbury and Brownell on radioiodine, I on medical education. Also, we had a round of delightful entertainment, asados, visits to bodegas, a motor trip to the foothills of the Andes where Perinetti has a finca. This is the wine producing part of Argentina, and we had abundant opportunity to sample its vintages. Excellent they are, too.

After Mendoza we proceeded by air to Buenos Aires, with an unplanned bed and breakfast *en route* in lovely Cordova. In Buenos Aires we saw much of Professor Houssay, also of Drs. J. Reforzo Membrives, P. Cattogio, E. del Castillo, and Carlos Galli Mainini. All of these men have worked at the M.G.H.—Cattogio with Dr. Bauer, the rest in the Thyroid Clinic. We participated in a meeting of the Argentine Associations of Endocrinology and Diseases of Nutrition, and were made honorary members thereof. The high spots of the social program were a delightful luncheon at Reforzo's beautiful suburban villa at San Isidro, and a charming dinner at the apartment of del Castillo in the city. We visited the laboratory of Profesor Houssay where, in a converted private house, this master, undaunted by adverse circumstances, carries on his brilliant research, surrounded, as always, by gifted students. After four days in magnificent Buenos Aires, which really does look a bit like Paris, we took off by Pan American for the short hop to Montevideo. Soon after the take-off, however, we feathered an engine, and had to return and spend twenty-four hours at the airport while they put in a new one. This was no hardship, however, for Señor Peron's airport at Buenos Aires is one of the most luxurious in the world, with a large outdoor swimming pool, beautiful hotel, fine restaurant, rhumba orchestra, and so forth. We relaxed in these salubrious surroundings at the expense of PAA, and got off successfully a day late.

Montevidio, our last stop, was also delightful. Smaller then Buenos Aires, but with a style and beauty of its own, to say nothing of a refreshing air of freedom, it provided us with yet another delightful occasion.

My old friend, Professor J. C. Mussio-Fournier, who visited the M.G.H. in 1941, rushed to meet us at the excellent Hotel Victoria Plaza, and extended the courtesy of the University of Montevidio. In our short stay of thirty hours we visited the medical school, the new and enormous Hospital de Clinicas, and the older but fascinating Hospital Pasteur. At the latter, in Mussio's clinic, we engaged in a panel discussion of thyroidological matters. We were lunched and dined by such friends as Drs. Edwardo Canabel, Morato-Moreno, and others. The latter has a radioiodine enterprise, which we visited. Altogether, we squeezed the greatest amount of experience as possible into our very brief stay in Montevideo, and when it was over we boarded a plane which took us, with stops at Rio and Caracas, to New York in 26 hours flat. A superb flight, and so ended our adventure.

On our return to Boston, we all had the feeling that the objectives of the trip had been accomplished. The letters we have received since our return leave no doubt that mutual understanding and good will between medical scientists from north and south of the equator have been promoted. Particularly, the bonds between investigators of the thyroid from Boston, Santiago, Mendoza, Buenos Aires, and Montevideo have been strengthened. Our friends from South America have been coming to us for so long that it is good to know that at last we are also going to them.

James Howard Means, M.D.,
Member of Board of Consultation

THE NEWS

No. 148 Boston, Mass. September 1955

MEDICAL SCIENCE BUILDING ✓

The new Medical Science Building of the Massachusetts General Hospital, now under construction, is located on Charles Street between the Baker Memorial and the Phillips House. Approximately one-half of the building will house the new Pathology Laboratories; other floors will be devoted to laboratories for Dermatology, Neurology, Neurosurgery, and Psychiatry.

The building was designed by Shepley, Bulfinch, Richardson and Abbott, Architects. It is being constructed with foundations strong enough to support twelve stories. Work is progressing on schedule, and it is expected that the building will be ready for occupancy early in 1956.

Pathology

With the opening of the new Research Building in May 1951, the Trustees of the Massachusetts General Hospital placed the construction of new Pathology Laboratories high on the priority list and committed the balance in the Research Building Fund for this purpose.

The present Pathology Laboratory Building was constructed in 1895. At that time the Massachusetts General Hospital had 250 beds; today there are almost 1,000. This gives some idea of the inadequacy of the present facilities for our Pathology Service today. It is obvious that in overcrowded hospital space the full benefits and potentialities of modern pathology cannot be achieved, new and promising research projects cannot be undertaken, and the maintenance of records is hampered. The physician or surgeon and the pathologist must have the records of a patient readily available for comparison with those of others; such comparison sometimes eliminates the need for surgery and shortens the hospital stay. Nearly hopeless complications have been presented in trying to maintain adequate pathology record service in this old building. The Massachusetts General Hospital is anxious to improve and speed up its service to patients and do everything possible to shorten the hospital stay; and to accomplish this a new Pathology Laboratory is essential.

Another important contribution of the department, the training of young pathologists, is seriously handicapped by the shortage of space for investigation and routine work, and by the inaccessibility of the records in the present antiquated building at the Massachusetts General.

The new Medical Science Building will enable the Hospital to extend much-needed pathology service to many more hospitals, both large and small, throughout Massachusetts. What can be done with an adequate pathology laboratory for larger hospitals may be illustrated by the arrangement presently in effect with the Memorial Hospital in Worcester. Under this plan a senior member of the Massachusetts General Pathology Staff becomes Chief Pathologist of the other hospital, which pays his salary. He devotes full time to the participating hospital, except for a day or two each week reserved for research and teaching at the Massachusetts General Hospital. He brings to the Massachusetts General his problem cases for consultation with the Pathology Staff. In addition, the Massachusetts General supplies rotating resident pathologists, and the services of its Chief of Pathology as consultant.

For small suburban and rural hospitals, a member of the Massachusetts General Hospital Pathology Staff is appointed as liaison between the two hospitals. He attends their monthly staff and clinicopathological conferences, and arranges to have the necessary services performed. Laboratory work is sent to the Massachusetts General for processing. This arrangement has been followed successfully for many years at Emerson Hospital in Concord and the Brockton Hospital. All autopsies in these hospitals are done by MGH doctors. In this way doctors in many communities have the advantages of a large city hospital for their pathological needs.

With the rapid strides being made in medical science and with a nationwide shortage of pathologists, neuropathologists, and neurologists, the training of young doctors at the Massachusetts General Hospital became seriously handicapped by the inadequacy of space needed for investigation and routine laboratory work. This Hospital has laid heavy stress on teaching since its founding in 1811, and is internationally known for its activities in this field. At a recent date there were 321 student doctors in the Hospital, representing 36 States and 17 foreign countries, while 1,675 living graduates of the Hospital are practising in the 48 States and in 46 foreign countries. This gives some idea of the importance of our undergraduate and graduate teaching program. Graduates of the Massachusetts General have already established themselves in many New England communities, but many more are needed to fill the needs of local hospitals that have been too long without the benefits of modern science. In Massachusetts, 42 graduates of the Pathology Service are practising in communities throughout the State. Many are using their training in pathology to help them in the practice of medicine and surgery.

A comparison of statistics for the years 1900 and 1950 makes the inadequacies of the old plant quite clear:

1900	6-month period	1950
	AUTOPSIES	
46	Total number	321
33%	Chronic disease, including cancer	72%
58%	Acute infections	1%
9%	All other	27%
	1-month period	
	SURGICAL PATHOLOGICAL SPECIMENS	
113	Total number	804
1%	Chronic disease, including cancer	65%
	Liver biopsies in chronic cirrhosis	
	Kidney biopsies in hypertension	
	Endometrial biopsies in chronic menstrual disorders	
	Testicular biopsies in sterility and endocrine disorders	
	Dermatological biopsies	
	Collagen diseases	
	Thoracic surgery	
	Chronic tuberculosis	
	Chronic bronchiectasis	
	General surgery	
	Peptic ulcer	
	Chronic ulcerative colitis	
99%	All other diseases, including infectious diseases	35%

The comparison shows an increase of 700% in the number of autopsies; also a shift from 58% acute infections in 1900 to 1% in 1950. In 1950, deaths due to chronic disease, including cancer, occurred in 72% of the cases, against 33% in 1900.

Likewise, there was an increase of nearly 800% in the number of surgical pathological specimens in a one-month period; and again the shift from infectious disease to chronic disease is even more obvious. Whereas 99% of the surgical specimens in 1900 were classified as diseases other than cancer or chronic diseases, in 1950 cancer and chronic diseases amounted to 65%, and infectious and other diseases amounted to only 35%.

Neurology

The Medical Science Building will also provide new quarters for research in Neurology. Of all the patients admitted to the Medical and Pediatric Services of the Massachusetts General Hospital, 20% to 25% have as a primary or important component of their diseases a neurological disorder. With advances made in the control of infectious diseases and the correction of metabolic disorders, the incidence of neurological disease appears more obvious. The extension of life expectancy as a result of the elimination of many of the infectious diseases of infancy, childhood, and adolescence, has resulted in an older population and survival of more handicapped people in the community, consequently the incidence of degenerative diseases among the patients in this Hospital, as in all hospitals, is greatly on the increase. Many of these are neurological disorders, such as paralysis agitans, senile dementia, chronic forms of multiple sclerosis, and spastic disorders. Consequently, there has been a resurgence of interest in neurological medicine in the United States in recent years, as indicated by:

1. Innumerable demands from educators in the field of medicine, surgery, and pediatrics for special training of interns and residents in neurology. They have come to believe that a knowledge of the function of the nervous system is essential to an understanding of many medical diseases. The Massachusetts General Hospital has been anxious to provide more adequate quarters for this teaching program.
2. The development of strong neurology services, set up either as independent departments or as subdepartments of medicine. Neurology now has the task of extending its boundaries to include all other available approaches to the study of disorders of human behavior.
3. The realization that neurology is a broad field of medicine which includes all diseases of the nervous system—primary and secondary. It encompasses more than 200 diseases. The cause and pathogenesis of only a few of these diseases are known and, in fact, in many instances not even the morbid anatomy has been defined.

For these, and probably other reasons, there is a growing need for well-trained young neurologists. Some hospitals and diagnostic clinics throughout Massachusetts seek physicians who are expert in the diagnosis and management of neurological diseases. Many universities throughout the country, having recently set up separate departments of neurology, need teachers with an adequate background in neuroanatomy, neurophysiology, biochemistry, and neuropathology, who are also intimately acquainted with the clinical aspects of the more common diseases of the nervous system.

In the new Medical Science Building at the Massachusetts General Hospital, the Neurology Department will have facilities to provide training at undergraduate and graduate levels, both in clinical neurology and in all of the related medical sciences. In addition, it will be possible to provide for the training of young doctors who aspire to a career in neurology.

Dermatology

With the reorganization of the Department of Dermatology in the Harvard Medical School and the Massachusetts General Hospital in 1948, foremost among the objectives was the development of a new research laboratory. In this unit, men with the interest and scientific training, having a knowledge of the tools and methods of research, and possessing the ideas and ability to define the problems and undertake their solution, were to be assembled. The new dermatology floor in the Medical Science Building will provide the necessary facilities to accomplish this objective. It will contain an air-conditioned animal room and laboratories for biochemistry, histochemistry, cytology, and serology, as well as for tissue culture and microbiology. These sciences represent a few of the many avenues by which one may approach the unrevealed secrets of skin diseases.

For leaders in the field of cutaneous diseases there is urgent need for young men trained adequately in medicine and in one or the other of the basic medical sciences. With the tools of the science of his choice, he is then prepared to undertake the solution of the many problems related to the skin, in both health and disease. Research in dermatology has too often been of a superficial order. Basic problems in the structure and function of normal skin are many. These are chiefly biochemical. Upon their solution will rest an understanding of the mechanisms involved in the skin's diseases.

It is expected that the new laboratories will contribute a good deal to the education of the undergraduate and graduate medical student in the problems of modern dermatology, and in this way will contribute in no small measure to the educational facilities at the Hospital.

Psychiatry

In 1933, a development in psychiatry under joint sponsorship of Harvard and the Massachusetts General Hospital was made feasible by a grant from the Rockefeller Foundation. On nomination of joint ad hoc committees, Dr. Stanley Cobb was called to the M.G.H. to establish a teaching and research Department of Psychiatry. New wards for patients, research laboratories, and out-patient clinics were provided by extensive building alterations. A close working liaison with the McLean Hospital, the MGH unit for mental diseases, was made available. In 1941, the incorporation of the Hall-Mercer Hospital and the opening of its MGH division augmented the financial support and increased the scope of both clinical and research activities. In 1946, the McLean Hospital was strengthened by the building of a research laboratory and by the appointment of Dr. Jordi Folch-Pi as its Director and as Assistant Professor of Biological Chemistry. The appointment of Dr. Mark D. Altschule, Assistant Professor of Medicine, as Director of Internal Medicine and of Research in Clinical Physiology, and the equipment of a Laboratory of Clinical Physiology further rounded out the program at the McLean Hospital and provided a link with the Department of Medicine of the Harvard Medical School.

A Child Psychiatry Unit was established in 1948, largely through aid from the U.S. Public Health Service. In 1952, quarters on the seventh floor of the Burnham Building were finished. There, children from the clinic, the wards, and outside the Hospital are seen. This development enlarges our scope and is closely allied with the Children's Medical Service.

On July 1, 1954, Dr. Erich Lindemann was appointed Professor of Psychiatry at the Harvard Medical School and Chief of the Psychiatry Service here at the Hospital. Dr. Lindemann came to us with a wide range of interests, which include psychology, the social sciences, and public health. He therefore has plans for a large and more integrated Department of Psychology here, but his most important objective is improvement in the facilities for the care of emotionally disturbed patients. Space for such a unit will be provided in the new building, so that the M.G.H. can look forward to developing a program of medical care for all types of acute psychiatric disorders, in close integration with the staff and the facilities of the McLean Hospital.

Another important concern of the new department is the development of a program of preventive psychiatry. This will require much research concerning earliest symptoms and danger signals and concerning the causes of mental disorder, both in the area of the functions of the central nervous system and metabolic processes and in the area of the early human relations of the growing organism. Close integration of such studies with the work of Dr. Adams in Neurology, Dr. Bauer in Internal Medicine, Dr. Butler in Pediatrics, and others in the new Medical Science Building and elsewhere in the Hospital, will be made possible by joint planning. Also, in the immediate future, an active consultation program focusing on the emotional implications of all illness, with special emphasis on the rehabilitation of the chronically sick patient, promises new understanding of motivational factors which affect the speed of convalescence. Extending his concern to continued care and follow-up of the patients and their families, Dr. Lindemann is profoundly interested in the development of more adequate facilities for ambulatory care, not only in the Psychiatry Clinic proper but also in a general medical clinic in an expanding Family Service, and in an advisory service to the community in the neighborhood of the Massachusetts General Hospital in Boston and in the community surrounding the McLean Hospital in Waverley.

Neurosurgery

As the newer developments in branches of science having a known or a potential applicability in the field of medicine appear, the Massachusetts General Hospital is able to benefit from its close geographical, personal, and scientific relationships with the Massachusetts Institute of Technology. The common interest of the two institutions in supervoltage therapy has already resulted in a fruitful collaboration. Initially, all radioactive material used at this Hospital was obtained from M.I.T., and nearly twenty years ago, radioactive iodine, a produce of M.I.T.'s cyclotron, was being used experimentally at this Hospital to study thyroid physiology. The arrangement of casual consultation with the Department of Physics at M.I.T. has grown to one of close collaboration, with the staff of one institution seen often in the laboratories of the other.

On the recommendation of the Scientific Advisory Committee, of which Dr. Karl T. Compton, the late President of M.I.T., was an active member at the time, a Hospital physicist was recruited from the Department of Physics at M.I.T. in 1949, and today this man and another from the Acoustics Laboratory at M.I.T. are both closely connected with the research program at the Hospital. These men have already clearly demonstrated the possible advantages to both institutions of such a relationship. Few scientists in medical schools or teaching hospitals in the country have an opportunity for daily collaboration with men trained in the natural sciences. However, M.G.H. is favored by the presence of two men in the new Research Building at the Hospital, who bring from the Department of Biology at M.I.T. newer techniques of electron and ultraviolet microscopy in the pursuit of studies of arthritis and malignant diseases. Another man with similar training will bring these techniques to the research program of the Pathology Department in the new Medical Science Building.

It may well be that future experimental advances in knowledge of the functioning of the nervous system and the treatment of neurological diseases may be largely dependent upon neurosurgical techniques coupled with utilization of basic discoveries in the fields of electronics and nuclear physics. For this reason we welcome the proposed establishment of the Compton Laboratory at M.I.T. and look forward to the expansion thereby of our present collaborative efforts. It is obvious, however, that for this collaboration to be efficient and fruitful, adequate research space must also be made available at the Massachusetts General Hospital. After construction of the new Medical Science Building was started, it was decided to add a floor in the initial construction contract so that the building would house the laboratories of the Departments of Pathology, Neurology, and Psychiatry—in essence, the beginning of a neurological institute. After the construction contract was let, it became apparent that expansion of research projects involving neurosurgical techniques belonged in this building.

The specific projects now under investigation involving members of the Neurosurgical Service include two general groups in which there is already the closest collaboration between M.I.T. and M.G.H., in the persons of Dr. Gordon L. Brownell in nuclear physics and Dr. Theodor F. Hueter in ultrasound.

David C. Crockett,
Associate Director for Resources and Development

* * *

Dr. Claude E. Welch was awarded the honorary degree of Doctor of Science by Doane College on May 30. Dr. Welch graduated from Doane in 1927.

* * *

SOCIAL SERVICE DEPARTMENT

The Fiftieth Anniversary of the birth of our Social Service Department will be celebrated from October 20 through 22. The program for the occasion is as follows:

Thursday, October 20—Alumnae Day

The program on this day is planned particularly for former members of the Department, including professional workers, students, aides, secretaries, and volunteers.

Morning: Registration
Afternoon: History of the Social Service Department
Reports and discussion
Social hour with Miss Cannon
Evening: Supper at the Hospital, with skits and other gaiety

Friday, October 21—General Program

Morning: Meetings (lasting 1½ hours)

1. Professional teamwork in care of the patient
   The present status and future tasks of professional teamwork, discussed by various team members (physician, nurse, and social worker)
2. Cooperation between Hospital Administration and Social Service
   For hospital and social service executives, board, and advisory committee members
3. Teaching of medical students
   Description and evaluation of present methods by medical and social work teachers
4. The total program of Social Service in a health agency
   Combining the basic functions of Social Service (administration, consultation, casework, teaching, research, and community activities) in a balanced program
5. Cooperation with community casework agencies
   For members of hospital and community agency staffs

Workshops (lasting entire morning)

A. Social casework in a medical setting
   Focusing on work with patients and families
B. Social casework in a medical setting
   Focusing on the role of the social worker in medical teamwork, either in individual contacts or in organized multidiscipline conferences with members of other professions
C. Social research in a medical setting
   Efforts will be made to define the essentials of an ongoing research program for a social service department in a teaching hospital, focused on study and evaluation of social work practice
D. Teaching of social work students
   Definition of criteria for student progress in field work
   For field work supervisors of medical and psychiatric social students

Afternoon: Buffet lunch at the Hospital
General meeting: "Integrating the medical effort"
Panel discussion by a group of experts (a medical clinician, a psychiatrist, a nurse, a social worker, a sociologist, a hospital administrator, and a medical statesman)
Evening: Cocktail hour and banquet, Harvard Club

Principal speaker—Professor Elliott Dunlap Smith, Provost of Carnegie Institute of Technology, Pittsburgh, Pennsylvania

Saturday morning, October 22

1. Reports and evaluation
   Reports of findings and recommendations from the meetings and workshops of the two previous days
2. Concluding paper by Harriett M. Bartlett: "Fifty years of social work in the medical setting—Past significance and future outlook"

The Board of Trustees, at their meetings on April 15, June 10 and 24, and July 22, voted:

To create the position of Associate Sociologist in the Department of Psychiatry;
To terminate the appointment of Dr. Verner S. Johnson as Senior Resident in Orthopedic Surgery, as of December 31, 1955;
To grant leave of absence to Dr. Fritz Lipmann, from June 16 through August 31;
To reappoint Dr. Herbert B. Locksley as Second Assistant Resident in Neurosurgery, beginning July 11;
To extend the appointment of Dr. Richard A. Mayo as Assistant Resident in Orthopedic Surgery, through December 31;
To grant leave of absence to Dr. Edward P. Richardson, Jr., for four or five months;
To grant leave of absence to Dr. Leonard J. Rothfeld, for the period June 17 through June 30.

To appoint:

Dr. H. Arto Aprahamian as Assistant Resident in Anesthesia, beginning January 1, 1956;
Dr. Henrik H. Bendixen as Assistant Anesthetist;
Dr. Alexander Breslow as Third Assistant Resident in Pathology for one year, beginning July 1, 1956;
Dr. Jimmie C. Brockman as Resident in Psychiatry, from July 1 through December 31;
Dr. Nancy L. R. Bucher as Associate Biologist (Medicine), for the period July 1, 1955 through June 30, 1958;
Dr. Leonard W. Cronkhite, Jr. as Assistant in Medicine for one year, beginning July 1;
Dr. Reynout Donner as First Assistant Resident in Pathology for one year, beginning July 1, 1956;
Dr. Melvin J. Glimcher as Senior Resident in Orthopedic Surgery, for the period January 1, 1956 through June 30, 1956;
A. Paul Hare, Ph.D. as Associate Sociologist in the Department of Psychiatry;
Dr. Raymond N. Kjellberg as Second Assistant Resident in Neurosurgery, beginning July 1;
Dr. Victor Politano as Assistant Urologist, effective August 1;
Dr. Duncan E. Reid to the Consulting Staff;
Dr. George Saslow as Psychiatrist, beginning July 1, with the privilege of seeing private patients at the Hospital;
Dr. Gerold L. Schiebler as Assistant Resident in Medicine, beginning July 1;
Dr. Jesse F. Scott as Associate Biophysicist (Medicine), for the period July 1, 1955 through June 30, 1958;
Dr. Joseph Stokes, III, as Assistant in Medicine, effective July 1;
Dr. Moses M. Suzman as Visiting Physician pro tempore, for two weeks, beginning June 20.

At their meetings during June and on July 20, the General Executive Committee voted:

To promote:

Dr. Arthur E. Baue to the position of Third Assistant Resident in Surgery, beginning July 1;
Dr. Leland C. Brannon to the position of Resident in Neurosurgery, beginning July 11;

Dr. David L. Collins, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Oscar S. DePriest, III, to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Harry B. Ditmore, Jr. to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Edward Dunn to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Walter M. Haynes, Jr. to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Gilbert Hermann to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Clement A. Hiebert to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. John H. Kennedy to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Richard N. Kleaveland to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Walter E. Klingensmith to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Harold L. May to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. George B. Murphy, Jr. to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Eugene R. Nobles, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Demetrios A. Papadopoulos to the position of Resident in Urology for one year, beginning July 1;

Dr. James A. Petersen to the position of Resident in Radiology, beginning July 1;

Dr. John D. Pitts to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Majic S. Potsaid to the position of First Assistant Resident in Radiology, beginning July 1;

Dr. Stuart E. Price, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Jens G. Rosenkrantz to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Richard L. Rovit to the position of First Assistant Resident in Neurosurgery, beginning July 1;

Dr. Robb H. Rutledge to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Frederick G. Shaffer to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Jack E. Tetirick to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Giles D. Toll to the position of Second Assistant Resident in Surgery, beginning July 1.

To extend the appointments of:

Dr. Franca Bonotti as Fellow in Anesthesia, through July 31;

Theodor F. Hueter, Ph.D. as Research Fellow in Physics, assigned to Neurosurgery, retroactive to January 1, through December 31;

Dr. Richard J. Stenger as Third Assistant Resident in Pathology, from July 1 until such time as he is called to active military duty;

Dr. Elliott B. Sweet as Clinical and Research Fellow in Orthopedic Surgery, from July 1 through December 31.

To reappoint:

Dr. Robert S. Adams as Clinical Fellow in Child Psychiatry for one year, beginning July 1;

Dr. Norman W. Andrew as Assistant Resident in Anesthesia for one year, beginning August 1;

Dr. Saul Aronow as Research Fellow in Physics for one year, beginning July 20;

Dr. Daniel M. Bachman as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. John S. Barlow as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Norman R. Bernstein as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Mandel E. Cohen as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Willard Dalrymple as Clinical Assistant in Medicine, beginning August 1;

Dr. Francis L. A. deMarneffe as Clinical Assistant in Psychiatry for one year, beginning July 1;

Dr. Leon I. Goldberg as Research Fellow in Anesthesia for one year, beginning June 4;

Dr. Joachim S. Gravenstein as Fellow in Anesthesia for one year, beginning August 16;

Dr. Salomon Hakim as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Dorothy H. Henneman as Research Fellow in Anesthesia for one year, beginning September 1;

Dr. William H. Horwitz as Clinical Fellow in Psychiatry for one year, beginning September 1;

Elizabeth B. Keller, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;

Dr. Lowell W. Lapham as Research Fellow in Neuropathology, for three months, beginning July 1;

Mr. Alden V. Loud as Research Fellow in Medicine for one year, beginning July 1;

Dr. Sholem Postel as Clinical and Research Fellow in Medicine for one year, beginning July 15;

Dr. Nancy Rollins (Youse) as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Ann Ross, A.B. as Research Fellow in Psychology for one year, beginning July 1;

Dr. John A. Scholl as Clinical and Research Fellow in Neurosurgery, for six months, beginning July 1;

Dr. Mary L. Scholl as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;

Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;

Dr. Chiu-chen Wang as Research Fellow in Radiology, through December 31;

Babette S. Whipple, Ph.D. as Research Fellow in Psychology for one year, beginning September 1.

To appoint:

James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;

Dr. Rafael M. Casas as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. James C. Davis as Research Fellow in Pathology for one year, beginning November 1;

Dr. Elias C. Dow as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Pierre M. Dreyfus as Research Fellow in Neuropathology for one year, beginning July 1;

Dr. Joseph I. Engler as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning August 1;

Dr. Lamont W. Gaston as Clinical and Research Fellow in Medicine, for six months, beginning July 1;

Elizabeth Gellert, M.A. as Research Fellow in Psychology, beginning July 1;

Dr. Herschel A. Graves, Jr. as Clinical Fellow in Surgery, assigned to Gynecology, for the months of July and August;

Dr. Thomas P. Hackett as Clinical and Research Fellow in Psychiatry, beginning July 1;

Dr. Arthur W. Hazenbush as Graduate Student Assistant in Orthopedic Surgery, for six months, beginning July 5;

Dr. William P. Jencks as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. Jacob D. Judah as Research Fellow in Biochemistry for one year, beginning September 1;

Heinz Kohler, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. Cesare T. Lombroso as Research Fellow in Neuropathology for one year, beginning July 1;

Dr. William B. Looney as Clinical and Research Fellow in Medicine, beginning September 19;

Dr. Alfred J. Luessenhop as First Assistant Resident in Neuropathology, beginning July 1;

Dr. John D. McQueen as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Herbert C. Mansmann, Jr. as Research Fellow in Neurology, for the period July 1 through September 30;

Ruth G. Matarazzo, Ph.D. as Research Fellow in Psychology for one year, beginning July 1;

Dr. John Mealey, Jr. as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Dagoberto Sosa Montalvo as Clinical and Research Fellow in Neurosurgery, for six months, beginning July 1;

Dr. George E. Murphy as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. David W. Richards as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Phillips W. Robbins, Ph.D. as Research Fellow in Biochemistry, beginning September 1;

Dr. John C. Rowe as Clinical Fellow in Medicine, beginning July 1;

Dr. Sabino J. Sinesi as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. Burton Stulberg as Clinical Fellow in Psychiatry for one year, beginning July 18;

Dr. Eji Suyama as Clinical Assistant in Surgery, for the period July 5 through August 15, with permission to act as Dr. L. S. McKittrick's assistant in Baker Memorial and Phillips House;

Dr. Julio Toriello as Clinical Fellow in Radiology, for the month of July;

Dr. Lawrence H. Warbasse, Jr. as Clinical and Research Fellow in Medicine, beginning September 1;

Dr. Leonard Weiner as Clinical Fellow in Psychiatry for one year, beginning July 1.

The General Executive Committee also voted:

To rescind the promotions of Drs. Gerald M. Edelman and Glenn A. Langer as Assistant Residents, beginning July 1, as they have left for military service;

To terminate the appointment of Dieter M. Schmid, Ph. D. as Research Fellow in Medicine as of August 20, because of his return to Switzerland;

That Dr. Katharine E. Spreng will begin service as Assistant Resident in Medicine on July 1 rather than October 1;

That Dr. Ralph C. Williams, Jr. will begin service as Assistant Resident in Medicine on October 1 rather than July 1.

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

While many of us were away on vacations at the seaside or the mountains or in countries abroad, others of us were at home, enjoying the privilege of meeting many of our visitors from other lands. On July 14, eighteen visitors from Australia, Brazil, Denmark, England, France, Egypt, Japan, Italy, and Spain came to the Massachusetts General Hospital. They were brought to this country by the State Department, to inspect atomic energy installations and cancer projects in the United States. In order to make their visit interesting and for them to learn something about our lives, they were invited to dinner at the homes of Dr. and Mrs. Morris H. Adler, Dr. and Mrs. Joseph C. Aub, Dr. and Mrs. Robert L. Berg, Dr. and Mrs. Stephen M. Krane, Dr. and Mrs. Arthur S. Pier, Jr., Dr. and Mrs. John D. Stoeckle, Dr. and Mrs. Claude E. Welch, and Dr. and Mrs. Stanley M. Wyman. We found our guests to be delightful people, with stimulating and exciting stories of their lives at home and of their tour of the United States. A feeling of rejuvenated enthusiasm for greater accomplishments was injected into our lives that evening when we met and talked with these friends from other parts of the world.

Our new Reception Center will be open each weekday beginning September 26, from 9 A.M. until 4 P.M. Post cards will be sent out, informing the ladies of the opening of the Reception Center and their assignments of work days.

An indoctrination talk will be given by Miss Mary Ruth Wolf, Director of our Volunteer Unit, on September 21, from 9 A.M. until 12 noon, and from 2 until 5 P.M. We are having the two sessions so that if you cannot come to one, you might be able to attend the other. Instructions given in the talk will so well orient us with the Hospital that, when visitors come to our Reception Desk, we will be able to direct them efficiently to their proper destinations.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Appraisal of drugs intended to alter subjective responses, symptoms.
J.A.M.A. 158:399-401.

Bunker, J. P., Stetson, J. B., Coe, R. C., Grillo, H. C., and Murphy, A, J.
Citric acid intoxication.
J.A.M.A. 157:1361-1367.

Dermatology

Blank, I. H.
Mechanism of the action of agents used for the relief of dry skin.
Proc. Scient. Sec. Toilet Goods Assoc. 23:19-23.

Herbst, F. S. M., Lever, W. F., and Hurley, N. A.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. VI. Studies of the serum proteins and lipoproteins by moving boundary electrophoresis and paper electrophoresis before and after administration of heparin.
J. Invest. Dermat. 24:507-525.

Digestive Tract Diseases

Jones, C. M.
Diseases of the esophagus.
In Textbook of Medicine, R. I. Cecil and R. F. Loeb, Editors, Philadelphia, W. B. Saunders Company, ed. 9, pp. 839-844.

Jones, C. M.
Panel on liver disease (with Drs. A. M. Snell, R. Kark, H. R. Butt, and V. Shorov).
J.A.M.A. 158:116-121.

General Medicine

Burrage, W. S., and Irwin, J. W.
Hydrocortisone in the therapy of asthma.
Ann. New York Acad. Sciences 61:377-383.

Burrage, W. S., and Irwin, J. W.
The use of intravenous hydrocortisone in asthma.
Ann. New York Acad. Sciences 61:460-463.

Henneman, P. H., Wang, D. M. K., Irwin, J. W., and Burrage, W. S.
Syndrome following abrupt cessation of prolonged cortisone therapy.
J.A.M.A. 158:384-386.

General Surgery

Soutter, L., Scannell, J. G., and Myers, G. S.
Pneumonectomy and pulmonary valvulotomy in the treatment of active tuberculosis and pulmonary stenosis. Report of a case.
J. Thoracic Surg. 30:49-56.

Laboratory Science

Geyer, R. P., Olson, F. R., Andrus, S. B., Waddell, W. R., and Stare, F. J.
Preparation of fat emulsions for intravenous alimination.
J. Amer. Oil Chem. Soc. 32:365-370.

Matoltsy, A. G., and Odland, G. F.
Investigation of the structure of the cornified epithelium of the human skin.
J. Biophys. & Biochem. Cytol. 1:191-196.

Neurology, Neurosurgery, and Psychiatry

Barrows, L. J., Hunter, F. T., and Banker, B. Q.
The nature and clinical significance of pigments in the cerebrospinal fluid.
Brain 78:59-80.

Otolaryngology

Weille, F. L.
The significance of the arteriovenous arcades of the spiral ligament of the cochlea.
Ann. Otol., Rhin. & Laryng. 64:173-180.

Surgery—Reconstructive

Webster, R. C.
Abrasive surgery for certain facial deformities.
New England Sanitarium and Hospital Spectator 6:2.

Books

Richardson, W.
The house on Nauset Marsh.
New York, W. W. Norton & Company, Inc.

MASSACHUSETTS EYE & EAR INFIRMARY

At the recent meeting of the American Medical Association, Dr. David G. Cogan was awarded the Knapp Medal by the Ophthalmic Section, for the excellence of his paper which was read at the 1953 meeting. In presenting the medal to Dr. Cogan, Dr. Frederick H. Verhoeff, Chairman of the Award Committee, said, "Because of the excellence of this paper, and also because of his many other accomplishments and the high esteem in which he is held, the award of the medal to Dr. Cogan will greatly add to the satisfaction of those who received the medal in the past, and enhance the efforts of those who will compete for it in the future."

The Massachusetts Lions Eye Research Committee has announced the establishment of a $25,000 eye research fellowship in honor of Dr. Edwin B. Dunphy, Chief of Ophthalmology at the Infirmary.

Dr. Verhoeff, a native of Louisville, Kentucky, Emeritus Professor of Ophthalmic Research at Harvard and Consulting Chief of Ophthalmology at the Infirmary, was awarded the honorary degree of Doctor of Science by the University of Louisville on June 5.

Dr. Robert J. Herm announces the opening of his office for the practice of Ophthalmology at 314 Main Street, Melrose, Massachusetts.

Staff appointments:

Dr. Richard B. Chapman, Assistant in Ophthalmology;

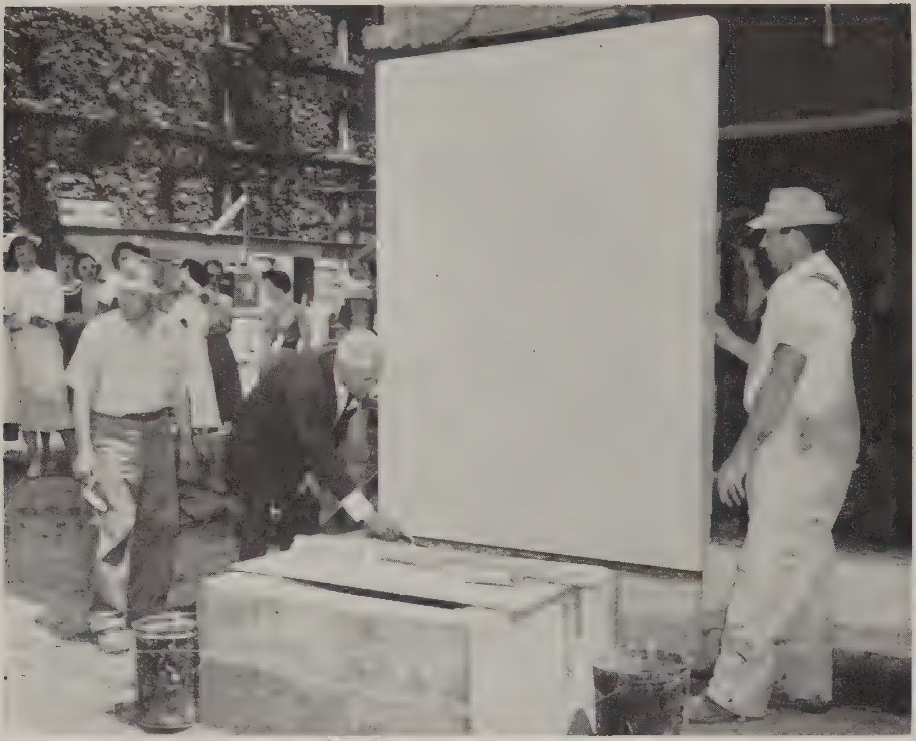
Dr. Daniel F. Milam, Jr., Assistant in Ophthalmology;

Dr. Taylor R. Smith, Associate Pathologist in Ophthalmology.

BIOGLETS

Dr. Martin R. Coles, Assistant Resident in Psychiatry—born in Boston, Massachusetts, October 12, 1928; A.B., Harvard College, 1950; M.D., Columbia University College of Physicians and Surgeons, 1954; Intern, University of Chicago Clinics, 1954-55; home: Boston, Massachusetts.

Dr. Roman W. DeSanctis, Intern in Medicine—born in Cambridge Springs, Pennsylvania, October 30, 1930; B.S., University of Arizona, 1951; M.D., Harvard Medical School, 1955; married; home: Tucson, Arizona.



During the ceremonies at the laying of the cornerstone of the new Medical Science Building on June 23, Mr. Francis C. Gray, Chairman of our Board of Trustees, assists in placing the granite marker at the corner of the building.

Dr. Frederick S. McAlpine, Assistant Resident in Anesthesia—born in Monessen, Pennsylvania, June 16, 1929; A.B., St. Vincent College, Latrobe, Pennsylvania, 1950; M.D., University of Pittsburgh School of Medicine, 1954; rotating internship, Bethesda Naval Hospital, Bethesda, Maryland, 1954-55; single; at present on active duty with the U.S. Navy as Lieutenant, j.g., at Massachusetts General Hospital; home: Monessen, Pennsylvania.

Dr. Charles F. McKhann, III, Intern in Surgery—born in Boston, Massachusetts, January 29, 1930; B.A., Harvard College, 1951; M.D., University of Pennsylvania, 1955; home: Haverford, Pennsylvania.

Dr. Marvin D. Siperstein, Assistant Resident in Medicine—born in Minneapolis, Minnesota, September 21, 1925; U.S. Army: Pfc, Army Special Training Program, 1943-46; B.S., University of Minnesota, 1946; M.D., University of Minnesota Medical School, 1948; Intern, University of Chicago Clinics, 1948-49; Ph.D., University of California, Berkeley, 1952; U.S. Public Health Service: Senior Assistant Surgeon, National Institutes of Health, Bethesda, Maryland, 1953-55; married.

New addresses:—

Dr. Franca Bonotti (clin. fel. *An.* 1955), Viale Giulio Cesare #51, Rome, Italy
Dr. Samuel Brendler (sr. r.s. *N.S.* 1953), Walter Reed Hospital, Washington, D.C.
Dr. Charles R. Campbell (r.p. *Path.* 1955), University of California Hospital, Parnassus and 3d Ave., San Francisco 22, Calif.
Dr. J. Maxwell Chamberlain (*N.S.* 1934 & *W.S.* 1937), 23 E. 79th St., New York 21, N.Y.
Dr. Lincoln D. Clark (*M.* 1948), University of Utah, Salt Lake City, Utah
Dr. Beverly W. Cobbs, Jr. (*M.* 1953), Postgraduate Hospital, Ducane Rd., London W. 12, England
Dr. Herschel D. Collins (*M.* 1953), 8 N. Main St., Caribou, Maine
Dr. Leslie Corsa, Jr. (a. *C.M.* 1954), 2151 Berkeley Way, Berkeley 4, Calif.
Dr. Genesio L. D'Alessandro (a.r.p. *An.* 1950), 275 Forest Ave., Glen Ridge, N.J.
Dr. Thomas L. DeLorme (sr. r.s. *Or.* 1955), 234 Marlborough St., Boston, Mass.
Dr. Daniel D. Federman (*M.* 1954), National Institutes of Health, Bethesda, Md.
Dr. Howard S. Frazier (*M.* 1954), Biophysical Laboratory, Harvard Medical School, 25 Shattuck St., Boston, Mass.
Dr. Frank W. Garran, Jr. (*S.* 1951), Barnstable, Mass.
Dr. Philip S. Gordon (*Dn.* 1955), 277 Williams St., West Haven 16, Conn.
Dr. Adolf L. Gundersen (*S.* 1950), 218 S. 14th St., La Crosse, Wis.
Capt. Arthur Haut, MC, USAF (*M.* 1950), Box 323, 10th Field Hospital, APO 800, c/o Postmaster, New York, N.Y.
Dr. Samuel L. Katz (a.r.p. *C.M.* 1955), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Robert L. Kirkpatrick (a.r.s. Apr.-June 1955), Cleveland City Hospital, Cleveland, Ohio
Dr. Arthur R. Kravitz (*M.* 1955), Boston Psychopathic Hospital, 74 Fenwood Rd., Boston, Mass.
Dr. William G. Kuhn, Jr. (a.r.s. *Or.* 1949), 251 Powers St., New Brunswick, N.J.
Dr. Cornelius Lansing (*C.M.* 1948), University of North Carolina, Chapel Hill, N.C.
Dr. Alexander Leaf (*M.* 1944), Department of Biochemistry, Oxford University, Oxford, England
Dr. Robert W. Mackie (sr. r.s. *N.S.* 1954), U.S. Navy Medical Centre, Bethesda, Md.
Dr. Daniel F. Milam, Jr. (*S.* 1949), Massachusetts Eye and Ear Infirmary, Charles St., Boston, Mass.
Dr. Jule P. Miller, Jr. (a.r.p. *Psychiat.* 1955), Boston Psychopathic Hospital, 74 Fenwood Rd., Boston, Mass.
Dr. Gisela A. Munzinger (clin. fel. *Psychiat.* 1955), Child Psychiatry Division, Cincinnati General Hospital, Cincinnati 29, Ohio
Dr. William R. Owen (*M.* 1950), 1007 Hermann Professional Bldg., Houston 25, Tex.
Dr. Norman L. Paul (clin. fel. *N.*), 51 Brattle St., Cambridge, Mass.
Dr. Thomas C. Peebles (*C.M.* 1952), 100 Summer St., Weston, Mass.
Dr. Joseph R. Petranek (*M.* 1954), Pondville Hospital, Walpole, Mass.
Dr. Murray Rabinowitz (a.r.p. 1955), 98-40 64th Ave., Forest Hills, Long Island, N.Y.
Dr. John F. Radebaugh, Jr. (*C.M.* 1954), 81 Parkview Ave., Bangor, Maine
Dr. Jane S. Rasmussen (*C.M.* 1954), University College Hospital, London, England
Dr. Harvey D. Rothberg, Jr. (*M.* 1954), 831 Central Ave., Plainfield, N.J.
Dr. Jack H. Rubinstein (*C.M.* 1954), Children's Hospital, Cincinnati, Ohio
Dr. Arnold D. Schwartz (clin. & res. fel. *Psychiat.* 1955), Harvard School of Public Health, 55 Shattuck St., Boston, Mass.
Dr. David B. Sheldon (*S.* 1951), University of California Medical Center, Los Angeles 24, Calif.
Dr. Raymond D. Sphire (a.r.p. *An.* 1955), 1110 N. Renaud Rd., Grosse Point Woods, Mich.
Dr. Richard P. Stetson (*W.M.* 1928), 203 Commonwealth Ave., Boston, Mass.
Dr. Bernard B. Stone (r.s. *N.S.* 1955), 15 Hatfield Rd., West Newton, Mass.
Dr. Brian D. Stringer (gr. stud. a. *S.* 1955), 2 Yaldhurst Rd., Christchurch, New Zealand
Dr. Julio Toriello (r.p. *R.* 1955), 4a Calle 6-35, Zone 1, Guatemala City, Guatemala, Central America
Dr. Felix S. Vecchione (clin. fel. *Psychiat.* 1955), Veterans Administration Hospital, Northampton, Mass.
Dr. Mackenzie Walser (*M.* 1949), National Heart Institute, National Institutes of Health, Bethesda, Md.
Dr. Oscar B. Williams, Jr. (a.r.p. *An.* 1955), Parkland Memorial Hospital, Dallas, Tex.
Dr. W. Steve Worthy (clin. a. *Gyn.* 1951), 523 S. Tanner St., Carrollton, Ga.
Dr. Setrag A. Zacarian (r.p. *D.* 1955), 130 Maple St., Springfield, Mass.

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Brief bits:—

Dr. Allan M. Butler was elected President of the American Pediatric Society at their annual meeting in Quebec on June 15.

Dr. Milton H. Clifford addressed the Fifth International Congress of Life Insurance Medicine at Aix-les-Bains, France, in June. His subject was "Subtotal gastrectomy for benign ulcers of the stomach and duodenum considered on a long-term basis".

Dr. James M. Davis (*S.* 1948) is now associated with Dr. Ashbel C. Williams in the practice of General and Thoracic Surgery in Jacksonville, Florida. His office address is 2720 Park Street.

Dr. Chester M. Jones will serve as Chairman of the American Board of Internal Medicine for the year 1955-56.

Dr. Robert R. Linton delivered an address on February 25 before the Vienna Surgical and Medical Society in Vienna, Austria. His subject was "Blood vessel grafting procedures". On March 11, he spoke at St. Thomas's Hospital in London on "The surgery of portal hypertension". On June 5 he delivered the Presidential Address before the Society for Vascular Surgery at Atlantic City. His subject was "Some practical considerations in blood vessel grafting procedures". On June 8 he addressed the Surgical Section of the American Medical Association meeting in Atlantic City on "Emergency and definitive treatment of bleeding esophageal varices".

Dr. Talmage W. Nielsen (*S.* 1949) has opened an office for the practice of Surgery in Salt Lake City, Utah. His office address is Suite 24, Professional Building, 60 South 4th East.

Dr. John W. Smillie (*E.S.* 1944) gave a paper on "Cataract surgery in megalocornea" before the Section on Ophthalmology at the American Medical Association meeting in Atlantic City in June. The discussion was opened by Dr. Derrick T. Vail (*Oph.* 1924), recently Chairman of the American Board of Ophthalmology.

Dr. Claude E. Welch was the guest speaker at the annual meeting of the California State Medical Society, held in San Francisco last May. He spoke on "Various aspects of gastro-intestinal surgery". Among others on the program were Drs. James A. Halsted (W.M. 1932) and Dr. Roy B. Cohn (*Path.* 1933 and *E.S.* 1936). Dr. Welch was also the speaker at the annual meeting of the Central New York Surgical Society, held in Syracuse on May 26.

THE NEWS

1811

No. 149 Boston, Mass. October 1955

CARDIAC LABORATORY AND CLINICS ✓

The time has come, according to THE NEWS, for another report from the Cardiac Laboratory and its appendages. Perhaps this is now appropriate, as five years have elapsed since our earlier note and another milestone has been attained in the affairs of the laboratory. In these five years conditions at the Hospital have changed to such an extent that the existing facilities in all the clinical laboratories have been stretched beyond their limits to keep abreast of routine demands and to participate fully in the accelerated programs of research. In particular, the sharp increase in bed occupancy by older age groups and the expanding requirements of the Ambulatory Clinics and, to a limited extent, of the Massachusetts General Staff Associates are reflected directly in the mounting requests for electrocardiograms and for the related services provided by the cardiac unit. This has now reached a near-critical stage, and the Hospital administration has come to our aid with plans for additional space and new equipment. In fact, construction has actually started on a new annex across the corridor from our present site, which promises to lessen the crowding and confusion in the main laboratory during the peak hours. These new quarters will include such welcome refinements as electric dryers, exhaust fans, and air conditioners.

On the threshold of these new developments, it may be of interest to recall the early days and duties of the laboratory, as well as to report on the activities of those currently responsible not only for the laboratory but also for the various research programs under way in cardiovascular disease elsewhere in the Hospital.

First, in regard to its origin more than forty years ago, certain excerpts from an address by one who was there are pertinent. On the occasion of the Ether Day anniversary in 1936, Dr. Paul D. White spoke on "The study and treatment of heart disease at the Massachusetts General Hospital from 1821 to 1936". His address was published in the *New England Journal of Medicine* for December 31, 1936. In commenting upon the founding of the laboratory he reported as follows:

> . . . In 1913 two events occurred, which inaugurated the new cardiac program that has followed. Mr. Skinner, a patient of Dr. William H. Smith's, through him offered to aid the progress of medical science at the Massachusetts General Hospital, and it was decided to install in the hospital one of the new string galvanometers called electrocardiographs. This instrument, a delicate apparatus, which registers the electrical activity of the heart muscle, was in those days viewed with suspicion by most of the doctors that had ever heard of it. It was regarded as little better than the clumsy old mechanical pulse tracing machine called the sphygmograph, which by the way was asked for in 1882 by Dr. Samuel Abbot whose request was referred to the Chairman of the Trustees and which apparently was not heard of again until Dr. Joseph Pratt years later, about 1910, brought in his own Mackenzie ink polygraph to use in the Outpatient Department.
>
> The other event was the coincidence of the date of my own graduation as interne and the date of the despatch by the new chief of the Medical Service, Dr. David Edsall, of some young doctor to London to study hearts and electrocardiography for a year and to bring back from Cambridge, England, an Einthoven string galvanometer. This instrument we installed at the hospital in the fall of 1914, in the only empty space, namely the basement of the skin ward. We built ourselves modest quarters adjoining the bathroom used by luetic patients, and here our heart work had its headquarters during the next few years until the demands of increased space carried us upstairs to the old apothecary shop on the ground floor of the Bulfinch Building under the stone steps just to the left of the central entrance door. One other move was made in 1925 to still more ample quarters, where we are now, in the new medical ell at the east end of the Bulfinch Building. To procure these ample quarters we were obliged to return again to the basement. . . .
>
> The old electrocardiograph did yeoman's service indeed. In seventeen years it wrote 21,160 electrocardiograms and helped to demonstrate that it and all its brothers, sisters and descendants were not useless toys, but were vital additions to clinical medicine in the proper understanding of heart disease. In 1931 it was relegated to the attic and we installed a new two-string galvanometer, which has written 17,118 more electrocardiograms in the past five years. . . .

This account of the early days and subsequent development of the laboratory by Dr. White is lacking in certain important and personal details — it does not, and obviously could not, fully reflect the profound and inspiring influence he himself has exerted upon his associates and fellow workers over the years, or indicate the scope of his boundless energy and enthusiasm, which fortunately he continues to share so generously with his colleagues and successors, even though the pressure of other duties forced him to relinquish the laboratory in 1949.

In the decade before World War II the demands upon the laboratory and the widening activities of its workers rapidly outgrew those "ample quarters" in the Bulfinch basement so proudly mentioned by Dr. White in 1936. Thus, with the rearrangement of the medical laboratories in 1939 the cardiac unit was moved above ground to its present central location, and now again, after another fifteen years, circumstances compel a further change, fortunately this time not a move but a welcome and necessary expansion.

The 100,000th electrocardiogram was recorded by the laboratory on September 3, 1947, thirty-three years after the founding of the unit, and the event was appropriately celebrated at that time. Now, eight years later, we are nearly two-thirds along on the second 100,000 (63,000 tracings). This sharp increment is indicated in the following table:

Electrocardiograms at the M.G.H.

Year	Wards	Private service	Total
1940 (4 leads)	3,110	2,408	5,518
1949 (12 leads)	3,691	2,318	6,009
1954 "	6,691	3,220	9,911
1955* "	7,988	3,616	11,604

Technicians	
1940	3
1949	6
1954	7
1955	8

* on basis of first six months

In 1949 the number of leads taken routinely was increased from 4 to 12, and the actual number of tracings has doubled in the past five years. Thus, on an average day the laboratory takes from 35 to 45 tracings, and not infrequently as many as 60 are recorded. Under the present system these are developed, processed, interpreted, and a report is made available on the wards or floors by 6 P.M. the day the tracing is made. To maintain this schedule requires a high degree of efficiency from equipment, full cooperation of ward and messenger services, and above all a busy day, often with extra hours, on the part of the technicians. Thus, to them especially, the new laboratory will afford a welcome respite from the crowded quarters of recent years.

So much for the routine service rendered by the laboratory. In addition, it has become over the years a focal point for clinical research by a considerable number of staff members, to an extent that this group and their activities are now being referred to informally as the Cardiac Unit. In any event, these men, fifteen in number, maintain active programs of research and teaching on the general service, in the special cardiac clinics, and in clinical conferences conducted five days a week with a senior member of the group serving in rotation as the chief for the week. In this fashion it has been possible to organize and conduct a long-term teaching program under the auspices of the Harvard Medical School Courses for Graduates, whereby twelve physicians can be accepted each year for a twelve-months' course. These contacts with young physicians from other sections of this country, and especially from far countries, have inspired us and, we hope, instructed them. Since 1949, in addition to those members from the United States, we have had either long-term graduate students or research fellows from

Asia and Africa	15
Europe	11
Central and South America	10
Canada	8
Philippines	3
Taiwan	1
New Zealand	1
Iceland	1
Total	50

As in the past, our two cardiac "residents", supported usually by the National Heart Institute, spend an active twelve months with clinical cardiology and special research projects. These two positions attract a considerable number of applicants, and it is regrettable that each year so many able candidates have to be directed elsewhere to the rather limited number of similar positions available in cardiology in this country.

The senior members of our group continue their special interests in the ever-broadening field of cardiovascular disease. Dr. Howard Sprague has developed the new phonocardiographic laboratory in the Research Building to a high degree of efficiency, and with the technical aid of Mr. Maurice Rappaport, Chief Engineer, Electrophysiologic Research, of the Sanborn Company, and a succession of research fellows, is acquiring a formidable collection of sound and murmur recordings for a projected album. In the same laboratory, Dr. Maurice McGregor of Johannesburg, South Africa, has continued his earlier studies of ballistocardiography with an improved instrument designed by Mr. Rappaport; and Dr. Conger Williams, with the assistance of graduate students, is employing a new and supersensitive vectorcardiograph capable of amplifying for the first time P and T vectors to a sufficient size to permit analysis and study.

Elsewhere, in the research laboratory adjacent to the X-ray Department on White 2, donated by the late Mrs. Theodore Brown and named for Dr. White, the catheterization team continues an active program concerned with the physiology of the pulmonary circulation. This team is composed of Drs. Gordon Myers and Allan Friedlich of the cardiac group, and Gordon Scannell and Stanley Wyman of the Surgical and X-ray Departments, with the indispensable technical assistance of Miss Ann Murphy. An angiocardiograph of special design, newly acquired from Sweden by the X-ray Department for this laboratory, permits high speed photography up to 12 frames per second synchronously in 2 planes of the passage of radio-opaque material injected in the blood stream. This should prove useful not only in studying the circulation through the heart and lungs but also in other organs of the body.

The problems of blood pressure and testing of new methods and new agents in dealing with hypertension occupy the special interest of Drs. Robert Palmer, James Currens, and William Chapman.

Dr. Mandel Cohen continues his investigation of the genetics of cardiovascular disease, with special reference to rheumatic fever, employing the twin-method of approach. He has also assembled some interesting and important new data on the central nervous system aspects of Cheyne-Stokes respiration.

It is with regret that we have lost temporarily the services and association of Dr. Edwin O. Wheeler. He has been called to active military duty for a two-year period and assigned to the U.S. Public Health Service's hospital on Staten Island as Assistant Chief of the Medical Service. In the interim Dr. Bryan Williams has joined our group.

Beginning this year, the M.G.H. is participating in a new project at a national level to survey the current practices employed in cardiac rehabilitation throughout the country and to determine what further investigation or improvement in methods seems indicated. This broad program is supported by the National Heart Institute and is under the direction of Drs. Howard A. Rusk and Paul D. White. The main activities will be centered jointly at the Institute of Physical Medicine and Rehabilitation of New York University and at the Massachusetts General Hospital. Dr. Bryan Williams is a member of the central committee and is coordinating the M.G.H. participation in this program. After the national survey is completed, specific projects are planned locally to supplement and extend current practices.

In concluding this report, I would like to speak of the achievements of our surgical colleagues at the M.G.H. in the field of cardiovascular disease which have been remarkable — first, in the correction of congenital defects, later in the perfection and utilization of arterial grafts, and now in the alleviation of certain acquired valvular deformities. In the past five years approximately 200 patients with mitral stenosis have had surgical relief by commissurotomy, mostly by Dr. Gordon Scannell, and an accessory aortic valve (Hufnagel type) has been inserted by Dr. Richard H. Sweet in 6 patients with severe and disabling aortic regurgitation.

The long and intimate association of the cardiac group with the House of the Good Samaritan, where problems of valvular disease and rheumatic fever have been studied for so many years, places our unit in a rather favored position to advise and to profit from the new developments in this field. Dr. Sprague continues as Chief of Staff at the Good Samaritan, and five others of our group serve on the staff. A long-term study of the consequencies of rheumatic fever, started by the late Dr. T. Duckett Jones over a quarter of a century ago, has been carried forward without interruption here and at the Good Samaritan, and detailed data on the first 2,000 patients are nearing completion for another interim report. Many of these cases date back to the early twenties, and with the advent of chemotherapy, antibiotics, and hormones it is unlikely that a similar group can ever again be assembled. Therefore, this experience should provide a useful baseline for the future comparison of the preventive programs and the vigorous therapeutic procedures presently employed.

Finally, the interest and support of patients and friends and, in particular, the substantial and increasing aid in recent years from the Massachusetts and American Heart Associations and from the National Heart Institute have made possible the research programs of the past and promise succcess for those of the future.

Edward F. Bland, M.D.,
Physician

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Dr. Fuller Albright was awarded the honorary degree of Doctor of Science at the Harvard Commencement in June. The text of the citation reads: "Brilliant investigator in the complex field of nutrition and metabolism; your keen mind and enormous courage are a credit to this University and to medicine."

The Board of Trustees, at their meeting on August 26, voted to appoint:

Dr. Gardner F. Fay as Assistant Resident in Orthopedic Surgery, beginning July 1, 1956;

Dr. Robert P. Fornshell as Assistant Resident in Orthopedic Surgery, beginning April 1, 1956;

Dr. Garfield G. Kennedy as Acting Assistant Resident in Surgery, for the period December 1, 1955 through February 29, 1956;

Donald C. Klein, Ph.D. as Associate Psychologist, beginning September 1;

Dr. Thomas C. Peebles as Assistant to the Children's Medical Service, effective as of July 1;

Dr. J. Russell Smith as Acting Assistant Resident in Surgery, for the period September 1 through November 30;

Dr. Toivo H. Suutarinen as Assistant Resident in Anesthesia, beginning September 15;

Dr. Douglas O. Tompkins as Assistant Resident in Orthopedic Surgery, beginning July 1, 1956.

At their meeting on August 24, the General Executive Committee voted:

To reappoint:

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Roger A. Melick as Clinical and Research Fellow in Medicine for one year, beginning September 15;

Dr. Robert L. Nielsen as Clinical and Research Fellow in Medicine for one year, beginning September 13;

Mr. Richard R. Peebles as Research Fellow in Psychology for one year, beginning September 1.

To appoint:

Dr. Paul L. Dunstan as Clinical Assistant in Psychiatry, beginning September 1;

Mr. William E. Fitzgerald, Jr. as Research Fellow in Psychology, effective as of July 1;

Dr. Carlos B. Gonzales as Graduate Student

Assistant on the Orthopedic Service, for the period September 6 through December 5;

Dr. Kiyokazu J. Momose as Clinical Fellow in Radiology for one year, beginning January 1, 1956;

Dr. Dean LaR. Moyer as Clinical Fellow in Pathology for one year, effective as of July 1;

Mr. Thomas F. A. Plaut as Research Fellow in Psychology, beginning September 1;

Dr. Betty S. Roof as Clinical and Research Fellow in Medicine for one year, beginning July 18;

Dr. John L. Rowbotham as Clinical Assistant in Surgery, with the privilege of caring for the patients of Dr. Leland S. McKittrick in Baker Memorial and Phillips House, effective as of August 1.

The General Executive Committee also voted:

That the appointment of Dr. David R. Bowsher as Clinical and Research Fellow in Neurosurgery be extended through November 30;

That the appointment of Dr. Spyros G. Macris as Clinical and Research Fellow in Anesthesia shall begin January 1, 1956 rather than July 1, 1955;

That the title of Dr. Edward S. Rendall be changed from that of Clinical Fellow in Medicine to that of Clinical Assistant in Medicine, effective as of August 1.

⁂

Mr. Joseph Hill has been appointed Director of Purchases at the Massachusetts General Hospital. He assumed his new duties on August 16. Mr. Hill was formerly Purchasing Agent at the New England Hospital, Roxbury, and prior to that was Procurement Officer with the United Nations Relief and Rehabilitation Administration.

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Dr. and Mrs. Claude E. Welch returned recently from an extensive tour of the Middle East and have sent in the following interesting account of their travels:

The American University of Beirut, Lebanon ("AUB" as it is known throughout this part of the world) has, for the past five years, sponsored an annual Middle East Medical Assembly, with speakers invited from the U.S.A. and Great Britain. Since the AUB shines like a great Star of the East over the whole intellectual, as well as the medical, life of these lands between Egypt and Turkey, an invitation to speak at this meeting was practically a command.

The Assembly was under the direction of Dr. John L. Wilson (*E.S.* 1940). Dr. Wilson is now the Professor of Surgery in AUB, a post he has held for the past year. He has a floor of operating rooms as modern as any here in the United States, and holds a position of outstanding importance. It was comforting to find John still the same great efficient man he was years ago, though hard teaching and operative schedules, plus three very active young boys, have thinned him down from his MGH days.

Coincidentally, the Department of State requested further lectures in other cities, so Dr. ~~Carl~~ Watson of the University of Minnesota and Mrs. Welch and I made a rapid tour of several neighboring countries.

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istake
in Dr. Welch's copy sent to me.
Correction in note from Dr. Watson. (C.F.H.)

Everywhere we went there were appreciative words for our predecessors on these teaching tours — Drs. Churchill, Simeone, and DeBakey—and for the aid that was being given by the United States, particularly through Point 4. The assistance was especially striking in Amman, where numerous new hospitals and a magnificently equipped laboratory are opening. It is a tremendous problem to educate the profession to the point where full use is made of these completely modern facilities. Personnel problems are acute, for pay is not high, and America, as a land of promise, tends to siphon off many of the most promising men.

Most of our activities were centered in Beirut. This is a large city, where culture of both East and West meet freely and live in harmony. A huge modern airport means that most travelers to the Middle East pass through here. With the snow-covered Lebanon range immediately behind and the deep blue Mediterranean at its feet, the city has great natural charm. Like their Phoenician ancestors, the Lebanese are great traders and are attracting many new citizens to their major city, which is rapidly becoming the most important in the Middle East.

Jordan, on the other hand, is poorly endowed by nature, and, after the partition of Palestine, was left with very little arable land.

In Jerusalem, which is sadly divided by its barbed wire fence and sentries who shoot to kill, modern sanitation seems to have a nearly impossible task to perform. There, as in other parts of the country, lack of water, a heavily concentrated urban population, and the completely haphazard sanitary habits of the natives make intestinal infections very common. Though Amman, the capital, has no sewerage system, the first one in the country has just been installed by the Americans in Salt, a city of about 12,000.

Syria has two major cities, Damascus and Aleppo, and a good share of the lands of the Fertile Crescent. Heretofore, medical care has been centered in a few private hospitals that, in common with nearly all in this section, are filled almost entirely with surgical cases. Tuberculosis (particularly of the spine), duodenal ulcer, and the complications of gallstones are the most common diseases encountered. Cancer of the colon or rectum is infrequent and nearly always incurable by the time the patient accepts surgery. Unfortunately, Damascus — a beautiful and exotic city—has, in the guise of nationalism, introduced Arabic as the only language, even in the medical schools. This alone has created a serious backward step; combined with professional jealousy, lack of laboratory facilities, and few autopsies, the practice of medicine is at a low ebb.

One of the most interesting trips was that which we made to Aleppo, the thriving metropolis of Northern Syria. Here we found that the American colony numbered four families, and that only one or two Americans appeared here each month. However, we were immediately carried back to the Massachusetts General Hospital, for Dr. Semir Bashour (gr. stud. a. *M.* 1953) is the new Director of Health. He was naturally immensely proud of his new cardiac laboratory, and everywhere were mementos of Dr. Paul D. White, the M.G.H. and Harvard. He is starting a robust health program essentially from scratch. He pointed out that one of his five hospitals is a remodeled prison — a feature he can accept with equanimity since Charles Street jail is allowed to flourish so near the M.G.H.

Here, as elsewhere, are found private hospitals, run either by very able individuals or by missions, all doing a very capable job. Those of Drs. Altoumyian in Aleppo, Dajani in Bethlehem, and Nachmann in Damascus were models of cleanliness and efficiency. The Danish Mission Hospital in Nebk, a small Syrian town, handles a surprisingly large number of surgical patients and is nearly independent of outside resources. Thus, the surgeons not only do all of their x-ray work and pathology, but they supervise the manufacture of morphine and even aspirin tablets.

The last important city we visited was Baghdad. Here the new-found wealth of Iraq is being used to develop many new projects of flood control and irrigation. A huge new medical school and laboratory is planned, and construction on it will begin soon.

A recent development that requires special emphasis is the opening of new schools of nursing. There has been strong prejudice against the education of Mohammedan women as nurses. However, native girls are being gradually attracted to the profession. Most of the private hospitals are educating a few nurses. In Amman, a new school of nursing has been established by Dr. Orris Chapman, the administrator of Point 4, and his able assistant, Miss Hillman. They now have 21 girls enrolled, and a new modern building has just been erected that could house 60.

The greatest problem in the Middle East is that of Palestine. An estimated 900,000 Arab refugees from the area, now in Israel, are still living in tents, in unbelievable desolation, on less than subsistence rations. This poses nearly incalculable difficulties in adequate medical care. For example it was a disheartening sight to enter a ward holding perhaps 60 children and find it absolutely quiet. Nearly all of these little patients were victims of malnutrition, with severe weight loss or edema. They would be relieved, only to return a few months later in the same condition.

Perhaps we could accept this situation with less equanimity than these people do, who have with them everywhere the evidence of rise and fall of civilization after civilization. However, discontent is rife and unless it is settled by implementation of the United Nations resolutions, starvation or a major disaster seems inevitable.

Meanwhile, it is heartening to see evidences of purposeful activity everywhere. The people are shaking off their physical and intellectual lethargy. New cars and traffic jams are as frequent in Baghdad as in Boston. The younger generation is greatly interested in America, and, with few exceptions, is being oriented toward the English-speaking countries. We are acquiring many responsibilities that will demand a great deal from American medicine.

* * *

CHAPLAIN TRAINEES AT M.G.H.

The second 1955 session of the Institute of Pastoral Care attracted ministers from many parts of the country to the training center here at the Massachusetts General Hospital. Rev. James H. Burns, our Protestant Chaplain, is also Executive Secretary of the Institute and Director of our Clinical Pastoral Training Program. He reports that twelve clergymen from Massachusetts to California and from Tennessee to Wisconsin took the second semester of the training course this year, and served as his assistants here in the Hospital.

The Institute attracts men not only from our own nearby and far-flung States, but also clergymen from other countries, and we thought you might be interested in knowing about the backgrounds of just a few of the men who were here with us this year.

Rev. William W. Baldwin is Priest-in-Charge of St. Andrews Episcopal Church in Cocoli, Canal Zone. Mr. Baldwin has a most interesting and varied background. He was born in Patchogue, Long Island, and received his early education there and at the Islip High School. At 16 he became a carpenter apprentice and worked in various jobs in the New York vicinity, later becoming a journeyman carpenter. He went west at the age of 21 and had considerable experience in business, salesmanship, and ranching in California and Nevada, returning to New York at the height of the depression. In 1934 he went on a job to Aruba, Dutch West Indies, and in 1937 returned to New York and operated a woodworking shop for several months. Later in 1937 he went to Maracaibo, Venezuela, as field superintendent and contractor for the Venezuelan Oil Concessions. He returned to the States in 1939, married, and while in New York he trained for flying at Roosevelt Air School. When, to his disappointment, he found he was one year too old for acceptance in the Army Air Force, he went to the Panama Canal Zone in 1940 and worked there for 9 years as carpenter foreman and operator. Through a series of circumstances, including the loss of a child at birth and a feeling of the need for a real purpose in life, he became interested in the Church and started attending services at St. Andrews in Cocoli. This led through a series of steps to confirmation, service as vestryman, lay-reader, and finally to his decision to study for the priesthood of the Episcopal Church. He was thereafter ordained Deacon of the Church in 1951, and Priest in 1952. Two months after his ordination to the priesthood, the church which he had first attended needed a clergyman, and the Bishop sent him to be Priest-in-Charge of St. Andrews. He has 2 children.

Rev. Robert P. Price, a Californian, is here in Boston taking graduate study at Boston University School of Theology. Mr. Price, his wife, and son are in residence at 207 Bay State Road. He is on leave of absence from his duties as Associate Minister, St. Paul's Methodist Church, San Bernardino, California. He has been serving the Methodist Church in Arizona and California for some 15 years, though he is a native of Martinsville, Virginia. He says his interest in clinical pastoral training has grown out of his experience in working with small groups of young adults, and from the realization that this training is very important in dealing with the myriad situations which affect the various individuals whom he is called to serve.

Denominations were almost as varied in their representation here in clinical pastoral training this year as were the States from which our trainees came. In addition to California and the Panama Canal Zone, States represented included Massachusetts, Rhode Island, Tennessee, Virginia, Pennsylvania, and Wisconsin.

From Wisconsin and the Norwegian Synod of the American Evangelical Lutheran Church came Rev. Adolph M. Harstad. He was born in the State of Washington in 1902, the son of Rev. and Mrs. B. Harstad. After finishing high school in Tacoma, Washington, he taught school for a year. He graduated from Concordia Junior College in St. Paul, Minnesota, and Concordia Theological Seminary in St. Louis, Missouri. After serving pastorates at Thornton, Iowa, Madison, Wisconsin, and Princeton, Minnesota, he became Chaplain at Bethesda Lutheran Home, Watertown, Wisconsin, in July 1953, which position he holds at present. Mr. Harstad had the distinction of being head of the largest "family" in the training group. In addition to the 440 patients at the Home where he ministers, he also has a wife and 10 children of his own. The real impetus for this training course came, quite naturally, from the day-to-day work which he does as a part of his job as Chaplain of the Home.

In the group this year were local clergymen — five in number from Massachusetts. They were Rev. Virgil V. Brallier, Pastor of the Maplewood Congregational Church in Malden, Rev. Theodore C. Hamlin, Pastor of the Congregational Church in Lakeville, Rev. Bertil E. Hult, Pastor of the Augustana Lutheran Church of Quincy, Rev. Russell B. Richardson, Pastor of the Second Congregational Church of Attleboro, and Rev. Douglas M. MacIntosh, Pastor of the Central Congregational Church of Jamaica Plain.

The only Massachusetts-born man in this group was Mr. Richardson, who was born March 8, 1905, in Reading. He received his schooling in Reading and at Mount Hermon Preparatory School. He graduated from Gordon College, Boston, and from Yale Divinity School in 1931. He is the father of 3 children. Before ordination, he was a student worker, serving as Registrar for the Student Volunteer Movement Convention of 1931 and later as traveling secretary. He was ordained in his own home church in Reading in 1931, and served the following pastorates: North Congregational Church, Woburn, from 1932 to 1935; South Congregational Church, Pittsfield, from 1936 to 1942. When the war came he entered the Army, serving for 3½ years as a Chaplain with the United States Army in the European Theatre and in Texas. Upon his return from military duty he accepted the pastorate of the Second Congregational Church of Attleboro, where he is currently serving. His interest in clinical pastoral training grew out of a lecture course on psychiatry which he attended at Yale. While at Pittsfield he served on the Board of Directors of the Riggs Psychiatric Clinic. A need for clinical pastoral training was also felt during his period of duty as an Army Chaplain. Mr. Richardson is at present Vice-President of the Attleboro Mental Health Clinic, which he helped establish, a member of the Hospital Association Board and the Board of Trustees of the Massachusetts Conference of the Congregational Christian Church, and Moderator of the local Attleboro Association.

Others taking training and serving as Assistant Protestant Chaplains were: George E. Sinkinson, Jr., Middler at the Episcopal Theological Seminary at Cambridge, Massachusetts; Rev. Charles Edwards, Pastor of the Baptist Church at Callao, Virginia; Rev. Roy E. Williams, Ph.D., Pastor of the Firwood Methodist Church of Wilkes-Barre, Pennsylvania; and Rev. Pitser M. Lyons, III, Pastor of the Colonial Heights Presbyterian Church of Kingsport, Tennessee.

* * *

Brief bit:—

Dr. Edward B. Benedict attended the meeting of the American Gastroscopic Society in Atlantic City on June 2, and discussed the following papers: "The techniques of gastric biopsy", by Dr. C. Wilmer Wirts, and "The major contributions of the gastric biopsy", by Dr. Paul Shallenberger. On June 3, Dr. Benedict attended the meeting of the American Gastroenterological Association, and discussed the paper "Peptic esophagitis and peptic ulceration of the esophagus", by Drs. Bernard S. Wolf, Richard H. Marshak, Max Som, and Asher Winkelstein. On June 7, Dr. Benedict attended the meeting of the American Medical Association, Section on Gastroenterology and Proctology, and discussed the following papers: "Hiatus hernia and related disorders of the esophagogastric junction", by Drs. E. Clinton Texter, Jr., Hubbard W. Smith, and Clifford J. Barborka; "Regurgitant esophagitis", by Dr. Herbert W. Schmidt; and "Esophagitis, hiatal hernia, and cardiospasm: Surgical considerations", by Dr. David B. Boyd.

MASSACHUSETTS
EYE & EAR INFIRMARY

CLINIC FOR SUBNORMAL VISION

During the past ten years the Refraction Department of the Massachusetts Eye and Ear Infirmary has been slowly developing its clinical program on subnormal vision. Work has been done in a very small way, with a certain group of patients who have been "left out" in the general routine of eye care. This group is composed of those persons who are not totally blind and yet do not have vision serviceable for reading and seeing things precisely. They are industrially blind, yet see enough to get around and do most things for themselves. Ordinary glasses are of no help and therefore they have been discouraged by being told that nothing could be done for them.

The Infirmary was one of the first hospitals in the country to include lectures in its curriculum on the use of special devices for this group of patients. The director of the Refraction Department, Dr. Albert E. Sloane, has been giving courses in this field for three years as part of the teaching section of the American Academy of Ophthalmology, and has been fortunate in having a close liaison with agencies for the blind. Mrs. Helen F. Kirwin (recently retired) of the Social Service Department was one of the pioneers in this work and dedicated herself to its progress.

A gift of $3,000 from the Boston Aid to the Blind now makes it possible to enlarge and equip the existing facilities for work in subnormal vision. The new area will have special equipment for refracting such patients, in addition to regular equipment for the usual refraction. This area will be used in the ordinary routine whenever needed, as well as for a separate room with subnormal vision devices. The Boston Aid to the Blind has dedicated itself to helping blind persons and is already well known to the Infirmary, having donated a sum of money last year for the equipping of a laboratory in the new Research Center.

Under the supervision of Dr. Sloane, such patients will now be referred to the clinic, where there will be many more special testing facilities. All of the newest instruments and techniques will be available for patient care. The clinic will also have access to the research facilities of the principal universities in the community and those throughout the United States. Cooperative agreements have been made with other leading medical centers and with the American Foundation for the Blind, so that new discoveries will be immediately available to those interested in the field.

The clinic will also undertake to spread its experience and teaching to all postgraduate groups, thereby increasing even further its main function—service to the patient. To be of utmost value, the work will proceed slowly and cautiously, and the research that is done will be correlated with that of other groups. All of the facilities will be available to staff members, so that they may do their own testing. Such devices as telescopic and microscopic lenses will be available in the clinic, as well as all of the other new developments and equipment in this field.

The new clinic will be a scientific testing ground for all phases of subnormal vision. We trust that this new service will eliminate false hopes which have arisen among certain patients in the past through distorted reports that so frequently appear in the press.

A visitor to the Infirmary for three weeks was Dr. Edwin G. Gut, from the University Eye Clinic in Basel, Switzerland. Dr. Gut was particularly interested in the newest surgical techniques in ophthalmology, tonographic methods, the new ophthalmoscope, and the stereoscopic camera. He hopes to make use of these new advances when he returns to Switzerland.

The Glaucoma Consultation Service, under the direction of Dr. Robert R. Trotter, now has a new location in what has been the out-patient operating room. This will make the glaucoma diagnostic procedures available to more clinic patients than has previously been possible. Dr. Baruch Sachs is the first house officer to start a three-month rotation on the new service.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K., and Ford, C.
Anesthesia: Fifty years of progress.
Surg., Gynec. & Obst. 101:105-139.

Beecher, H. K., and Todd, D. P.
Comment on the critique.
Ann. Surg. 142:142-144.

Otolaryngology

Pressman, J. J., and Kelemen, G.
Physiology of the larynx.
Physiol. Rev. 35:506-554.

Sterility

Simmons, F. A., and Taymor, M. L.
Failure of conception in 100 completely studied couples: Analysis of factors in infertility.
Fertil. & Steril. 6:320-341.

BIOGLETS

Dr. Joseph Albert, Assistant Resident in Dermatology—born in Boston, Massachusetts, July 31, 1929; Boston Latin School, Class of 1946; Boston University, 1946-49; Harvard School of Dental Medicine, 1949-51; Research Fellow in Diabetes, Joslin Clinic, 1951; Research Fellow, House of the Good Samaritan, 1952; M.D., University of Vermont College of Medicine, 1954; Intern in Medicine, New England Center Hospital, 1954-55; single.

Dr. A. Robert Arnstein, Intern in Medicine—born in St. Louis, Missouri, September 20, 1930; attended Princeton University, Princeton, New Jersey; M.D., Washington University School of Medicine, St. Louis, 1955; home address: 11 Scarsdale Street, St. Louis 17, Missouri.

Dr. John H. Dwyer, Assistant Resident in Children's Medicine — born in Pittsburgh, Pennsylvania, October 18, 1926; U.S. Navy: Electronic Technician's Mate, 1945-46; B.S., Yale University, 1950; M.D., University of Pittsburgh Medical School, 1954; Intern, University of Pittsburgh Medical Center, 1954-55; married; one daughter.

Dr. Leonard J. Friedman, Intern in Medicine—born in New York City, August 14. 1930; A.B., Harvard College, 1951; M.D., Harvard Medical School, 1955; married; home: Boston, Massachusetts.

Dr. A. Erik Gundersen, Intern in Surgery—born in LaCrosse, Wisconsin, December 26, 1930; Lake Forest Academy, Lake Forest, Illinois, 1946-48; B.A., Dartmouth College, 1952; Dartmouth College Medical School, 1951-53; M.D., Harvard Medical School, 1955; married; one daughter; present address: 80 Pierce Road, Watertown, Massachusetts.

Dr. Wayne M. Hebertson, Assistant Resident in Neurology—born in Provo, Utah, February 19, 1926; B.S., Brigham Young University, Provo, Utah, 1949; M.D., College of Medicine, University of Utah, Salt Lake City, 1952; Intern and Assistant Resident in Medicine, Salt Lake General Hospital, Salt Lake City, 1952-55; military service: 1st

MEMBERS OF OUR GENERAL EXECUTIVE COMMITTEE
Seated: DR. LAURENCE L. ROBBINS, DR. WALTER BAUER, DR. EDWARD D. CHURCHILL, DR. W. FRANKLIN WOOD, DR. DEAN A. CLARK
Standing: DR. JOSEPH S. BARR, DR. ALFRED KRANES, DR. ERICH LINDEMANN, DR. BENJAMIN CASTLEMAN

Lieutenant of Infantry, 11th Airborne Division, Asiatic Pacific Theatre, 1944-46; single; permanent address: Route 1, Provo, Utah.

Dr. Kenneth E. Liffmann, Intern in Dentistry — born in Düsseldorf, Germany, April 14, 1929; A.B., Brown University, Providence, Rhode Island, 1951; D.M.D., Harvard School of Dental Medicine, 1955.

Dr. Ronald A. Malt, Intern in Surgery—born in Pittsburgh, Pennsylvania, November 12, 1931; A.B., Washington University, St. Louis, Missouri, 1951; M.D., Harvard Medical School, 1955; married; one son; temporary home: Watertown, Massachusetts.

Dr. John T. Monroe, Jr., Intern in Medicine—born in Trenton, North Carolina, January 27, 1929; B.S., Davidson College, Davidson, North Carolina, 1951; M.D., University of North Carolina, 1955; home: Fayetteville, North Carolina.

Dr. Edward C. Parkhurst, Assistant Resident in Urology—born in Beverly, Massachusetts, March 3, 1922; A.B., Amherst College, Amherst, Massachusetts, 1943; U.S. Navy: Non-Pilot Navigator Lieutenant, Pacific Theatre, 1943-46; M.D., University of Rochester, Rochester, N.Y., 1951; Rotating Intern, Rhode Island Hospital, Providence, Rhode Island, 1951-52; Resident in Surgery, Rhode Island Hospital, 1952-55; married; two children.

Dr. Russell E. Randall, Jr., Assistant Resident in Medicine—born in San Antonio, Texas, October 18, 1928; A.B., Princeton University, Princeton, New Jersey, 1949; M.D., Columbia University College of Physicians and Surgeons, New York City, 1953; Intern, King County Hospital, Seattle, Washington, 1953-54; military service: Captain, USAF, Flight Surgeon, stationed in Alabama, San Antonio, Texas, and Westover AFB, Westover, Massachusetts; will return to the Air Force for three years' residency in Internal Medicine; activities: football, tennis, captain for two years of varsity wrestling at Princeton, hunting, fishing, gardening (earned way through school by landscaping — Randall's "Handy-Andy" Service); married; two children.

Dr. Ellis L. Rolett, Intern in Medicine—born in New York City, July 10, 1930; B.S., Yale University, 1952; M.D., Harvard Medical School, 1955; home: White Plains, N.Y.

Dr. Farrokh Saidi, Assistant Resident in Surgery — born in Teheran, Iran, November 22, 1929; entered the United States in 1946; attended Cornell University, Ithaca, N.Y., for three years; M.D., Harvard Medical School, 1954; Intern in Medicine, Duke Hospital, 1954-55.

Dr. Allan I. Sandler, Intern in Medicine—born in New York City, June 17, 1930; A.B., Princeton University, Princeton, New Jersey, 1951; M.D., Harvard Medical School, 1955; single; home: Long Beach, N.Y.

Dr. Richard L. Sidman, Assistant Resident in Neurology — born in Boston, Massachusetts, September 19, 1928; B.A., Harvard College, 1948; M.D., Harvard Medical School, 1953; Intern, 4th Medical Service (Harvard), Boston City Hospital, 1953-54; Moseley Traveling Fellow from Harvard to Strangeways Research Laboratory, Cambridge, England, and the Department of Anatomy, Oxford, England, 1954-55; married; home: Boston, Massachusetts.

Dr. Sumner I. Zacks, Intern in Pathology—born in Boston, Massachusetts, June 29, 1929; A.B., Harvard College, 1951; M.D., Harvard Medical School, 1955; home: Brighton, Massachusetts.

New addresses:—

Dr. Robert J. Brockhurst (*M.* 1948), 327 Charles St., Boston, Mass.
Dr. Herschel A. Graves, Jr. (clin. fel. *S.* 1955), 602 Doctors Bldg., Nashville, Tenn.
Dr. Thomas H. Green, Jr. (*W.S.* 1947), 226 Marlborough St., Boston, Mass.
Lowell P. Hager, Ph.D. (a. biochem. *Res. Chem.* 1955), Department of Chemistry, Harvard University, Cambridge, Mass.
Dr. Gudrun Helm (fel. *An.* 1955), Malmö Allmänna Sjuklms, Malmö, Sweden
Dr. Henry L. Heyl (r.s. *N.S.* 1940), Hitchcock Foundation, Hanover, N. H.
Dr. Betsy A. Ledbetter (a.r.p. *An.* 1955), 401 Flint St., Jonesboro, Ark.
Dr. Joe V. Meigs (*E.S.* 1921), 226 Marlborough St., Boston, Mass.
Harris S. Moyed, Ph.D. (res. fel. *Biochem.* 1955), Department of Bacteriology, Harvard Medical School, Boston, Mass.
Dr. Henry Neiditsch (fel. *An.* 1955), 82 Missionsstrasse, Basel, Switzerland
Dr. Averum B. Organic (*M.* 1952), Navajo Medical Center Sanitarium, Fort Defiance, Ariz.
Dr. Oscar Swineford, Jr. (*W.M.* 1927), Box 3373, University Station, Charlottesville, Va.
Dr. W. Jones Williams (res. fel. *Path.* 1955), Institute of Pathology, Welsh National School of Medicine, Cardiff, Wales

We were delighted to receive this nice letter from Dr. Frank B. Norbury (*M.* 1949)—our MGH "singleton" in Jacksonville, Illinois. (For those newcomers to the Hospital who may not understand what we mean by "singleton"—we have conferred that title upon those doctors who are the only MGH-ers practising in their particular communities.) Dr. Norbury's letter reads:

> I was pleased to be asked to contribute information as the only "singleton" in Jacksonville.
>
> I have just completed my first year of practice in this community of about 25,000 people. Jacksonville is in central Illinois. It is the home of Illinois College and MacMurray College for Women. We also have the State School for the Deaf, State School for the Blind, and a State Psychiatric Hospital. Education is therefore a major local industry, along with farming.
>
> About half my time is devoted to the private practice of Internal Medicine in the community and half time is spent working in a private psychiatric hospital—the Norbury Sanatorium. This makes an interesting combination, and I believe psychiatric experience would be extremely valuable to anyone who intends to practise Internal Medicine in a small community. The physicians here have friendly and cordial relationships which make for a relaxed atmosphere in which to practise medicine. St. Louis, ninety miles away, is the nearest large medical center for more specialized medical care.
>
> My chief interest outside of medicine is my family, especially my year-old daughter who is a never-ending source of amazement and amusement.
>
> I have enjoyed receiving THE NEWS, and I hope we will have a chance to visit Boston in the near future.

This interesting letter has come from Dr. Stanley T. Soholt (sr.r.s. *Or.* 1951), including his new office address — 193 Arch Street, Redwood City, California. He writes:

> Although I am listed as a "singleton", as you put it, being the only MGH-er in Redwood City, I am hardly lacking for association with other MGH alumni. As you know, the migration of MGH grads to California, particularly to the San Francisco area, has been considerable. Even within ten miles of Redwood City we have a number of them: William Key, Gordon Morrison, John Ratcliffe, O. W. Hills, and Kirk Prindle in San Mateo, just north of here; and Ralph Hawkins and Joseph Tanner in Palo Alto just south of here.
>
> Upon leaving the old "MASSACHUSETTS" in 1951, I returned directly to the San Francisco Bay area and have been practising Orthopedics here in Redwood City since that time. Redwood City is a town of about thirty to forty thousand people and is about twenty-seven miles south of San Francisco, being one of a string of suburbs extending down the San Francisco peninsula. It is on the San Francisco Bay and protected from the ocean fog by a small range of mountains. To describe the climate of this area, even when understating the facts, is difficult to do and not sound like a member of the local chamber of commerce. Suffice it to say that we find it very pleasant.
>
> My practice here has been an enjoyable one, and the attitude and relationship of the other members of the profession seem to be a good deal more pleasant in general than is ordinarily encountered in a large city. We work in a new 200-bed hospital which is only five or six minutes away from my office or my home. So the combination of pleasant surroundings, pleasant colleagues, and convenient location of the office and hospital makes my work a great deal more leisurely and enjoyable.
>
> This whole area is growing fast and the number of MGH alumni is gradually increasing, so I don't feel I will be a "singleton" in Redwood City for long.

THE NEWS

No. 150 Boston, Mass. November 1955

THE POLIOMYELITIS STORY MASSACHUSETTS GENERAL HOSPITAL — 1955

The real story of the part played by five Boston hospitals in the 1955 poliomyelitis epidemic will be found in the experiences of the hundreds of men and women who worked closely and with selfless devotion in the polio wards of these hospitals. A few observations, however, from the point of view of a trustee who, with other members of the Board, had the great privilege of seeing the wards in full operation, may help to give completeness to the story.

As Chairman of the Board of Trustees of the Massachusetts General Hospital, it seems to me that the conversion of a large area in a general hospital to a self-contained "isolation hospital" has been one of the outstanding achievements of the Massachusetts General Hospital during its long history of service to the community.

Just as the Hospital rose to great heights at the time of the Cocoanut Grove disaster in 1942, so, thirteen years later, a "disaster" of an entirely different nature is being met in an equally outstanding manner. The impact of the 1955 polio epidemic came gradually upon the Hospital during the early summer months, then suddenly reached unprecedented proportions as the number of patients with the disease increased steadily beyond any previous experience in the Commonwealth.

From the standpoint of the M.G.H. the polio epidemic cannot truly be described as an emergency, for that would imply suddenness and brevity, though the element of suddenness has been a major factor all along the line, from the making of administrative decisions to the recruiting of personnel and the moving of equipment. Unlike an emergency, however, the polio situation in the Hospital has placed upon it a long-term responsibility, especially for those patients who were most seriously afflicted.

Our task is far from completed in relation to the more than 400 polio patients who, up to November 1, have been cared for in the Massachusetts General Hospital. Even at this writing, there are 119 patients still in the polio wards and 28 of them are in respirators. The Polio Clinic is in full operation, and many patients discharged from the Hospital will be seen here for months and months to come.

No layman could visit the polio wards and not be profoundly moved at the gallantry and fortitude of the patients themselves, nor fail to recognize the inspiring *esprit de corps* of those who minister to them. The Trustees acknowledge a debt of deep gratitude to those people from every department of the Hospital who, by their skill and devotion to duty, have made it possible once again for the Massachusetts General Hospital to fulfill its obligation to the community in a great emergency.

Francis C. Gray,
Chairman, Board of Trustees

A NOTE OF APPRECIATION

The management of the polio epidemic mainly shows, it seems to me, how effectively the Massachusetts General Hospital is able to act as a unit to meet an emergency situation. This has been demonstrated, in the first place, by the polio team formed among the Resident Staff, and by the magnificent joint effort of all departments of the Hospital to support the polio wards and keep the remainder of the Hospital running at the same time. This effort is described in detail in this special issue of THE NEWS.

This capacity for unity is also illustrated by the fact that, when it became necessary to open White 9 as the respirator center, the teaching services for Neurology and Neurosurgery were housed for many weeks in the Phillips House — the first time, I believe, that Phillips House has served in such a capacity.

At the same time, all respirator cases, including patients who ordinarily would have been identified as "Phillips House" or "Baker" patients, have been cared for together on White 9, and all adult paralytic cases (other than respirator), whether children or adults, whether "ward" or "private", have been admitted to a specially created isolation unit on Baker 8 and 6. To the best of my knowledge, not a single complaint, and indeed scarcely a comment, was heard about this unusual train of events.

The Hospital is grateful not only for the prompt and faithful assistance given by so many of our own personnel but also for the aid furnished by many individuals and organizations outside the Hospital. Among these are, especially, Dr. Benjamin G. Ferris of the Harvard School of Public Health and Consultant to the Massachusetts General Hospital, and Dr. Louis Weinstein of the Haynes Memorial unit of the Massachusetts Memorial Hospitals and Associate Physician to the Children's Medical Service of this Hospital, who have visited us regularly to advise on treatment procedures, particularly on the respirator floor. Beth Israel Hospital helped out with intravenous solutions when our supplies were running short, and the Mount Auburn Hospital and others furnished nurses at critical moments.

We owe, most of all, an enormous debt to the National Foundation for Infantile Paralysis for its contribution of respirators, nurses, a medical social worker, physical therapists, and very large financial assistance. We appreciate, too, the part played by the American Red Cross and its Motor Corps, District 5 of the Massachusetts State Nurses Association, and the several branches of the Armed Forces in recruiting nurses, corpsmen, and other personnel; the Harvard, Tufts, and Boston University Medical Schools in supplying medical students to serve in many capacities; and the First National Bank of Boston and the New England Telephone and Telegraph Company in furnishing nurses (at their expense).

The Boston newspapers and wire services have not only cooperated in telling the story of the work done by the five hospitals in Boston where polio patients have been cared for, but have also assisted in a very important way in making known to the public the needs of these hospitals, particularly with respect to recruitment. To these and all others who in any way assisted us in the emergency we offer deep and sincere appreciation.

Dean A. Clark, M.D.,
General Director

September 12, 1955

ADMINISTRATIVE LETTER

Dear Doctor:

M.G.H. has every year prepared itself to handle cases of poliomyelitis, usually in relatively small numbers, and has long conducted an excellent polio clinic for aftercare. This summer, however, it joined Children's Medical Center, Haynes Memorial, Boston Floating Hospital, and Boston City Hospital in caring for a staggering load of polio patients.

In the process of devoting all our people and resources, M.G.H. has been awe-inspiring to those of us who have been close enough to the situation to see one emergency problem after another solved. All the solutions simply involved more of our people, each continuously giving more and more to the task. You cannot imagine the personal devotion and ability to maintain maximum effort shown here this summer unless you were one of the staff involved.

Because of this heavy load of polio patients, all sections of the Hospital are under unusual stress. Many of the House Staff and all of the Nursing Service have pushed themselves to a state of emotional and physical fatigue. Part of the Anesthesia Service is spending full time in the care of respirator cases. The personnel of Laundry, Emergency Ward, Housekeeping, Maintenance, Central Supply, Physical Therapy, Laboratories, and Dietary

Departments are carrying a bigger load than at any other time in the history of the Hospital.

Phillips House has taken the Neurosurgical and Neuromedical Services patients. Baker 6 and Burnham 5 are exclusively polio floors. White 9, recently opened, holds the patients who are in acute respiratory distress. White 11 holds the patients in less acute respiratory distress. White 8 has patients undergoing rehabilitation. There is a scattering of convalescent polio patients throughout the Hospital.

The only way you can get an inkling of the efforts involved in the past is to visit White 9. It is a sudden education in the meaning of poliomyelitis, especially in the adult population. Almost everyone who has visited there has requested that others connected with the Hospital be invited to visit there briefly. The General Executive Committee would like to join in this invitation to each member of the Staff.

Sincerely yours,
(Signed) **E. T. Neumann, M.D.,**
Administrator

Because each department that participated in the polio emergency achieved greatness in its own particular way, with no first and no last in importance but each performing an indispensable role in the over-all endeavor, we have arranged the following accounts from the various services in alphabetical order.—*Editor*

ADMITTING OFFICE – STATISTICS

On July 5, 1955, the first polio patient was admitted to the General wards. From then until August 9 the average number of polio patients in the General Hospital, Baker Memorial, and Phillips House was 50. Beginning on August 9 the admissions increased in the three units to an average of 6 per day. The highest number of admissions in one day was 13 on August 16. Up to November 1 there had been 408 polio patients admitted — 81 bulbar type, 123 nonbulbar paralytic, and the balance nonparalytic. Of the total, 138 were children. More than 50 patients were in the respirator unit.

There were 19 fatal cases. Seven long-term respirator cases have been discharged to the Lemuel Shattuck Hospital, Jamaica Plain, and 2 to the Veterans Hospital. As of October 1, there were 121 polio patients in the Hospital, 33 of them being in respirators and Jefferson machines, and an average of 2 to 5 in rocking beds. These patients were on White 9, Baker Memorial 6, White 8, Burnham 5 (children), and White 5.

Helen M. Daly, R.N.,
Executive Assistant, General Hospital

ANESTHESIA DEPARTMENT

When the polio team was established this year, an assistant resident from the Anesthesia Department was assigned to the team because of the respiratory problems encountered in polio patients. This has proved of value, both to the patients and to the members of the Anesthesia Department. The opportunity for the anesthesia residents to familiarize themselves with the special problems the polio patients display is very valuable.

Ever since the first respirator patient was admitted to the Hospital there has been a member of the Anesthesia Department constantly on the respirator floor to help out with tracheotomies, bronchoscopies, and airway problems, as well as to give artificial respiration with an anesthesia machine during the periods when it was necessary to take the patients out of the iron lung respirators in order to perform the necessary patient care. During the first month one anesthesia resident alone handled most of the problems, with occasional assistance from other members of the Anesthesia Department. Later, as the number of patients increased and it became obvious that the work would go on for a considerable length of time, three assistant residents were assigned, full time, to the polio service in order that there might be continuous day and night coverage.

As the surgical schedule increased it became apparent that the Anesthesia Department would be unable to supply adequate service for the surgery, with three of its residents tied up at the polio service. It was therefore a great help that a surgical assistant resident who had previously rotated through the anesthesia service was assigned, from the middle of September, to the polio service, so that an anesthesia resident could be made available for regular anesthesia duty.

It should be mentioned that the anesthesia service has had the opportunity to institute and get experience with a respirator treatment which differs from the usual iron lung system. During the polio epidemic in Copenhagen in 1952 it was found that application of intermittent positive and negative pressure to the airway of the patient had certain advantages. Therefore a set-up, using a Jefferson Respirator, was tried and it proved to be very satisfactory. It provides a better ventilation of the patient, and since the patient is in his bed rather than in an iron lung, nursing care is greatly facilitated. The Jefferson Respirator is being used here at Massachusetts General Hospital on patients with major pulmonary complications and patients with bedsores. Up to five patients at a time have been on these respirators, which has increased the work and responsibilities of the Anesthesia Department. Invaluable help has been given by a group of doctors from the Research Laboratories in the care of patients who have been treated this way.

The Oxygen Therapy technicians deserve a very special commendation for their skillful and untiring help with our many problems.

Thorkild Waino-Andersen, M.D.,
Clinical Fellow in Anesthesia

THE CHAPLAINS

There comes to the life of every individual some crisis, large or small, which demands the utmost in time, talent, and treasure. To many, this summer has been one of those times. The polio situation has demanded the utmost in time, talent, and treasure from the patients and their families, the doctors, the nurses, and the aides.

From the moment the disease is diagnosed as polio the hours of physical and mental anguish begin for the patient and his family. The patient is afraid — afraid of the dreaded paralysis that people have feared for so many years. The patient is lonely — lonely for his family from whom he has suddenly been taken. When he arrives at the hospital he experiences a series of questions and examinations of a kind to which he is not accustomed. He is finally placed in one of the polio wards. If he requires respirator help he goes to White 9. There is an atmosphere of controlled tension here. Thirty-five or more respirators continue their rhythmic wheezing. But there is more to this ward than respirators. Staff doctors, nurses, aides, floor secretaries, domestics, and others are part of this controlled tension. In one ward there are doctors making rounds. In another there is an anesthetist giving life-saving oxygen to a patient. In another there is a nurse who is suctioning the patient or trying to make him as comfortable as possible. Activities such as these are being carried out on all the wards, constantly.

Many questions go through the mind of a chaplain when he is at work. He knows that the correct answers to these questions may contribute, in a measure, to the efficiency of the staff. A word of encouragement, a helping hand, or just listening while a doctor unloads his mind of its burdens may send that member of the staff back to duty refreshed. A nurse with reddened eyes may need someone to help her move a patient. Or, her heart may be aching for the patients around her. A student nurse may be relatively new to this type of service and be concerned about the great concentration of suffering. Or, it may be that the floor secretary needs someone to go on an important errand for her. In these many and varied situations the chaplain searches his mind for the best ways in which to be of help.

It is the patient himself who elicits the utmost from all who are in attendance in any way. Whether he be in or out of a respirator, he needs help. He is concerned about his future. If he is married he is concerned about his family. He is lonely and afraid of the future. He is tired of being in bed. If he is in a respirator he feels helpless — a burden to the world and to himself. He is discouraged and filled with tension. However, this is only one type of patient personality. There are those in respirators who can still joke. One young man is a perfect example of this. The incident occurred when the shift was being made from White 12 to White 9 and this young man was being moved into the elevator. His head was in one corner and the respirator in the other. As the door closed he shouted gaily, "Down, please." An on-the-job salesman tried to sell his products to the attending doctors one day, providing them with just the lift they needed at that particular time to carry on with their work. These are only two examples of fortitude shown in many ways by the patients themselves.

Then there are the mothers, fathers, husbands, wives, and close friends of the patients who need help. Courage, understanding, patience, and fortitude are required of these visitors who are most closely concerned. To the patient a visitor is the lone star that shines through a cloudy sky. "What time is it?" asks a patient. "Almost half-past eleven." "It won't be long, then," he says. A visitor to a patient is like a medication that soothes, strengthens, and encourages a tired and lonely being. A visitor without courage, understanding, patience, and strength needs to be reminded of whence these attributes come. This is where the chaplain may help. A suggestion here and a word of comfort there can mean a great deal.

In conclusion, this is one chaplain's personal reaction as a member of the polio volunteers. From the moment a patient arrives in the ward he needs care not only for his physical and mental self, but also for his spiritual self. The untiring devotion of the doctors and nurses brings the physical and mental self back to its normal being as soon as possible. This chaplain has great respect and admiration for all the doctors and nurses with whom he he has worked in this situation. But there is that other part of the human personality — the soul — which also needs the services of a trained person. A strong soul helps the powers of recuperation do their work. This has been very evident on the polio floors. There have been many times when there was no drug which would satisfactorily reduce the apprehension of a patient. This chaplain has many, many times seen a pain-lined and apprehensive face change to one of peace after a reading of the Twenty-third or the Twenty-seventh Psalm, a prayer, and the touch of a hand on the brow. There is a confidence and a strength derived from this type of treatment which cannot be duplicated by any other method. In ministering to the sick in a hospital, especially on a service like polio, the chaplain serves all races, creeds, and religions. He may find a doctor who has gone without sufficient sleep for many days and who needs encouragement. He may find a nurse who is filled with grief over her many patients. He may find a student nurse who has just witnessed her first Allen Street. He may find someone who simply needs to talk. In short, as one doctor put it: "The chaplain is a prophet, a priest, a counselor, a friend, and an orderly."

Rev. Theodore C. Hamlin,
Assistant to the Protestant Chaplain

Of the many hospitals in Boston, and in the entire world for that matter, there is hardly one which can compare with the Massachusetts General Hospital in its widespread variety of faiths and nationalities among its administrators and patients. That is why one should not be surprised to see individuals from every walk of life and from every street in the world, even from far-off India, going about the corridors at M.G.H.

As a rule there is not so much the element of surprise, but a certain quizzical attitude noticeable on the part of some individuals with regard to certain services — for instance, that of the chaplains. The trouble is that they look upon the chaplain simply as a *man* and not as the official representative of God which, indeed, the chaplain is. He is primarily trained, ordained, and empowered by a time-tested and divinely founded organization to be the representative of God on earth. The words of Saint Matthew's Gospel enlighten us: "Jesus drew near and spoke to them [His apostles, His first chaplains]: All power in heaven and on earth has been given to me. Go, therefore, and make disciples of all nations . . . teaching them to observe all that I have commanded you . . .". (Matthew 28: 18-20)

It is indeed unfortunate that many refuse to believe that God is practical and has organized a human agency to help, encourage, and solidify the relations of man with Himself. Isn't that the definition of religion? Those who lack such belief could well learn from most of the patients, especially those who are victims of the current polio epidemic. The philosopher says, with reason: "A man has to look up, especially when he's down"; and so, the patient, immobilized in an iron lung, with chances to live very much dimmed, naturally looks *above* for a solution to his problem. And, as all of them attest in their own words, the more they look to God the happier and more peaceful they become, in spite of any physical handicap.

Life and health come to the world through love of God. To stimulate the love of God in the patient is the essential purpose of the chaplain. When, in the early hours of the morning, you see the Catholic chaplain going about the corridors from room to room, he is carrying Holy Communion, the most complete manifestation of love a man can present to his God. Not only do the mind and soul take part, but even the body itself. What better for a sick patient than an actual contact with the Divine Healer!

During every hour of the night and day you will see a chaplain hurrying to the operating room, the emergency ward, to the bedside of a dying patient, to bring to him the assurance of the love of God, to remind him that he must increase his love for his Maker and his Eternal Judge. The Catholic chaplain will often administer the Last Rites, which are extremely consoling to the understanding patient. The Bible explains this in passages from Saint Mark 6: 12-13 and Saint James 5: 14-15.

Also, during the day, the chaplain goes about visiting patients who are not dangerously ill. Always, the primary purpose of the visit is to remind the patient of his love of God and of making his peace with Him.

Some hospitals have in the past closed their doors on everyone but doctors and nurses. The result was that the patient often failed to recover, being dissatisfied and discouraged. "A sound mind in a sound body" is an important truth because both the mind and the body are so naturally and closely related that one cannot be affected without the other also being concerned. In other words, if you want to cure a man, you risk failure if you restrict yourself to the body. The whole man, *body and soul,* must be soothed and cared for. The following words of the Bible are especially significant: "My Son, in thy sickness, neglect not thyself; but pray to the Lord . . . cleanse thy heart from all offense." (Ecclesiasticus 38: 9-10)

Rev. Victor J. Milot, S.M.,
Catholic Chaplain

[We regret that we failed in our attempts to procure an account of a Jewish chaplain's reactions to his work with the polio patients. The rabbi who had been serving at the Hospital had concluded his term of duty and his successor had not been appointed.—*Editor*]

DIETARY DEPARTMENT

Most of the patients on White 9 have by now (October) progressed from intravenous feeding to a modified house menu.

During all stages of the nutritional care of the polio patients "tray precautions" have been effected through the use of paper service. Their food intake has followed almost identical patterns and their consumption, according to the doctors' orders, is arranged to afford them a diet high in protein and fluids, moderately low in carbohydrates and fat, and very low in calcium.

Since the patients are unable to feed themselves, the usual floor service has been modified and, through rescheduling and with the aid of volunteers, the trays are served at such times as will not conflict with the visiting hours.

A "coffee hour" for the professional and personnel groups has been made available in each unit.

Louise Hatch,
Director, Dietary Department

EMERGENCY WARD

With the usual influx of summer infections and vacation accidents, the facilities and personnel of the Emergency Ward were already severely taxed when the first of the poliomyelitis patients appeared. By the early days of August, no day passed without the admission of one or more paralyzed adults or children — several days witnessing the arrival of a dozen such patients. Within a short time, the paralytic patients became less of a challenge, for most of them were admitted promptly to the polio floors with a specific diagnosis. As the epidemic progressed, however, increasing numbers of nonparalytic patients, patients with polio-like diseases, and emotionally upset relatives and others who had been in contact with the patient required attention, consultations, and laboratory evaluation.

Upon receiving a warning by the Admitting Office of a polio referral, either from a private physician or from hospitals not admitting polio patients, the administrative staff of the Emergency Ward sought to arrange for space — usually isolation rooms — for the initial evaluation. This often required the moving of other patients, careful disinfection of the evacuated rooms, and repeated changes of linen. Sterile gowns and equipment were always available for the doctors and nurses; and, most critically, suction machines, oxygen therapy apparatus, tracheotomy sets, and anesthesia machines were kept in readiness. Initial examination was performed promptly by members of the House Staff — medical, surgical, or pediatric — and lumbar punctures and necessary laboratory work were obtained.

Thereafter, emergency procedures — including tracheotomy, intubation, intravenous medications, oxygen therapy — were carried out as indicated, often requiring the immediate aid of special staff members. Surgical, medical, and pediatric consultants, members of the polio team, ear, nose and throat men, anesthetists, oxygen therapy aides, and extra nurses often proved to be life saving.

Despite the burden of usual medical and surgical emergencies always expected during the summer months, the mounting number of polio suspects and victims were seen, evaluated, and cared for without preventable mishap.

William A. Tisdale, M.D.,
Resident in Medicine

HOUSEKEEPING DEPARTMENT

The polio emergency has shown that the cooperation between all departments of the Hospital is something of which we may all be proud. We in the Housekeeping Department played a minor role in the great effort put forth. However, we also can be proud of the initiative and conscientiousness shown by our employees.

Although we were given very short notice of the transfer of respirator cases from White 12 to White 9, the porters were able to have the needed space ready within three hours. This involved washing all the walls of the west wing of White 9, and scrubbing, waxing, and polishing the floors. On the following day the same was done in the east wing. Separate private rooms were done each day as the furniture was removed. The same was done on White 12 after the patients were evacuated to White 9. This work was continued constantly whenever a patient was dismissed from a room. Our special elevator was put at the disposal of the Nursing Service during this time, so that the patients might be transported as quickly as possible.

We have been greatly aided in carrying out our work by all those who are working on the polio floors — doctors, nurses, and volunteers. As it stands at the moment, we are supplying two maids and one porter, all of whom put in much more time than is asked of them.

Our personal thanks go to the employees in Housekeeping who have done so much toward meeting this emergency.

William J. MacNair,
Director, Housekeeping Department

THE LABORATORIES

At the start of the polio influx to this Hospital, the Medical Services involved consulted the Baker Laboratory as to how they could obtain the necessary laboratory examinations with the greatest possible speed. Early laboratory reports were essential in the diagnosis and proper care of the patients.

The initial tests included complete blood counts, urinalyses, and often spinal fluid cell counts. Since the majority of these patients were admitted through the Emergency Ward and the E.W. technician was unable to manage this load single-handed, it was agreed that the Baker Laboratory would try to add this work to its regular busy summer schedule.

Dr. Perry Culver very kindly came to the Department and discussed with the laboratory personnel the necessary precautions to be used both in connection with the patients and with the laboratory specimens.

Before long, additional laboratory tests were required, according to the needs of the patients, and it became necessary for the Chemistry and Bacteriology Laboratories to enter the picture. The respiratory cases in particular needed, in addition, blood chemistries for electrolytes and blood gases and spinal fluid sugar determinations. Many of these patients also needed cultures on tracheotomies and antibiotic sensitivity tests. Blood cultures were also done on a number of patients.

Needless to say, all laboratory personnel pulled together with the rest of the team in the care of the polio patients.

Ellen Wood, B.S.,
Technician-in-Charge

THE LADIES' VISITING COMMITTEE

In the middle of August the Ladies' Visiting Committee was asked by the Volunteer Department to help on the various floors where there were polio patients. It immediately became apparent that on White 12, where the many respirator cases then were, a regular and experienced volunteer could be of great service in helping the floor secretary with the scores of records to be kept daily, answering the continual telephone calls, and sometimes doing emergency errands. Several members of the Ladies' Visiting Committee were reached and were asked to give one or two full days regularly each week. The value of the work required depended upon its repetition, for it naturally takes a few days for the volunteers to learn the procedures.

On August 30, when the patients in their respirators were moved to White 9, we were able to be of assistance during that complicated process — not with the patients themselves, but again with the records and the telephone. We were, and still are, tremendously impressed with the teamwork, cooperation, and quiet efficiency on this vitally active floor.

A little sitting room for the patients' families was quickly set up on this new floor, which has been very much appreciated. We see that there are magazines and fresh flowers in this room. Sometimes we have been asked by a minister or a doctor to arrange for a tray of coffee for families who were in deep distress. The family of one of the patients has donated twelve small but sturdy chairs for this room, for which we are all very grateful.

It has been interesting to note how the families pull together and what a comfort they are to each other. Also, we were deeply touched one day when a mother brought us a box of candy, for she felt we had been hurrying with our lunches and she just plain appreciated the fact that we were there for her to talk with. Imagine, under those circumstances, thinking of other people!

Many impressive experiences have been ours during the time of this emergency. Here are just a few of them: One day a minister who had come directly from Charlestown State Prison brought in two bouquets of mixed flowers that the prisoners had picked from their own garden and had asked him to take to the polio patients. One member of the Ladies' Visiting Committee took a mother from Idaho out to do some necessary shopping after she had finished her work for the day. That mother had immediately flown on here when she was notified that her daughter was stricken with polio in Boston. She says she will always remember this special act of kindness. The wife of a patient telephoned through to the floor one day to ask if we could possibly take the time to ask her husband, who was in a respirator, which shade of gray they should paint their house. He sent back word that Chelsea gray was the correct color and that there were two large cans of this paint in the cellar near the furnace. The wife said to me later that it made her husband seem wonderfully close to her to be able to have such mundane messages relayed back and forth.

Most of our work on the floor where there are the respirators and rocking beds is really with the records and the busy telephones, but there have been innumerable small services — even simply giving time to listen to the families when their greatest need of the moment is to have someone to talk with — that make our service worth while. We have the greatest admiration for the patients and their families, as well as deep respect for every person working on and for this floor.

Virginia B. Arnold,
Member of the Ladies' Visiting Committee

My time on the polio floor has been devoted to assisting the ward secretary in working on patients' charts, answering the telephone, and going on emergency errands to the Pharmacy, the Blood Bank, and to other places about the Hospital.

To me, one of the most memorable days was that of the flood in August. On White 12 every preparation was made to take care of possible power failure. Cables were strung up in the corridors, in case it would be necessary to resort to emergency generators to keep the respirators going. Each room was supplied with flashlights and other equipment for the emergency. Though parts of the Hospital were flooded, the power fortunately did not fail.

The kindness of the patients' families has been amazing. Baskets of peaches, boxes of cookies, and other delicacies have been brought in for the enjoyment of the staff.

The contribution of one of our volunteers is worthy of special mention. Mrs. Henry B. Chapin of Jamaica Plain, who celebrated her 90th birthday in July, has been doing her bit for the polio patients by making hundreds of tracheotomy dressings for the Central Supply Room.

Anna P. Revere,
Member of the Ladies' Visiting Committee

THE LAUNDRY

The polio epidemic placed a terrific strain upon the Laundry, Linen Control, and Sewing Departments. It thrust upon every employee here an additional work load which each assumed with the utmost cooperation. With the Hospital operating at near capacity with 140 (approximately) polio cases, which require over double the amount of linen needed for other patients, we had to increase our overtime considerably. This meant in many instances that various employees were required to work 6 to 7 days per week. This was done without complaint from a single individual, and always on a volunteer basis.

We also added a service new and unique to the Hospital by appointing one man as a liaison agent between the polio wards and the Laundry Department. This was in addition to his other duties. He made periodic checks with all polio floors, starting not later than 4 A.M., repeating at various intervals throughout the day, and continuing as late as 10 P.M. I feel very strongly that this close cooperation was one of our greatest assets in keeping the polio wards sufficiently supplied with all items of linen required for maximum patient care.

Our Washroom production increased between 50,000 and 60,000 pounds for a four-weeks' period over the same period last year. This, of course, meant that our ironers and press line had to assume added work loads. Our Drying Room, where all precaution gowns, johnnies, towels, etc. are dried, assumed the greatest proportion of this added work load. During an average day we ordinarily use between 900 and 1,000 precaution gowns throughout the Hospital. During this epidemic we are processing between 2,500 and 3,000 gowns per day. The use of precaution face masks has also increased tremendously. During an ordinary period 800 to 1,000 masks are used per day. Now we are using close to 3,500 per day. After washing and drying, the masks require almost 10 man-hours per day in merely untying the strings which get knotted in the process.

The Sewing Unit was also affected by the polio situation, in that it had to be able to prepare, on a moment's notice, material for hot packs of various sizes and other items required for polio cases. The mending problem also became more acute, for every item that needed mending had to be finished and back in circulation as soon as possible.

There were many times during the epidemic that the services of the Volunteers were required, especially to fold polio precaution gowns and to untie masks. Their contribution greatly enhanced the effectiveness of our Department.

The Maintenance Department also contributed to our successful operation by working nights in order to make the repairs on our machines which were necessary to keep our Department running at peak capacity.

I also wish to thank the Nursing Service for its contribution of consideration for us. Each ward requisitioned only what it actually felt it needed and, therefore, many items that would have been in short supply were available for distribution to other wards throughout the Hospital.

It has been only through the greatest of efforts and complete cooperation of my assistants and all my employees that the Laundry, Linen Control, and Sewing Departments have been able to meet the excessive demands put upon the Department during this emergency.

James J. Mahoney, Jr.,
Director, Laundry Department

MAINTENANCE DEPARTMENT

The Maintenance Department's duty was to supply and maintain oxygen, vacuum, and electrical facilities so that the doctors and nurses could carry on, without interruption, their work of attending to the patients. We accomplished this by working, sometimes, round the clock. Our department functioned as a team — each member doing what was required, regardless of trade or hours. We purchased, improvised, borrowed, and robbed to get materials from supply houses, contractors, utility companies, and other parts of the Hospital.

When patients first began to arrive on White 12 we were equipped with oxygen and vacuum, but we did not have enough electrical outlets on single circuits for each respirator, nor did we have a stand-by generator in case of a power failure. A separate individually fused line was run to each respirator, and we borrowed a generator from Mr. John Ellsworth of the Boston Edison Company. This generator was set up in the television room of the doctors' Penthouse, and wires were strung to White 12 and later to White 11.

Soon it was obvious that White 11 and 12 would be inadequate to meet the demands as more patients continued to arrive, so Bulfinch 1 was set up with oxygen, vacuum, and A.C. current for 22 outlets. Boards were fastened to the floor and the cubicle curtain rods, on which were hung the oxygen containers, vacuum lines, and outlets. Since the Bulfinch Building is on D.C., we brought in the A.C. lines across the yard from the transformer vault, up the side of the Bulfinch Building, in through the vent ducts to the ward, and thence around the ward on the cubicle curtain rods. This set-up was executed in two days, without moving the patients.

About this time the north wing of Baker 6 was wired with A.C. taken from the basement of the new Medical Science Building.

We were now maintaining 24-hour coverage with a truckdriver and two husky helpers. Hardly a day or night — and especially a week end — would pass without an urgent call for us to pick up a respirator or some other piece of equipment at the Children's Medical Center or somewhere in Framingham, Lynn, Connecticut, or wherever else it could be found.

But more patients still continued to arrive, and we knew that our facilities would soon be inadequate, and it was decided that White 9 must be opened for polio after many years of being used for office space, laboratories, teaching areas, and repositories for truck-loads of miscellaneous material. White 9 could be set up to handle well over 50 cases if needed. Here was work for all. We emptied the west wing, set up the kitchen and utility rooms, strung A.C. outlets and oxygen and vacuum pipes for 24 respirators in 18 hours. As the men were going home to get some sleep, patients were being moved down from the floors above with the aid of long electrical cords in the corridors and outlets in the elevators. The respirators never stopped pumping. The next day the east wing was set up like the west. The south wing was gradually opened as soon as space could be found for the offices. When there was no more space left we moved the offices to the corridors of the Research Building. Walls and windows were often being washed while furniture was being removed, the floor was being swept while the patient was waiting in the corridor to be moved in. Hundreds of items, like footboards, storage racks, and shelves were built, and respirators were remodeled.

A portable generator, strong enough to power the entire White 9 floor as well as the vacuum pumps, is set up in the yard near the White Building. This generator was shipped in from Northampton, arriving at 3 A.M. By 9 A.M. it was in operation, by using the east stair well as a wire shaft. This generator was loaned to us by the Civil Defense, through the offices of the Massachusetts Department of Public Health. The Department was called at 1 P.M., a generator was located, a truck hired, the unit was delivered at 3 A.M. — a job well done.

At present we are providing a daily check on equipment, and are assisting in the movement of patients to the Lemuel Shattuck Hospital.

Raymond V. Kinsman,
Director, Maintenance Department

NURSING DEPARTMENT,

The record of the Nursing Department's contribution to the care of the polio patients in the summer of 1955 is the summary of the activities of all members of the nursing personnel, and the student nurses and student practical nurses in every unit of the Hospital. Although during the acute stage the patients were concentrated on two floors in the Baker Memorial and two floors in the White Building, with some acutely ill children on Burnham 5, workers and students on every ward assumed added duties to give help. Nurses, practical nurses, aides, secretaries, and students volunteered extra hours. The Phillips House, having given all possible full-time nurses to White 9, opened beds to care for the neurological cases, so that White 11 might be available for the growing number of acutely ill polio patients. Nurses from the clinics of the Massachusetts General Hospital planned week-end and evening time in terms of ward needs. For many weeks the day, evening, and night supervisors pooled their nursing resources to assure a safe staffing for the respirator ward.

A review of the staffing situation tells, in part, of the impact of the epidemic on the Nursing Department. The first patient, arriving on July 5, and all additional patients arriving during July were absorbed in the usual way on White 12. On August 1 it was necessary to open Baker 6 to polio patients, and to staff the floor for special care of paralytic and nonparalytic patients. At this time there were 39 nursing personnel and student nurses assigned to these patients in the Hospital as a whole.

By this time the urgency of the situation was evident, and activities to meet it were under way. The search for personnel to staff the growing polio units became everyone's responsibility. A notice was posted asking nurses and student nurses, under a carefully controlled plan, to volunteer to work additional hours. A six-day week for graduate nurses, nurse interns (senior student nurses), and many aides became the common pattern. An appeal was sent to members of the Alumnae Association of the MGH School of Nursing who live in this area. The Staff Education Unit of the Nursing Service began a series of classes for all nursing personnel in the Hospital. These classes were designed to teach the care of the polio patient, and to help in furnishing the emotional support which would enable us as a Department to meet the emergency successfully. Contact was maintained with District #5 of the State Nurses' Association, which had been designated to recruit nurses from the Greater Boston area for the emergency. Instructors from the School of Nursing and supervisors, some of whom had previously volunteered at the Children's Medical Center, worked now with the Staff Education Unit, and volunteered evening and night hours on the respirator floor to orient the new workers and teach the new procedures. On August 23 the National Foundation for Infantile Paralysis was asked for 10 nurses. The first nurse to respond arrived from Florida on August 24. Two additional requests to the Foundation brought a total of 23 nurses.

Meanwhile, the nursing was greatly facilitated by the responses from other departments. A stable team of resident doctors was in constant attendance. This group provided 24-hour coverage on the respirator floor, and assured nurses in other units of the immediate availability of doctors in emergencies. Anesthetists were available to maintain respiration while patients were taken from their respirators for special care. Oxygen Therapy supplied a man to maintain constant vigilance over respirators and oxygen flow. Housekeeping provided extra service to save nursing time. The Laundry worked over-time to maintain an adequate supply of gowns and other linen. Purchasing, Stores, Pharmacy, and Central Supply delivered on call. Dietary provided coffee in the ward kitchens. Social Service was always present when families needed support or the nurses needed assistance with plans for community nursing referrals. The chaplains and ministers from the summer course in Pastoral Care added their special support. Secretaries and others came from many departments to help with clerical work or to feed patients, as the need indicated.

By August 30 the patients in respirators numbered 28, and so had grown beyond the limits of care possible on White 12. The number of respirators needed was increasing daily. More nurses were needed. At the request of the Nursing Department, plans were launched to move the patients in respirators to a larger ward where the nursing care might be better organized. Administration, Medicine, Maintenance, Housekeeping, Nursing — all began to plan. White 9, the floor selected, was fully occupied by two nursing classrooms, a Dietary Department unit, several research units, and other offices. The ward had almost no suction in the 32-bed section, and electric outlets were inadequate.

The record of Nursing cannot tell adequately what the Maintenance Department did to supply suction and electric outlets over night, nor how the many groups were removed from the ward, nor how the Housekeeping Department made the ward ready for the polio patients — all in less than 24 hours. However, we watched the miracle take place, and we know that the almost incredible was achieved. While we watched we could not avoid seeing the eagerness with which these men approached their opportunity to help, nor fail to notice their fatigue after working both day and night to prepare the space and to make safe care possible. Ten student nurses, due to move to McLean for their psychiatric nursing affiliation, volunteered to postpone their assignment and were released by the McLean Hospital School of Nursing as a part of that Hospital's contribution. These students shared in the moving and supplied some of the badly needed nursing care. Members of the Ladies' Visiting Committee transformed a corridor and an office into a comfortable and attractive lounge for anxious families who came to visit patients. The Admitting Officers maintained close touch with the over-all situation, relieving the pressures whenever possible.

The number of patients continued to grow. By the 13th of September 28 nurses and other workers were assigned to Baker 6; 21 to White 11; 22 to Burnham; and 95 to White 9, where there were then 37 patients in respirators, 22 of whom had had tracheotomies. Two Red Cross Aides, especially trained for polio care, had joined us; 23 nurses had been recruited by the National Foundation for Infantile Paralysis, but more help was needed. Throughout the summer, corpsmen from the Chelsea Naval Hospital and the Naval Shipyard at Charlestown had come to help during the evenings. Usually these men numbered about 15. In late August medical students had been secured. About 14 of these men came each night to share in the work of nursing the patients who were in respirators. The Cambridge Visiting Nurse Service, the Navy Nurse Corps, the Army Nurse Corps, the Air Force — all sent nurses for 2 or more weeks. Some of the local industries loaned nurses for varying periods of time. Many of the agencies also paid the nurses while they were on loan. Private nurses added daily to our number. The Boston Visiting Nurse Service consulted with us on referrals. Alumnae of our School of Nursing, and nurses and volunteers who had previously worked at M.G.H. returned for varying periods of time.

The nursing problem was two-fold: first, to secure an adequate number of personnel and to bring organization into a staff, of which half or more changed daily; second, nursing was also needed for other patients in the Hospital, who continued to run a high census for this time of the year.

By September the picture had begun to change. Many patients had gone happily home. Some had been transferred to White 5, White 8, and Burnham 5 for rehabilitation. Hubbard tubs had been installed on White 8 and Burnham 5. The respirator ward, in July and August a place of silence and sucking bellows, had come to life with rocking beds and radios hung on respirators for Red Sox fans to follow their favorite team. There were now some 54 trips to the Hubbard tub daily on Burnham 5; there were more children learning to do their exercises, more patients to teach — and the innumerable hot packs continued everywhere. On Baker 6 there were days when adult patients were lifted 27 times into a bathtub, for there was no special tub on that floor to provide the needed care. The demand for nurses was no less; it was merely different. As summer substitutes began to leave us, a group of theological students joined the nursing ranks. The Nursing Department could understand only too well the difficulties of the Physical Therapy Department as it endeavored to stretch its personnel to meet the challenge.

As autumn comes, we, with the remaining patients and the few who join us daily, face the long pull ahead. It will be many months before our share of the rehabilitation is complete. But the memory of the summer of 1955 will remain for all of us who shared in any way in the nursing at M.G.H. as a heart-warming though tragic and wearying experience. It proved again, and in another way, that the Hospital — our Hospital — can meet whatever emergency comes to its doors. It renewed our faith that nurses, student nurses, and all other nursing personnel can be prepared to do their share when needed. It demonstrated the essentiality of every worker in the Hospital in the total care of the patient. It reassured us that members of the Hospital family and our co-workers and friends in the community will be ready when needed with both understanding and active support. And the patients have left with us examples of faith and courage to remember always.

Ruth Sleeper, R.N.,
Director, School of Nursing
and Nursing Service

PHYSICAL MEDICINE DEPARTMENT

When the polio epidemic struck the Massachusetts General Hospital, the Physical Medicine Department was in a very weak position to cope with such a great influx of patients, most of whom require some degree of physical therapy. The influx came at the height of the vacation season and we had only five therapists available. Very soon there were as many as one hundred patients in the Hospital at one time who, of course, could be given only a minimum of treatment. The residents on the staff were assigned to work with the polio team to see new patients, and particularly to evaluate them for the need of physical therapy and to help make plans for discharge.

The first step was to get emergency aid in the form of additional therapists. Channels had been established for this through the local chapter and national headquarters of the National Foundation for Infantile Paralysis. Two emergency aides were recruited. We also had to have emergency help in replacement of staff members, one of whom contracted polio of a nonparalytic variety. To further help out in the situation, two new assistants were added to the Department as hospital aides, to assist particularly in the underwater treatment of the patients. It soon became apparent that one tub was not enough, and in short order the Hospital procured a standard Hubbard tub which was placed in the solarium of White 8, with all the necessary plumbing and lifting tackle to handle adult patients. Also, a new stainless steel Hubbard tub was fabricated and placed in one of the single rooms on Burnham 5 where all the children's cases were concentrated, so that there were soon three tubs available for treatment. As the number of patients continued to increase and the backlog was maintained, in many instances, two more emergency aides were requested and obtained. Also, the staff positions available were increased an additional two over those previously open in the Department. Thus, we will have a staff of twelve, plus two aides and the students who began their training in October, to help handle the hundred patients who are now being treated by us.

An emergency service established was that of a routine of instruction for parents or relatives in the home care of patients, particularly those not seriously paralyzed.

The Occupational Therapy Department came to our assistance in the handling of patients, as well as in expanding their own activities, particularly for the longer-term patients in the convalescent phase.

The Bay State Medical Rehabilitation Clinic began preparations to handle the expected increase in the load which will be upon us in the latest convalescent stages. There are many seriously paralyzed patients who will require long-term treatment, some of whom will be referred to the Bay State Clinic for their services in teaching the use of crutches or braces, and in training in the activities of daily living and other functional occupational work, to get them ready to return home. The Physical and Occupational Therapy staff was increased with this in mind.

Although the peak of the epidemic seems to have been passed as far as new admissions are concerned, the really hard work is only just beginning for the Physical Medicine Department and the Bay State Clinic. We will be faced with the problem of getting optimum end results, preventing deformities, providing psychological help, and also with the follow-up of the less severely stricken or nonparalytic patients to determine that they are safely through their bout with polio. Some of these patients will have to be followed for many years, therefore increases in physical medicine work will certainly be felt for a long time because of this epidemic.

Arthur L. Watkins, M.D.,
Chief of Physical Medicine

THE POLIO TEAM

Early in the summer the need for a team of residents and house officers whose only responsibilities would be the care of polio patients became increasingly evident. Accordingly, members of the house staff from neurology, medicine, orthopedics, pediatrics, anesthesia, and, later, surgery were drawn together to form a unit which became known as the polio team. In similar fashion a visiting staff was appointed so that the service might have the best in guidance and advice from those physicians who had had the most experience with polio.

As the epidemic progressed, the team became larger and the division of duties more complex. The adult patient with acute polio, but without respiratory difficulty, became the responsibility of the neurologists. Medicine and anesthesia concentrated their efforts on the respiratory unit. Surgery stood by for some fifty or more tracheotomies and innumerable venous cutdowns. Pediatrics cared for those patients under sixteen on White 11 and 12, Baker 6 and 8, and Burnham 5. Orthopedists were evident on every ward, to care for both the acute and the recovering patient.

At the height of the epidemic the number of critical situations met in a given 24-hour period was staggering. Equipment was in short supply and was improvised or rushed in from other areas. Many of the house staff were on their feet for 36 out of each 48 hours. As some patients began to recover from the acute phase of the disease, several groups of physician volunteers from the Research Laboratories lent their services on the respirator floor where many hands were needed in order to utilize the various pieces of equipment. At one time over one hundred individuals were required each day to staff White 9 alone. Personnel were in short supply during the whole summer, as they are even now. During August and September, many midnight calls for help brought responses from other hospitals, from medical schools, from undergraduate bodies, and service personnel.

When large numbers of people are afflicted with the same disease in epidemic form, a hospital like the M.G.H. must do more than provide good care and apply time-honored principles of medical practice. It must also make every effort to contribute to the total understanding of the disease itself by making careful observations and evolving newer concepts of treatment. It is gratifying to be able to report, even at this early date, that this aspect of the Hospital's obligation has been met. Members of the polio team and the visiting staff have collected a mass of data which looks promising for later evaluation. New methods of treatment have been cautiously tried and will undoubtedly find their way into the medical literature.

As this is being written, acute cases of polio are still arriving in the Emergency Ward, though in decreased numbers. However, on most of the wards the emphasis has changed from that of saving a life to that of rebuilding wasted muscles and limbs. This latter task may prove even more difficult than the one just now being completed. Certainly, more patience and wisdom are required to help these patients regain a measure of independence and to adjust to the long process of relearning how to use their limbs.

Leonard W. Cronkhite, Jr., M.D.,
Assistant in Medicine

[Here are a few outstanding impressions made upon a member of the polio team during his days on White 12 and 9. They were given over the telephone — an example of a doctor too busy with his patients to be able to record on paper his contribution to this issue. We give them to you very much in outline form as they were given to us, but each item represents a significant paragraph in its own right. *—Editor*]

We were faced from the start with the overwhelming problem of obtaining both trained and untrained personnel. Securing supplies was also a great problem. Within the space of one week there was a tremendous increase in need for I.V. fluids and antibiotics.

One or more physicians were on duty at all times. Sometimes there were as many as 12 physicians on the floor at the same time. When respirator cases were on White 12, a physician slept in the Penthouse, in order to be instantly available if needed. On White 9 there were 2 physicians each night who often slept in a room on 9.

Scheduling in order to give necessary periods of relief to those who were in constant attendance on patients presented a real problem.

The assistance given by people in all categories (professional and nonprofessional personnel) from the Research Building was especially noteworthy. When these laboratory research people and clinical fellows discovered there was a need of personnel volunteers to aid in the emergency, large numbers of them from the Research Laboratories offered their services in whatever capacity the Hospital felt they could best be used. They served as substitutes for anesthetists, nurses, and corpsmen in general. Within two weeks of the onset of polio, attempts were made to get the patients out of the respirators by using small chest respirators. It was in this and in the task of moving patients from the respirators to rocking beds that these research people were so remarkably helpful. Moving patients as soon as possible from the respirators to the rocking beds lifted their morale and made possible the early retraining of muscles not involved in the polio attack. People from Research also donated many hours a day (under Dr. Gross) in assisting the Anesthesia Department in taking care of positive pressure respirators.

Everybody worked together, and it would be impossible to recount all the amazing things that people accomplished — for instance, even the special footboards made by the carpenters, to fit within the respirators according to individual requirements.

Richard H. Eppright, M.D.,
Assistant Resident in Orthopedics

PSYCHIATRY DEPARTMENT

The Department of Psychiatry became aware, early in the polio epidemic, of a need for a psychiatric study of a clinical picture appearing in a large number of seriously ill patients which resembled a toxic delirium. We felt it was also of interest to attempt to understand the psychological effect upon the patient of an overwhelming illness of this type and to determine whether or not there was a need for a psychiatrist in such a crisis situation. It was also felt that the effect upon the community of such a widespread epidemic must be great, and some effort was made to study this over-all effect upon families, friends, and the community as a whole. A somewhat similar project was undertaken by the Department of Child Psychology to better understand the effect of hospitalization upon both children and family. With these general goals in mind, two residents began a comprehensive and intensive interview program to include all patients in respirators and, subsequent to this, a large number of nonrespirator cases — actually, all the adult polio cases in the Hospital during one of the peak epidemic weeks. This eventually amounted to approximately 150 clinical diagnostic interviews.

In addition to this, it was felt that the respirator group of patients warranted more intensive psychiatric study. While this was done at first to document a very unusual type of delirious phase manifested by some of the more seriously ill polio cases, it soon became apparent that as psychiatrists we were fulfilling an urgently felt need on the part of most of the patients to talk about their worries, fears, and anxiety during certainly one of the most acute crises of their lives. These were problems about which they hesitated to talk to their families and the then overtaxed staff. As a result of this, we were visiting the patients almost every day, fulfilling a role in this Hospital similar in many ways to that assumed by the psychiatrists during the time of the Cocoanut Grove disaster. Now, as then, it is hoped that out of the observations made, more knowledge of the psychological response to overwhelming illness and a more effective method of dealing with the rehabilitation aspects of such illnesses will be attained.

Martin R. Coles, M.D.,
Assistant Resident in Psychiatry
Jimmie Brockman, M.D.,
Resident in Psychiatry

RADIOLOGY DEPARTMENT

Patients in respirators *may* suffer from collapse of the lung or a superimposed infection. To be sure that we were aware of any changes taking place in the patients' respiratory condition, it was essential that x-rays were taken. To do this, the X-ray Department took portable x-ray units right to the patients who were in the respirators. The patient had to be removed from the respirator so that the films of the chest could be taken. This required the immediate cooperation of the anesthetists with the breathing machine. In some instances the procedures lasted anywhere from 30 to 60 minutes. The maximum requests in a single day were for the filming of 12 patients.

The X-ray Department was on call for this service, with technicians assigned to the floor. This service was considered emergency, and priority was given to requests from the respirator floor whenever possible. On some days technicians remained on the floor the entire day.

The films were promptly read in the X-ray Department, for if it was found that there was a collapsed segment of the lung without infection, the anesthetists or surgeons with the use of the bronchoscope could correct the trouble.

We wish to express great appreciation of the wonderful cooperation on the part of the x-ray technicians who, without complaint, assumed extra responsibilities. We feel that they also greatly improved the techniques to a point where they have achieved a high degree of accuracy, despite the difficulties encountered with the portable unit as compared with stationary equipment.

John D. Reeves, Jr., M.D.,
Assistant Radiologist

SOCIAL SERVICE

"Is this something with which Social Service could help me? The worker who spoke with me the other day was so kind, and she said to be sure to call Social Service if any problem should arise. I realize this is Saturday afternoon, but it would mean so much if I could get in to see my wife — even for twenty minutes. We have so much to talk over." The immediate problem was the need of a baby sitter in his home so that this 27-year-old husband and father could visit his 25-year-old wife who was here at M.G.H. in a respirator. He was not only faced with a lack of community facilities but was experiencing the impact of his locality's fear of contagion. Neighbors would like to help, and indeed a great many had done so, but in some instances others were understandably loath to go into a home where a patient with polio had been.

This type of call and many others came in to the "Polio Office" which the Social Service Department established on White 5 and covered all day every day except Sundays. Here, under the leadership of an experienced member of the staff who coordinated all the work, we maintained a master card file of all polio patients admitted, assigned coverage, and centralized all requests for service and calls for information.

At medical request we set the goal of seeing relatives of all polio patients admitted to the Hospital, to offer service to them and the patients, to secure pertinent social information which would aid in the doctor's and our better understanding of the patients and their families in their adjustments to severe illness and handicap, and in the possibilities for carrying out medical aftercare plans. This social information was placed in the patients' medical records, so that both in current treatment and in consideration of discharge plans it could assure suitable, individualized aftercare plans.

To facilitate contact with relatives, a notice was given to them by the Admitting Officers at the time of the patients' admission, telling of the service and the office where calls and appointments could be made. Many patients and families were also referred directly by the doctors, while still other relatives who did not call the office were seen during visiting hours on the wards.

A complete resource file of institutions and agencies which offer convalescent care, chronic care, and clinic care throughout the State was compiled to aid in discharge planning.

The children and their parents presented special needs in meeting hospitalization, separation from family, and acceptance of discharge to other institutions if home care was unsuitable. The parents had many fears which had to be allayed. They were helped when they expressed their feelings of guilt about their child's having developed polio, also when they were aided with practical plans for housekeeper help at home.

The Child Psychiatry Unit has seen a small group of children and their mothers. In conjunction with the child psychiatrists' service to the children, the social workers have seen the mothers once a week, helping them to handle their feelings about the illness, to understand the immediate medical situation, and to face the long recuperative process ahead. This service is furthering our understanding of reactions to hospitalization, separation, and immobilization, and will be helpful as a control group in an on-going study of emotional factors in children with rheumatoid arthritis.

The young adult patients, many between the ages of twenty and thirty-five, have called forth our greatest admiration and effort in service. These young people, on the threshold of their careers in life, many of them having established homes and with young children, are magnificently meeting critical illness, permanent handicap, or long-range rehabilitation — any one of which will disrupt many of their cherished hopes and plans.

Both parents and relatives have needed continued reassurance and support, as well as assistance in practical planning. The immediate emergency needs for housekeepers where the mothers are ill is one example. If the wage earner is stricken and family maintenance is needed, workers have helped families in applying for and securing public assistance. Rooms near the Hospital have been found for relatives. The working out of careful discharge plans in the homes, with additional assistance from visiting nurses, physiotherapists, or domestic help has been done. Arrangements for admissions to convalescent or chronic institutions have been facilitated.

All of our staff have in some way been involved in service to the polio patients — eleven members in direct service to patients and families, and others in relieving these eleven workers from their regular assignments in order that they might help with the polio patients.

We are particularly grateful that a worker, loaned for three months from California by the National Foundation for Infantile Paralysis, has arrived here. Several years ago we loaned a staff member to the Foundation to work in Los Angeles during their epidemic, and this exchange contribution during our emergency is most gratifying.

At this point it is still difficult to comprehend the extent and the immensity of the situation in which we have been trying to serve these courageous patients. The impact of the emergency is lessening, but we know that the greater needs are going to continue in the long months and even years ahead during convalescence and rehabilitation, or, in some instances, in adjustments to permanent disability. It has been a privilege to know and serve these patients, and we have learned much in how the human spirit can rise above heartbreaking situations.

Josephine C. Barbour,
Chief of Social Service

VOLUNTEERS

During these past summer months, from June through September, when the volunteer schedule is usually lighter than during other months of the year, our volunteers contributed 15,854 hours of service.

As the polio emergency grew in intensity many volunteers doubled their time and recruited new volunteers. Red Cross Nurses Aides and Gray Ladies answered their Chapters' appeals. Round the wards and in other areas of the Hospital they performed many time-consuming tasks, such as secretarial work and other duties on the wards. They answered telephones, went on errands, performed escort service, folded gowns, fed patients, and made themselves useful in countless other ways.

What our volunteers learn is not just how to fold linen, not just how to stuff cotton into tubes in the Central Supply Room, but actually to realize that there are many jobs to be done in the Hospital and, regardless of how menial the task may be, to do it gladly and humbly. Our volunteers believe and know that they are here "to do" and "to give", and this is the spirit they exemplify.

Mary Ruth Wolf,
Director, Volunteers

Representative letters from families of patients:

Dear Dr. ————:

I want to thank you and the other doctors and nurses for what you did for my husband while he was in White 9. For such a large hospital, you would expect everyone to be very impersonal about their patients, but you all were so different. Everyone was so thoughtful in every way.

The thing I shall always remember about you is what you told me — to have faith in God and prayer. At the time it didn't mean a thing, but as days go by I find I do have faith in God and prayer.

Dear Dr. ————:

I should like to express my gratitude to you and the members of your medical team for all the efforts expended in the care of my husband last month.

Words seem so inadequate, but knowing everything possible was done has helped me to accept my loss. Thank you for your kind understanding under such difficult circumstances.

I am most grateful to you.

Dear Dr. ————:

My sister was a polio patient at your hospital recently. Words cannot begin to tell you the thoughts I wish I could express. Everyone was kindness personified — the doctor, the personnel of the 12th floor, elevator operators, and even the guards at the parking lot. Although I have been hospital-connected for over twenty-five years, never have I witnessed such efficiency and teamwork! We all are so very grateful for all that was done. It seems so very little to offer you a heartful of thanks and gratitude.

In lieu of flowers we suggested donations to the polio fund, and at the time I left the amount was in three figures.

It is very comforting to know that my sister had all the care it was possible to give. My hurried trip over was softened by the thought that she was at the Massachusetts General.

* * *

The American Hospital Association, at its annual convention on September 21, conferred Honorary Membership on Miss Ruth Sleeper—the first nurse to be so honored. The award was given "in recognition of her progressive leadership and diligent service in improving nursing care, and because of her inspired and untiring efforts to better the health of mankind."

* * *

A pension plan for employees of the Massachusetts General Hospital, including the General Hospital in Boston, McLean Hospital in Waverley, the Vincent Memorial Hospital, and the Hall-Mercer Hospital (Massachusetts General Hospital Division), went into effect on September 5. A pamphlet, describing the principal features of the plan, has been issued. The Hospital will pay the pensions provided by the plan, without any contributions from our employees.

The Board of Trustees, at their meeting on September 16, voted:

To accept, as of September 30, the resignation of Mr. Reginald Gray as Secretary of the Corporation with great regret and with an expression of appreciation for his long years of devoted service;

To elect Mr. Elliot Lee Richardson as Secretary to fill the unexpired term of Mr. Reginald Gray;

To accept the resignation of Lowell P. Hager, Ph.D. from the position of Assistant Biochemist, effective September 3.

To promote:

Mary Ellen Jones, Ph.D. to the position of Associate Biochemist (Medicine), for a period of three years, beginning July 1;

Karl Schmid, Ph.D. to the position of Associate Biochemist (Medicine), for a period of three years, beginning July 1.

To reappoint:

Dr. Byron H. Waksman as Associate Bacteriologist (Neurology), for a period of three years, beginning July 1.

To appoint:

Dr. Philip R. Dodge as Assistant Neurologist, beginning October 1;

Dr. Benjamin G. Ferris as Consultant in Medicine;

Dr. Justin R. Hüppe as Resident in Radiology (extra) for one year, beginning March 1, 1956;

Dr. Louis L. Weiss as Assistant Resident in Anesthesia, beginning October 1.

At their meetings on September 14, 21, and 28, the General Executive Committee voted:

To reappoint:

William L. Bencze, Ph.D. as Research Fellow in Medicine for one year, beginning September 29;

Werner Ritschard, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning October 1.

To extend the appointments of:

Dr. John A. Scholl as Clinical and Research Fellow in Neurosurgery, for a period of twelve months rather than six months, as previously recommended;

Dr. Snorri P. Snorrason as Graduate Student Assistant in Medicine, assigned to Cardiology, through December 31.

To appoint:

Dr. Howard J. Bagnall as Clinical and Research Fellow in Neurosurgery for one year, beginning September 22;

Dr. George E. Burket as Graduate Student Assistant in Surgery, beginning September 12;

Dr. Ruben D. Cabrera as Graduate Student Assistant in Orthopedic Surgery, for the term September 6 through December 5;

Dr. Odom N. Coker as Graduate Student Assistant in Surgery, beginning September 6;

Robert Crokaert, D.Sc. as Research Fellow in Biochemistry, beginning September 15;

Dr. William M. Crowell as Clinical Fellow in Psychiatry, beginning September 1;

Dr. William G. Durnin as Graduate Student Assistant in Orthopedic Surgery, for the term September 6 through December 5;

Dr. Thorkild Friis as Clinical and Research Fellow in Medicine, for the period September 1, 1955 through February 29, 1956;

Dr. Shinzo Isojima as Research Fellow in Immunology for one year, beginning October 1;

Dr. Hsing Y. Lee as Graduate Student Assistant in Orthopedic Surgery for one year, beginning September 20;

Ann D. Salomon, Ph.D. as Clinical and Research Fellow in Psychology for one year, beginning September 1;

Dr. Mariano A. Sandiego as Graduate Student Assistant in Surgery, for a period of six months, beginning September 12;

Dr. W. Raymond Shanahan as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning November 1;

Dr. Kadhim H. Shubber as Clinical Fellow in Orthopedic Surgery, for the period October 1, 1955 through January 31, 1956;

Dr. Ingrid Sondergaard as Clinical and Research Fellow in Psychiatry for one year, beginning October 15;

Dr. Herman W. Spater as Clinical and Research Fellow on the Children's Medical Service for one year, beginning September 1;

Dr. Wirjo K. Subiakto as Graduate Student Assistant in Orthopedic Surgery for one year, beginning September 20;

Dr. Teofilo Trevino as Graduate Student Assistant in Orthopedic Surgery for one year, beginning September 6.

MASSACHUSETTS EYE & EAR INFIRMARY

On September 26, the House Officers of the Infirmary were privileged to hear an address given by Sir Norman Gregg of Sydney, Australia, a personal friend of Dr. Edwin B. Dunphy. Sir Norman is renowned for making one of the most outstanding contributions in the field of medical research in the past decade. His paper, published in 1941, showed the connection between rubella and congenital cataracts, if contracted during pregnancy. This led to the discovery of further connection between German measles and congenital heart disease and deafness. For this important work, Sir Norman Gregg was knighted.

The joint meeting of the American Academy of Ophthalmology and Otolaryngology was held in Chicago, October 8-14. The ENT staff of the Infirmary was represented by: Dr. Philip E. Meltzer, vice-president, who presided over the Otolaryngological Section meeting on October 10; Dr. George F. Reed, who took part in a symposium on "Errors in the early diagnosis and treatment of cancer in the upper respiratory tract" — Dr. Reed spoke on "The pharynx"; Dr. V. H. Kazanjian, who participated in the special scientific programs and spoke on "The median forehead flap for the repair of defects of the eyelids and nose".

Speaking in the Continuous Courses and panel discussions on Otolaryngology were: Dr. V. H. Kazanjian on "Traumatic injuries of the face"; Dr. Philip H. Meltzer on "Your otological office problems" —panel discussion; Dr. Daniel Miller on "ENT cancer can be treated in your community"—panel discussion, and "Laryngeal emergencies in infants and children"; Dr. George Kelemen on "Mechanical injuries of the hearing organ" and "Otitis media: Pathologic changes as a guide to clinical procedures".

Members of the Ophthalmology staff who addressed the meeting were: Dr. Robert R. Trotter, who spoke by special invitation at the Ophthalmology Section on "Diamox: Further reports on its use": Dr. Brendan D. Leahey on "Corneal transplantations with track suture"; and Dr. Paul A. Chandler discussed "Posterior sclerotomy and air injection in the treatment of flat anterior chambers following cataract extraction".

Several doctors from the Infirmary participated in the Continuous Courses in Ophthalmology given at the Academy meeting. Speakers from the Infirmary included: Dr. Charles L. Schepens on "Indirect ophthalmoscopy: Technique"; Dr. Albert E. Sloane on "School vision testing" and "Telescopic lenses"; Dr. Abraham Pollen on "Prescription of prisms"; Dr. Paul A. Chandler on "Cataract surgery"; and Dr. Brendan D. Leahey on "Cataract transplantation".

A new five-volume loose-leaf textbook titled *Otolaryngology,* edited by Coates, Schenck and Miller, has just been published by W. F. Prior Co., Inc.

The book points out that otolaryngology is a field that is constantly expanding in all its branches. Some of the extensive new fields which have been reopened to the otolaryngologist are rhinoplastic and otoplastic surgery and audiology.

Another feature of these volumes is that a rigidly bound book on this field may soon become obsolete, but a loose-leaf work can be constantly brought up to date without the necessity of a complete new edition. The old passages may be taken out and new information inserted. The editors and publishers of this book intend to see that this plan is carried out by frequent revisions and with the addition of entirely new chapters when necessary.

Among the Infirmary contributors to the book are: Dr. Robert L. Goodale on "Bronchiectasis (Bronchosinusitis)"; Dr. George Kelemen on "Osteomyelitis of the temporal bone"; Dr. Harris P. Mosher on "Fulminating osteomyelitis of the frontal bone complicating acute infection of the frontal sinus"; Dr. Lyman G. Richards on "Acute laryngotracheo bronchitis"; Dr. LeRoy A. Schall on "Tumors of the temporal bone"; and Dr. Francis L. Weille on "Surgical problems involved in the removal of glomus jugulare tumors" and "The otolaryngological technique for block dissection of the neck".

Dr. Robert L. Goodale spoke at the Peter Bent Brigham Hospital on "Atrial septal defects". His lecture was given on October 16 as part of the courses offered by the Postgraduate Medical Institute of Boston.

Dr. Alexander S. Macmillan, Jr. gave three instruction courses on X-ray at the American Roentgen-Ray Society meeting in Chicago, which was held on September 19-23.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, the titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Goodale, F., Jr., Sanchez, G., Friedlich, A. L., Scannell, J. G., and Myers, G. S.
Correlation of pulmonary arteriolar resistance with pulmonary vascular changes in patients with mitral stenosis before and after valvulotomy.
New England J. Med. 252:979-983.

General Medicine

Burrage, W. S., Mansmann, H. C., Jr., and Irwin, J. W.
Current methods of diagnosis and treatment of asthma.
A.M.A. Arch. Int. Med. 96:369-374.

Rasmussen, H.
Iodide hypersensitivity in the etiology of periarteritis nodosa.
J. Allergy 26:394-407.

Wang, D. M. K., Burrage, W. S., Irwin, J. W., and Aronow, S.
Cortisone or hydrocortisone in the treatment of severe, intractable asthma?
J. Allergy 26:448-452.

General Surgery

Cope, O., and Raker, J. W.
Cushing's disease: The surgical experience in the care of 46 cases.
New England J. Med. 253:119-127; 165-172.

Dexter, C. J.
Acute diverticulitis of the cecum with perforation.
Am. J. Surg. 90:535-536.

Laboratory Science

Bandurski, R. S., and Lipmann, F.
Synthesis of phosphoryl-enolpyruvate from oxalacetate.
Federation Proc. 14:176-177.

Gregory, J. D.
Nucleoside diphosphatase of liver mitochondria.
Federation Proc. 14:221.

Gregory, J. D.
The stability of N-Ethylmaleimide and its reaction with sulfhydryl groups.
J. Am. Chem. Soc. 77:3922.

Hager, L. P., and Lipmann, F.
The relation between acetoin condensation and pyruvic oxidation and pyruvic oxidase of *Lactobacillus delbrueckii.*
Bact. Proc., 1955:113.

Hilz, H.
ATP-sulfate reaction.
Federation Proc. 14:227.

Jones, M. E., Spector, L., and Lipmann, F.
Mechanism of citrulline synthesis.
Federation Proc. 14:232.

Matoltsy, A. G., and Balsamo, C. A.
A study of the components of the cornified epithelium of human skin.
J. Biophys. & Biochem. Cytol. 1:339-360.

Mudd, S. H., Park, J. H., and Lipmann, F.
Magnesium antagonism of the uncoupling of oxidative phosphorylation by iodo-thyronines.
Proc. Nat. Acad. Sc. 41:571-576.

Waksman, B. H., and Adams, R. D.
Allergic neuritis: An experimental disease of

rabbits induced by the injection of peripheral nervous tissue and adjuvants.
J. Exper. Med. 102:213-236.

Otolaryngology

Kelemen, G.
Osteomyelitis of the temporal bone.
In Otolaryngology, Coates, G. M., Schenck, H. P., and Miller, M. V., Editors, Hagerstown, Md., W. F. Prior Company, Inc., vol. 2, chapter 20.

Surgery — Reconstructive

Webster, R. C., and Ju, D. M.
Posterior pharyngeal wall flaps in the rehabilitation of complicated palate cases.
Cleft Palate Bull., vol. 5, no. 3:2-4.

Miscellaneous

Churchill, E. D.
Physician panic reactions in disaster.
New York State J. Med. 55:2452-2454.

NOTES ON NIPPON — 1954

Two hillside vistas stand out in retrospect:

One was from the home of "Madame Butterfly", overlooking Nagasaki Harbor. When the second atomic bomb was dropped on August 9, 1945, one of the principal targets was the Mitsubishi Shipyard. And yet only nine years later almost to a day, afloat in the harbor, and in the final stages of being fitted out, were two sleek new merchantmen, recently created in this same shipyard.

The other was from the Atomic Bomb Casualty Commission, overlooking Hiroshima. This sight was striking only in that nothing remarkable was to be seen, as the entire city had been rebuilt *in toto,* and, except for one or two intentionally unchanged ruins, there were no really evident reminders of the massive destruction which had occurred less than a decade before.

The events and circumstances of the intervening years between "unconditional surrender" and these evidences of reconstruction are common knowledge: the wisdom of retaining the Emperor; the immediate and almost complete subordination of the Japanese people to the Occupation Government; the success of General MacArthur as a powerful leader with a flair for the melodramatic; the economic stimulus of the Korean War; and the at least apparent (and hopefully real) friendship which developed between the members of the occupation forces and the people they came to know. But the less often mentioned factor in what has been a historically unique relationship between the conquering and the conquered is the catalyst which has made this fortunate reaction possible — namely, the tremendous energy of the Japanese people, which seems to have remained essentially unchanged despite the effects of a total and unsuccessful war.

But there are other than just the economic manifestations of this same dynamic quality which have remained or have developed during the postwar era, and among these are the cultural elements.

Theatrically, the Japanese can boast of one of the world's finest contemporary productions — "The Takarazuka Review" — which includes an all-girl cast, elaborate settings, striking costumes, and a fast-moving routine which makes a five-hour performance seem only minutes long. Or the more distinctly Japanese play, the Kabuki, which employs almost every effective trick of the drama, from revolving stages to ostensibly floating sampans, and dancers using timing in a way Hollywood might well envy.

In the line of handicrafts, the people of Hakata, in what is a true "backyard industry", produce figurines which are noteworthy, not only for their realism, but for the bits of life they portray.

One hundred miles to the north of Tokyo, at Nikko, the first three members of the Tokugawa Shogunate are buried in a series of magnificent and ornate shrines. For over three hundred years each building has been retouched every twenty years, and even today a number of the elaborate wooden frescoes and glossy enameled finishes are being methodically and completely redone.

The Japanese have a saying in which there is much truth, that not to see Kyoto is not to see Japan. Kyoto was not only the political capital for over eight hundred years, but has remained the cultural center of the country, which is perhaps the reason it was carefully spared by the American B-29's. It remains today untouched, with its artists vigorously at work producing ceramics, jewelry, woodblock prints, and etchings, all of which have been painstakingly and beautifully executed.

Agriculturally, too, the evidences of Nipponese industry are manifest. In late May and in June, at the peak of the rainy season, when the rice is being planted, the entire family from grandmother to grandchild can be seen tirelessly stooped over, laying out the young sprouts freehand, but in lines which are incredibly straight and symmetrical. And as the corollary of the Japanese economy in farming is the premium which necessity has demanded be placed on space. Archibald MacLeish has given a graphic description of this situation:

"There are the roads always narrow and mostly at the wood's edge or the river's. . . . There are the whole plains empty of roofs, squared into flats of water, no inch for walking but the dike backs, not so much as a green weed at the foot of the telegraph poles or a corner patch gone wild.

"There are the fields empty of crows after harvest; thin picking for black wings after cloth ones. . . .

"There are the forest floors swept clean and the sweeping bundled in careful, valuable piles. . . .

"There are the rivers diked and ditched and straightened to recover a napkin's breadth of land and the hill valleys terraced till the steepest slope turns flatwise to the sun."

There is one way in which this frugality of space is relaxed. In the fall, when the golden rice is harvested and the paddies are finally at momentary rest, the corners of the fields and cracks between the houses are suddenly warmed by the rich yellows and reds of the national flower, the chrysanthemum.

Even in what little recreation these people have time for, their dynamic qualities are evident. One incident in particular is memorable. It was 3 o'clock A.M., at an altitude of 10,000 feet. One hundred miles to the north lay Tokyo Bay. And nearer at hand, from timberline to the summit of Fuji, a continuous string of bobbing lights, 5 miles in length and representing several hundred plodding people, dominated the starlit landscape. Two hours later and 3,000 feet higher it was possible to enjoy one of the scenic highlights of Japan as a great red sun eased its way up over the horizon. But even more spectacular than the sunrise had been the chain of lights which this persevering, patient, energetic people had created in their predawn pilgrimage to Nippon's pinnacle.

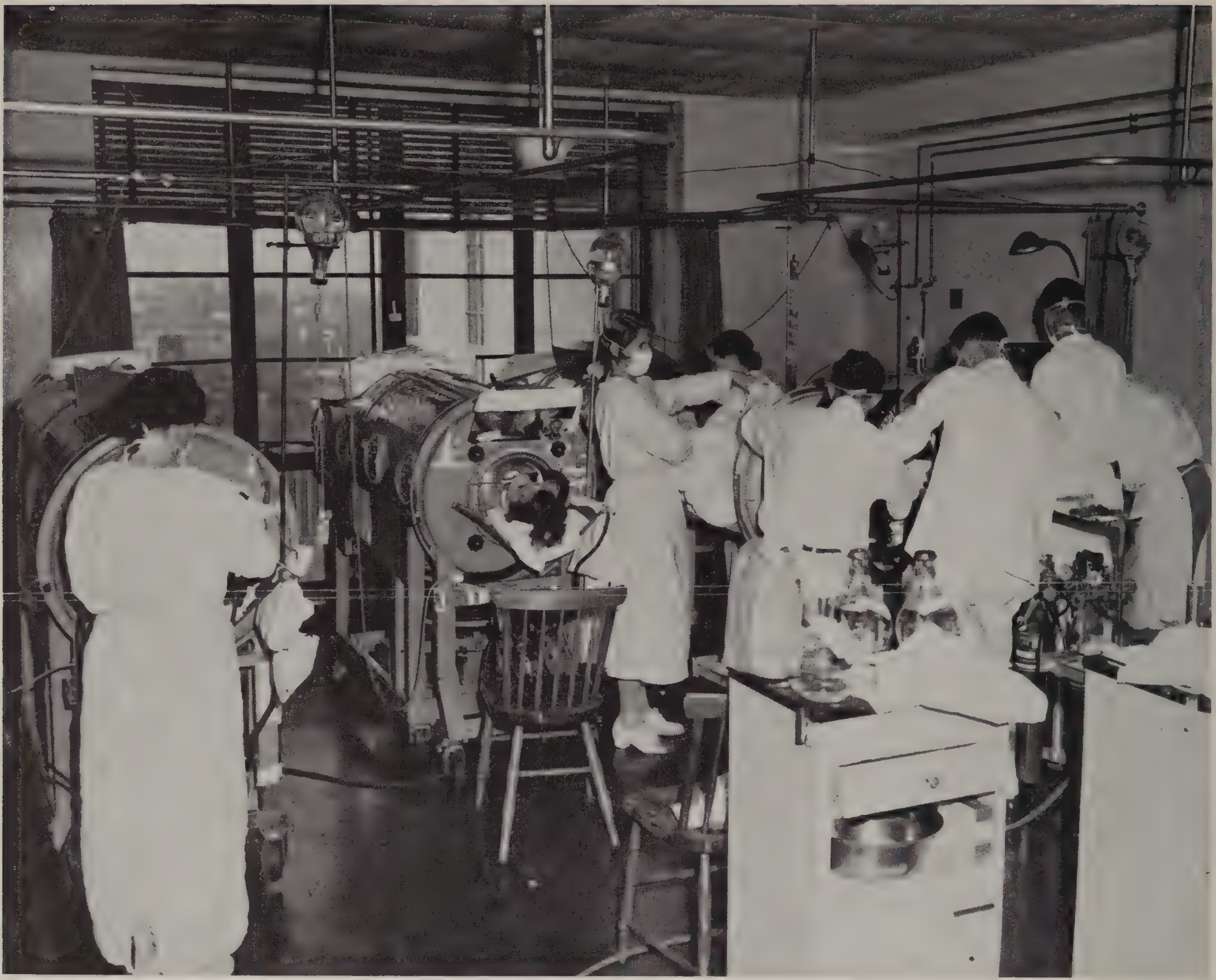
Giles D. Toll, M.D.,
Assistant Resident in Surgery

New addresses:—

Dr. Margaret Anthonisen (r.p. *Psychiat.* (*McL.*) 1934), Mary Hitchcock Memorial Hospital, Hanover, N. H.
Dr. Benjamin A. Barnes (*W.S.* 1945), Department of Surgery, Massachusetts General Hospital, Boston 14, Mass.
Dr. George Christman (*Dn.* 1951), 403 Commonwealth Ave., Boston, Mass.
Capt. Richard A. Currie, MC, USAR (*S.* 1950), U.S. Army Hospital, Camp Gordon, Ga.
Dr. Ihsan Dogramaji (gr. a. *C.M.* 1945), 142 Atatunk Bulvari, Ankara, Turkey
Dr. Arthur C. Guyton (*W.S.* 1943) Box 153, Route 7, Jackson, Miss.
Dr. Buford Hall (*M.* 1946), 1819 West Polk St., Chicago 12, Ill.
Dr. Norman P. Hill (*M.* 1946), Truesdale Hospital, Fall River, Mass.
Dr. Charles I. Johnson (s. *Otolar.*), 375 Heath St., Chestnut Hill 67, Mass.
Dr. James M. Judd (*E.S.* 1944), Murray Hill, Mount Morris, N.Y.
Dr. Betsy A. Ledbetter (a.r.p. *An.* 1955), 1513 Line Ave., Shreveport, La.
Dr. Craig S. Lichtenwalner (*M.* 1950), State Board of Health, Jackson, Miss.
Dr. Murray Rabinowitz (a.r.p. 1955), Institute for Enzyme Research, University of Wisconsin, Madison, Wis.
Lt. Leonard J. Rothfeld, MC, USAR (a.r.p. *An.*), 805 9th AU Tokyo Army Hospital, APO 500, c/o Postmaster, San Francisco, Calif.
Capt. Guillermo C. Sanchez, MC, USAR (*M.* 1950), Student Detachment, Field Service Medical School, Fort Sam Houston, Tex.
Dr. Vivian A. Tenney (a.r.s. *Gyn.* 1943), 155 East 49th St., New York 17, N.Y.
Dr. Augustus Thorndike (*W.S.* 1923), 15 Holyoke St., Cambridge, Mass.
Dr. Laurens P. White (*M.* 1950), 32 6th Ave., San Francisco, Calif.
Dr. David W. Williams (*W.S.* 1943), 33 Mulberry St., Springfield, Mass.

Brief bits:—

Dr. Otto E. Aufranc spoke at the convention of the International College of Surgeons in Philadelphia on September 13. His topic was "The application of mold arthroplasty to conditions of the hip".



One small section of a polio floor at Massachusetts General Hospital

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Dr. J. H. Means has had a very full lecture schedule since last spring. On March 28 he gave the Kober Lecture at Georgetown University. The title of his talk was "The nature of medical research". On April 3 he participated in the Ford Hall Forum on the subject "The high cost of medical care: What can we do about it?". On April 18 he spoke before the Boston University Phi Delta Epsilon Fraternity. His title was "The need for experiment in the social as well as the biologic area of medicine". On May 14 he took part in a panel discussion on "The role of the teaching hospital", at the opening of the new University Hospital of the University of Saskatchewan at Saskatoon, Canada. At the request of the Right Reverend Henry K. Sherrill he paid a medical goodwill visit to St. Luke's Hospital, Tokyo, Japan, from the middle of June to the middle of August. Mrs. Means and his stepdaughter, Beth H. Butler, accompanied him on this journey. We hope to report on the Japan trip in an early issue of The News.

Dr. Leonard D. Rosenman (*E.S.* 1943) appeared in the office of The News not long ago. We always appreciate visits from old friends and wish they might stay longer.

A card from Dr. John W. Smillie (*E.S.* 1944) says, in part: "I continue to be an Assistant Professor of Ophthalmology at the University of Michigan Medical School; but, as this is a fair-sized institution, mail addressed to me as Department of Ophthalmology, University Hospital, Ann Arbor, Michigan, will be in my hands a day or so earlier."

Dr. Jacob H. Swartz announces the removal of his office to 483 Beacon St., Boston, Mass.

Dr. John F. Tannheimer (r.p. *Path.* 1945 & a.r.p. 1948) paid us a nice visit recently.

Dr. Richard Warren announces the removal of his office for the practice of surgery to the Peter Bent Brigham Hospital.

Dr. Richard C. Webster has accepted the Chairmanship of the Program Committee of the 1956 Kansas City Convention of the American Association for Cleft Palate Rehabilitation.

This letter from Dr. Philip L. Pillsbury (*W.M.* 1942) includes a new address for him—new as far as our records are concerned. From 3512 Clay Street, San Francisco, California, he writes:

While I would like to enjoy any distinction, however minor, that of being a "singleton" in Ross is no longer mine. In fact, I have been living in San Francisco since 1946. After leaving the military service I came here as assistant resident and then resident in Medicine at Stanford University Hospitals. Later I engaged in the private practice of Internal Medicine in association with Dr. Walter Beckh in this city. Very fortunately, I have been able to continue my academic interests as a clinical instructor in Medicine at Stanford.

This letter would not be complete if I failed to mention a little personal history. I married Patricia Gilbert in 1946. We now have four children. We still plan for the day when we shall be able to return to Boston and the M.G.H. to renew old friendships.

[This letter illustrates the fact that unless we are notified of a change of address there is no way for us to keep our records—including the Directory section of our Annual Report—up to date.—*Editor*]

This letter has come from Dr. Harvey D. Rothberg, Jr. (*M.* 1954), Department of Hematology, Walter Reed Army Medical Center, Washington 12, D.C.:

My wife and I both enjoy receiving The News each month, as it is one of our main ways of keeping in touch with the Massachusetts General Hospital (where we met!).

We've been down here now for over a month, and are very enthusiastic about Washington. Pending call to active duty in the Air Force (which did not come when expected), I am working as medical officer in the hematology department of Walter Reed Army Medical Center. My work will be about 75% research — probably mostly in the areas of spleen functions, hemopoiesis, and hemolytic anemia. At the moment, however, I'm spending about half my time learning techniques used in working with radioisotopes. I'm in the outpatient clinic two afternoons a week, and go on hematology ward rounds twice weekly. There's an active teaching program here, too; in fact, I was informed that later on I will be giving a couple of lectures myself.

All in all, this promises to be a most interesting year, but whether it will last that long is problematical.

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Contributions to The News in the amount of $575.60, over and above subscriptions fees, were received during the fiscal year 1954-1955. A note of appreciation is always sent to each contributor, but The News takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

THE NEWS

No. 151 Boston, Mass. December 1955

MEDICAL CLINIC

On the sixth of October, 1818, a young man was brought by his father to the first unit of the Massachusetts General Hospital, which unit later became known as the McLean Hospital. The Hospital had opened its doors but two days earlier, and the arrival of father and son was the occasion for considerable activity. We are told that "the Committee spent three hours in conversing with him in order to learn all the particulars of the case", and that following this lengthy deliberation, the young man was admitted to the Hospital as its first patient. He was treated successfully and entirely cured of his ailment. That this latter must have been true is evidenced by a further notation to the effect that he became successful in life "and acquired a property of ten or twelve thousand dollars."

The event of the three-hour consultation by a committee of physicians prior to the admission of the Hospital's first patient could be considered as the first meeting of the Ambulatory Clinic. The Committee, and later the admitting physician, each fulfilled what was to be for many years the primary mission of the clinic — that of selecting suitable patients for admission to the Hospital wards. That any further service than this be offered to the community was apparently not thought justifiable until many years later. However, as time passed, it occurred to many members of the Hospital staff that certain patients might be better treated on their feet than in the iron-posted beds of the Bulfinch wards. Accordingly, a facility was established and the admitting physician was charged with the additional duty of providing ambulatory care to those members of the community who could come to the clinic for diagnosis and treatment. This decision on the part of the Board of Trustees resulted in an immediate and rapid growth of the Hospital's patient census and undoubtedly established the basis on which the clinics of today operate.

To elaborate in detail on the changes in character which the clinic underwent during the hundred years following these early days will not be attempted. It is enough to acknowledge that change took place as needs became apparent. Medicine and surgery, and later the various specialty clinics, were partitioned off from the original clinics as these services became established in the Hospital itself. Follow-up clinics were established, and the practice of accepting difficult cases from referring physicians for diagnosis and advice was extended. Not the least of these changes was a semantic one, wherein the name of the clinics was changed from the "Outdoor Department" to the "Out-Patient Department", and finally to the more recent and resounding title of "The Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary".

Though all this change was vigorous and healthy, careful examination of the growth and development of the ambulatory clinics leads to several unhappy conclusions. First, it is evident that the development of the clinics as units for patient care has always lagged behind similar developments in the Hospital itself. Second, it is equally evident that the clinics have always been regarded as appendages, necessary and even useful, but nevertheless appendages of the Hospital. Even today, a critical appraisal of current clinic practice leads the observer to the candid admission that in the Hospital setting there exist two standards of medical care. The ease with which the inpatient and his physician can make use of the total resources of the Hospital is in striking contrast to the difficulties which beset the clinic patient in his effort to obtain medical care. Nor does our present clinic arrangement equal the facility with which patient and private physician approach ambulatory care in the office setting. It is with these problems that we are now concerned. Happily, some progress can be reported and should be acknowledged as being the result of the labors of many individuals from both the administrative and professional services. Although we are primarily concerned in this report with the Medical Clinic, it should be pointed out that the advances made in this one area could not have been accomplished without the enthusiastic support of members of the other services.

Recent changes

The first indication that the whole problem of ambulatory care might be reevaluated came in April 1951, when the incoming Chief of the Medical Services stated in his letter of acceptance that he intended to emphasize the need for ambulatory medical care. Soon thereafter, the General Director reported that the Board of Trustees and he were equally mindful of the Hospital's obligation in this area and the existence of this as yet unfulfilled community need.

With this accord on the part of both administration and professional staff, a plan of procedure was evolved. Among the first changes evident to the casual visitor were those related to appearance. The hallmarks of the old Out-Patient Department were drab walls and floors, seemingly endless rows of hard wooden benches, and an atmosphere which was cheerless at best. Today, with the new floors and wall paint and the islands of bright new chairs and sofas, some of the gloom has been dispersed. There is more to be done, but these beginnings brought with them a gratifying change in atmosphere.

New Director

It was apparent to both the administration and the professional staff that there was need for a full-time Chief of the Medical Clinic. Fortunately for the clinic, Dr. John D. Stoeckle was about to finish his tour of duty with the Army Medical Corps and accepted the new position to begin in February 1954. Dr. Stoeckle brought with him much of his well-remembered enthusiasm and a keen sense of awareness of the needs of patients. With Mr. E. Michael White and Miss Ruth M. Farrisey, his administrative counterparts, Dr. Stoeckle has already accounted for an impressive list of improvements.

Records

No ambulatory clinic can effectively operate unless the patient, his record, and his doctor come together at the same time. This requires a well-equipped and efficient record department. The administration has recognized this as a problem area and is currently installing a new open-shelf filing system which, when completed, will benefit everyone requiring the services of an efficient record room. When this work is finished, it will rest with the attending physician and the patients to make the system workable.

Reception of patients

Each morning a hundred or more patients wish to see a doctor. Every admission involves a number of administrative procedures which precede the actual reception of the patient by his physician — an interview to determine basic eligibility, the preparation of a unit record, and payment of the clinic fee. In times past, an attempt was made to accomplish both the administrative reception of the patient and professional care by the attending physician during the same morning. As might have been expected, the task of providing care for an unannounced number of patients posed its problems. In order to separate the registration activities from medical care, the following measures have been instituted:

1. The Medical and Neurology Services have each assigned a resident admitting physician who is responsible for the professional reception of the patients. They assess the urgency of a given prob-

lem and decide on whether admission to the Emergency Ward, Over-Night Ward, the Hospital wards, or an appointment for the clinics is in order.

2. The admission interviews have been improved, with the view of being shorter and more objective; also, patients can be admitted directly to the clinics providing they fill out and return by mail a pre-registration form. Many patients are recipients of welfare and disability assistance. The agencies responsible for such "third-party" payments can also make arrangements for direct admission of their patients.

3. For years, admission to the clinics was restricted to patients from certain localities, though the number of patients seeking admittance never justified such restrictions. The present policy of admitting all patients seeking medical care is a much wiser one, in that it permits the Hospital to discharge more fully its responsibility to the New England community.

4. Lastly, the recent admitting practice permits admissions throughout the day rather than limiting the hours to 8:00 to 10:00 A.M. — a measure which has cut down on the long morning queues.

Cost

The job of providing medical care for patients admitted to "The Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary" is a sizable one. In 1954 there were 181,774 patient visits. Though it is stated that the charge will be cost, minus professional fee (with the distinct understanding that no one will be turned away because of inability to pay), the basic clinic fee comes to $2.50 per visit! This past year the cost of laboratory charges has been separated from this basic clinic fee, thus permitting the Hospital to collect the amount specified for such examinations by the Welfare and other agencies. Thus, one cannot claim that the clinics provide cheap medical care. To the patient, the total cost is much more; he must take into account his loss of wages, the cost of travel, and other expenses incurred each time he visits the clinics. These constitute no small sum, considering his weekly wage.

"Cash on the line" is the present clinics' policy. This is a cumbersome arrangement, particularly so when the taking of an electrocardiogram or other test on the second floor necessitates paying for the same in the basement before these services are rendered. However, progress aimed at correcting this unnecessary inconvenience can be reported. The administration has already introduced a system of credit (bills) for routine laboratory work, and billing methods are being explored for payment of all diagnostic measures and all medical care procedures.

Appointment system

The administration and the staff of the clinics have done an excellent job in introducing the simplest type of appointment system — scheduling patients in blocks. Although this has required considerable patient education, it seems to work — the "new appointment patient" coming to the Medical Clinic arrives on time and is ready to meet the doctor, though often the latter is not as punctual as is the patient. This important aspect of clinic functioning requires still more doing, more patient education, and more explanation to those who advise the patients to come to the clinic.

Diagnostic facilities

In order to operate efficiently, the clinics must have certain basic diagnostic facilities on their own premises. Here, too, some progress has been made. The clinical laboratory now operates on a full-time basis, as does the electrocardiographic station. These two simple innovations have increased the operating efficiency of the clinics immeasurably.

Staff participation

Service in the clinics has been looked on in recent years as somewhat of a chore. The patient census in the Medical Clinic has remained high, while the number of staff members who were active participants in ambulatory care has not increased proportionately. As a consequence, the patient load per physician has been excessive. No conscientious physician can utilize his best judgment in caring for sick people if he is constantly pressed for time and is forced to see more patients in a given morning than he habitually does in his office; nor does the patient leave the clinic with the feeling that his doctor has been thorough and sympathetic under these circumstances.

To be able to report a change in this area is most gratifying. During the past eighteen months, medical staff participation in ambulatory care has increased over fifty percent. As a result, each physician has been able to do a more thorough, less hurried examination of those patients assigned to him. Of all the changes so far reported, this one is the most heartening, because it reflects the willingness of the staff to meet a long-overdue obligation.

Future plans

The preceding paragraphs have outlined perhaps too briefly the many steps which have already been taken to improve ambulatory care. They are important beginnings because of the many who contributed and because of the concrete evidence that improvements can be made. Often the Massachusetts General Hospital has been referred to as a "venerable" institution; however, equally often this phrase implies little more than "having reached an advanced age". That both the administrative and professional staff have shown a healthy willingness to modify and experiment is an indication that the Massachusetts General Hospital is cognizant of the need for change.

Change to date has been accomplished within the framework of an old building, outmoded facilities, and limited space. Future plans must inevitably include a really modern facility for the clinics. A new building, spacious and properly designed, is a requirement high on the list. If the usual principles of organization are followed, the type and location of most diagnostic and therapeutic facilities become self-evident. It is already apparent that the high patient census on the Hospital wards has overburdened existing diagnostic facilities so that the ambulatory patient who is usually less critically ill comes off second best in his access to these areas. The administrative processing through which the patient must pass before receiving medical care needs centralization, space, and geographical nearness to the patient care area. Other equally important branches of an ambulatory care unit such as social service, dietitians, secretarial service and so on, need to be so located that they have easy access to the patient care area in the same building. Reception and waiting areas, cafeterias, and perhaps a diagnostic ward for the ambulatory patient need consideration.

Another quite different but intimately related problem is that of full utilization of the clinics as one of the many teaching units within the Hospital grounds. A new and efficient clinic building should have incorporated in it the facilities needed for continued education of medical students, house staff, and attending physicians. The opportunities for teaching with ambulatory patients can equal if not excel those for ward teaching.

Final objectives

The major objective in future planning for ambulatory care is to eliminate the double standard of practice which now exists between in-patients and out-patients. We hope there will be but one Medical Service which will be responsible for both patients in the Hospital beds and patients on their feet, that both categories of patients will have the same ease of access to the many resources which the Hospital has to offer, and that the professional staff will participate fully in all of the Service activities. If these simple objectives are kept clearly in mind, there is little need to further justify the plans outlined here.

The Medical Services

* * *

Dr. Howard B. Sprague has recently been appointed a member of the National Advisory Heart Council. The Council is a fifteen-member group composed of outstanding leaders in medicine, science, education, and public affairs, and was established by the National Heart Act as official Advisory Board for the National Heart Institute.

The Council reviews requests from non-federal institutions and individuals for research and teaching grants in the field of diseases of the heart and circulation. The group is a recommending authority for these grants, which are awarded from funds appropriated by Congress by the Surgeon General after they have been recommended by the Council for approval.

* * *

Dr. Kurt H. Thoma, past Chief of our Dental Service, gave the Chalmers J. Lyons lecture before the American Society of Oral Surgeons in Los Angeles on October 13, and received the Society's award "in recognition of his outstanding and distinguished contributions to the art and science of oral surgery". Dr. Thoma was also elected an Honorary Member of the Chalmers J. Lyons Academy of Oral Surgery.

Ether Day was observed this year with the customary awarding of Service Pins. The occasion took place in the Moseley Rotunda, with Dr. Clark acting as master of ceremonies and awarding the pins. Mr. Francis C. Gray, Chairman of our Board of Trustees, made a few congratulatory remarks, and Dr. Walter Bauer gave a brief talk on the polio situation at the Hospital.

Of the nonprofessional group, 93 received pins for 5 years of continuous service at M.G.H., 37 for 10 years, 8 for 20 years, and 8 for 30 years. One 40-year pin was awarded to Mr. William Beckman of the Maintenance Department.

Members of our professional staff who received 25-year pins were Dr. Edward D. Churchill, Dr. Louis Dienes, Dr. Mildred L. Ryan, and Dr. Richard H. Sweet.

Following the ceremonies, refreshments were served in the East Dining Room for the recipients and their friends.

The Board of Trustees, at their meeting on September 30, voted:

To permit Dr. Victor A. Politano to see a limited number of private patients in his office at the Hospital.

To appoint:

Dr. Toivo H. Suutarinen as Fellow in Anesthesia, instead of Assistant Resident in Anesthesia;

Dr. Harold M. Wolman as Assistant in Psychiatry, beginning September 1.

At their meetings on September 28, during October, and on November 2, the General Executive Committee voted:

To promote:

Dr. Mary S. Coley to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1956;

Dr. Robert H. Richie, Jr. to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1956;

Dr. Robb H. Rutledge to the position of Resident in Surgery, effective July 1, 1956;

Dr. David B. Shurtleff to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1956;

Dr. Thomas J. Whitfield, III, to the position of Chief Resident on the Children's Medical Service for one year, beginning July 1, 1956.

To extend the appointment of:

Dr. Norman L. Paul as Clinical Fellow in Neurology, from July 1, 1955 through June 30, 1956.

To reappoint:

Dr. Oswald D. Cinquegrana as Senior Clinical Fellow in Physical Medicine, effective February 1, 1956;

Dr. Sung J. Liao as Senior Clinical Fellow in Physical Medicine, effective March 1, 1956;

Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine, as of October 1;

Dr. Madan M. Singh as Clinical and Research Fellow in Medicine, for the period October 15, 1955 through June 30, 1956;

Dr. Samuel J. Sunnenblick as Graduate Student Assistant in Surgery for one year, beginning October 3;

Dr. John B. Vander as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Donald F. Williams as Clinical Fellow in Medicine, rather than Graduate Student Assistant, effective as of October 1.

To appoint:

Dr. John R. Bumgarner as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Arthur C. Cairns as Graduate Student Assistant in Medicine, assigned to Cardiology, effective as of October 1;

Dr. Felix A. Córdoba as Research Fellow in Surgery (Immunology), as of September 20;

Dr. Dolores R. de Córdoba as Research Fellow in Surgery (Immunology), as of September 20;

Dr. Emilio del Campo O. as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Dr. Frank W. Garran, Jr. as Clinical Assistant in Surgery, beginning October 1;

Dr. Morice Hall as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Dr. Hunter Heath as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Dr. Biriya Hotrabhavananda as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Dr. George Martz as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Yehia Z. Mouhran as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Miss Renee G. Naves as Research Fellow in Medicine, beginning December 1;

Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery, as of October 1;

Dr. Yvon A. Paradis as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Jeanne S. Phillips, Ph.D. as Research Fellow in Psychology, beginning October 1;

Dr. Kenneth J. Ryan as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Herbert de N. Tucker as Graduate Student Assistant in Medicine, assigned to Cardiology, effective October 1;

Mr. Alvin J. Yorra as Research Fellow in Orthopedic Engineering, for the period October 18, 1955 through June 30, 1956.

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DEDICATION OF THE NEW NEUROSURGICAL OPERATING ROOM

On Monday, October 10, the new operating room for neurosurgery was dedicated. Need for a specially designed room for this specialty has been emphasized in previous issues of the Massachusetts General Hospital News (December 1951 and June 1954). It was stated in these articles that the standard rooms on White 3 with their overhead galleries are unsatisfactory both for teaching and for modern neurosurgical techniques. It was also pointed out that conduction pathways in the spinal cord and the function of certain areas in the brain concerned with pain, psychological processes, epilepsy, and abnormal movements can only be studied adequately in the course of actual operations. Not only the patient himself, but later sufferers from similar conditions will benefit by wisely planned investigation of this sort. Fortunately, an additional 30 minutes to an hour devoted to electrical recording of nerve impulses in the brain, spinal cord, and peripheral nerves in the course of surgical exposure of these structures carries no added risk or discomfort to the patient, provided certain precautions can be taken. To do this safely and effectively requires: 1) unusually efficient ventilation to prevent infection from air-borne bacteria; 2) having the added personnel required to run the E.E.G. and other electronic apparatus, outside the operating room but where they can see through glass what is going on and where the surgeon can see their recordings; 3) electrical screening in the walls, ceiling, and floors that will keep out interfering radar, radio, and other high-frequency currents.

Thanks to Mr. Willard Simpkins of New York and the family and friends of Mr. Amory Coolidge, who died three years ago, it has been possible to build and equip such a room.

On the occasion of its dedication the neurosurgical staff and Mr. Carleton N. Goff, the hospital architect, were privileged to demonstrate these unusual features of the room to the generous donors. Afterward, in Dr. Dean A. Clark's absence, Mr. Francis C. Gray, Chairman of our Board of Trustees, and Mr. David C. Crockett, Associate Director for Resources and Development at the Hospital, were hosts at a most pleasant luncheon in the Trustees' Room. Mr. Gray expressed the gratitude of the Hospital for such an unusual gift, and Dr. James C. White, as Chief of Neurosurgery, his deep appreciation of this memorial to one of his best and oldest friends. Drs. William H. Sweet and H. Thomas Ballantine described the type of work for which this new theatre is especially constructed, in addition to its advantages for routine neurosurgical operating and teaching.

James C. White, M.D.,
Chief of Neurosurgery

One Monday morning a few weeks ago, Dr. Gilbert Hermann of our house staff came bursting into The News office, waving the Inter-Hospital Tennis trophy over his head. The MGH team had won it back the day before.

After a lapse of 11 years, the Sir Cuthbert Wallace cup No. 2 was put back into contention. A small but enthusiastic group of spectators saw the Massachusetts General Hospital beat the Peter Bent Brigham 3 matches to 2. The matches for the most part were well played, and at times the caliber of play was remarkably excellent.

Things started out well for us when Drs. Gerald Austen and Richard Austin defeated Drs. Burhenne and Goldfein of the Brigham 6-1 and 7-5.

In a hard-fought match, Drs. Cahill and Froesch of Brigham defeated Drs. Gilbert Hermann and Charles Keevil 6-3, 6-3; but the M.G.H. rebounded as Drs. Hermann and Austen then overpowered Drs. Criscitiello and Schlant of the Brigham 6-0, 6-2.

The final issue remained in doubt, as Dr. Cahill of the Brigham sent Dr. David L. Collins down to defeat with 6-0, 6-2.

With the match score tied at 2 all, our Dr. Keevil defeated Brigham's Dr. Froesch 6-2, 12-10 (!) in as good a match as may be seen anywhere this side of the Longwood Cricket Club.

Next year, when the sore muscles have regained their tone and the blistered feet have healed over, the cup — we hope — will be taken down from the shelf in the Archives Room, polished up, and once again be placed out for contention.

[For the interesting stories of the original Wallace cup and the Dr. Harvey Cushing trophy, we refer you to the MGH News issues of November 1944 and April 1954.]

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears. For books, give the publisher's name and address.

THERE ARE STILL THOSE WHO FAIL TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Gastrointestinal Research

Spiro, H. M., Ryan, A. E., and Jones, C. M.
The utility of the blood pepsin assay in Clinical Medicine.
New England J. Med. 253:261-266.

Laboratory Science

Matoltsy, A. G., and Balsamo, C. A.
The components of the cornified epithelium of the human skin.
J. Invest. Dermat. 25:71-74.

Neurosurgery

White, J. C., and Adams, R. D.
Combined supra- and infraclinoid aneurysms of internal carotid artery: Report of a case of unusual congenital dilatation of intracranial portion of carotid artery and injuries to visual, oculomotor, sensory, and taste fibres.
J. Neurosurg. 12:450-459.

White, J. C., and Cobb, S.
Psychological changes associated with giant pituitary neoplasms.
A.M.A. Arch. Neurol. & Psychiat. 74:383-396.

A chapter, written by Dr. James C. White and translated into German, entitled "Tecknik der Operationen am sympathischen Nervensystem", has been included in Volume 1 of Burghard Breitner's new loose-leaf *Chirurgische Operationslehre,* published by Urban & Schwarzenberg, Vienna.

A translation into Spanish of White, Smithwick, and Simeone's *The automatic nervous system,* published by The Macmillan Company in 1952, has been brought out by Editorial Artecnica, Buenos Aires.

Ophthalmology

Donahue, H. C.
An exceptional lesion of the orbit.
A.M.A. Arch. Ophth. 54:259-261.

Otolaryngology

Kelemen, G.
Aural changes in the embryo of a diabetic mother.
A.M.A. Arch. Otolaryng. 62:357-369.

Pathology

Castleman, B.
Tumors of the thymus gland.
In Atlas of tumor pathology, Section 5, Fascicle 19, Washington, D.C., Armed Forces Institute of Pathology.

Morgan, W. L., Jr., and Dudley, H. R.
Malignant thymoma and myasthenia gravis: Report of a case and review of the literature.
New England J. Med. 253:625-632.

Miscellaneous

Cass, L. J., Frederik, W. S., and Andosca, J. B.
Methyprylon—A new sedative and hypnotic drug.
New England J. Med. 253:586-591.

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VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

Due to the polio epidemic, the concerts given in the Chapel, which usually begin in the early fall, have been postponed until December.

There is now a very definite need for long-playing records which would be suitable for convalescents to enjoy and also for playing in the Chapel. Dr. and Mrs. Milford D. Schulz have very kindly donated a "hi-fi" set to the Hospital — hence this appeal for records.

Mrs. Jackson M. Thomas wishes to express her thanks for the help she received in making the tea, held on November 17 in Bartlett Hall, such a success. Many Staff Wives and foreign visitors were present.

The exact date of the tea to be held in February will be announced soon.

When the Staff Wives launched their furniture exchange project, they received such a generous supply of items that they wondered when so many pieces would ever be taken away. However, this situation was very quickly altered and their supply of furniture for loan to our visitors from other lands is completely exhausted. So — will all those who have extra mattresses, beds, chairs, tables of all sizes, lamps of any kind, etc., which are stored away or no longer in use, please let Mrs. Richard H. Sweet know about them. If you cannot deliver your contributions to 27 Chestnut Street, Brookline, drop Mrs. Sweet a note to that effect and arrangements will be made to have them collected. All articles that have been received to date have been most gratefully accepted and used.

Our Reception Centre is going along smoothly. The work has proved interesting, enjoyable, and rewarding for the Staff Wives, as well as for the visitors from other countries who come to us for assistance.

Regular weekly volunteers are still very much needed.

Membership in the Staff Wives group is open to wives of permanent members of the staff of the Hospital, also to Clinical Assistants' wives and any other women who are in sympathy with our aims and projects.

MASSACHUSETTS EYE & EAR INFIRMARY

At the meeting of the American Academy of Otolaryngology, held in Chicago on October 8-14, there were 5600 people registered. A highlight of the meeting was a film, sponsored by the Academy, on "The development of the ear". This film, the first of its kind, will be available to medical schools and otolaryngology groups throughout the country.

Representing the Infirmary on the ENT Board of Examiners were Drs. Schall, Meltzer, Mueller, and Reed. During the Board examinations, a memorial dinner was given for Dr. Harris Peyton Mosher, former Chief of Otolaryngology at the Infirmary.

Banquets were held by both the Eye and ENT alumni of the Infirmary. There were 49 ENT alumni present from such far-off places as Hawaii and Canada, as well as from all parts of the United States, to hear Dr. LeRoy A. Schall speak on the progress of the Infirmary in the last 15 years and the plans for the new Research Building. It was decided to hold a joint banquet for both the Eye and ENT members at next year's meeting.

It was interesting to note how many men who have had residencies at the Infirmary are now giving instructional courses at these annual meetings. They represent every phase of Otolaryngology, and their courses are usually given to capacity audiences. Among the former residents who conducted instructional courses at the October meeting in Chicago were: Dr. Lawrence R. Boies of Minneapolis, Dr. John M. Converse of New York City, Dr. Gordon D. Hoople of Syracuse, Dr. Percy E. Ireland of Toronto, Dr. Clair M. Kos of Iowa City, Dr. Frederick T. Hill of Waterville, Maine, Dr. Mercer G. Lynch of New Orleans, Dr. George E.

Shambaugh, Jr. of Chicago, and Dr. James A. Moore of New York City.

The Winthrop Foundation has begun a course on "Hearing testing", which is being offered to doctors' nurses and secretaries. The course will enable the nurse or secretary to relieve the doctor of routine details and certain special testing. Among the areas to be covered are: basic types of hearing loss, routine air conduction audiometry, screening for quick tests, bone conduction testing, masking, recruitment testing, speech testing, and techniques for testing special problems. The course will be given by Mr. Alan Feldman, audiologist at the Winthrop Foundation.

Dr. LeRoy A. Schall and Dr. Trygve Gundersen have participated in one of New England's largest medical sessions. It was held at Bretton Woods, New Hampshire, September 29 through October 1, on the occasion of the sixth annual meeting of the New Hampshire and Vermont State Medical Societies.

Dr. David G. Cogan, Director of the Howe Laboratory of Ophthalmology, has been appointed to the National Advisory Neurological Diseases and Blindness Council. This Council makes recommendations to schools on research grants in the fields of neurological and sensory disorders and in diseases causing blindness and deafness.

Awards of research grants to seven members of the Massachusetts Eye and Ear Infirmary staff have been made by the National Institute of the U.S. Public Health Service. Recipients are Dr. W. Morton Grant of the Howe Laboratory for work on glaucoma, and four members of the Retina Foundation — Drs. Charles L. Schepens, Endre A. Balazs, Marie A. Jakus, and Laszlo Varga. Awards were also given to Dr. Merrill J. King for his study on "Retrolental fibroplasia", and to Dr. Robert S. Gohd for "the isolation, detection, and study of the common cold virus".

Miss Madeline Shipsey, Casework Supervisor at the Infirmary, discussed "Field work teaching of social work students in a medical setting" at the 50th anniversary meeting of the Social Service Department of the Massachusetts General Hospital, held October 20-22.

Dr. Helio Hungria, an otolaryngologist from Rio de Janeiro, Brazil, observed the work in the Otolaryngology Department from October 1 to 22.

Dr. Nagid Saad, a State Department guest from Lebanon, visited the Retina Service in October, to study the detached retina operation.

The following votes were passed at a meeting of the Board of Managers of the Infirmary, held on October 5:

To accept with regret Dr. Charles I. Johnson's resignation as Surgeon and to appoint him as Consulting Surgeon in Otolaryngology.

To promote:

Dr. Walter J. E. Carroll to the position of Surgeon in Otolaryngology;
Dr. John E. McKeigue to the position of Associate Surgeon in Otolaryngology;
Dr. George F. Reed to the position of Assistant Surgeon in Otolaryngology.

New addresses:—

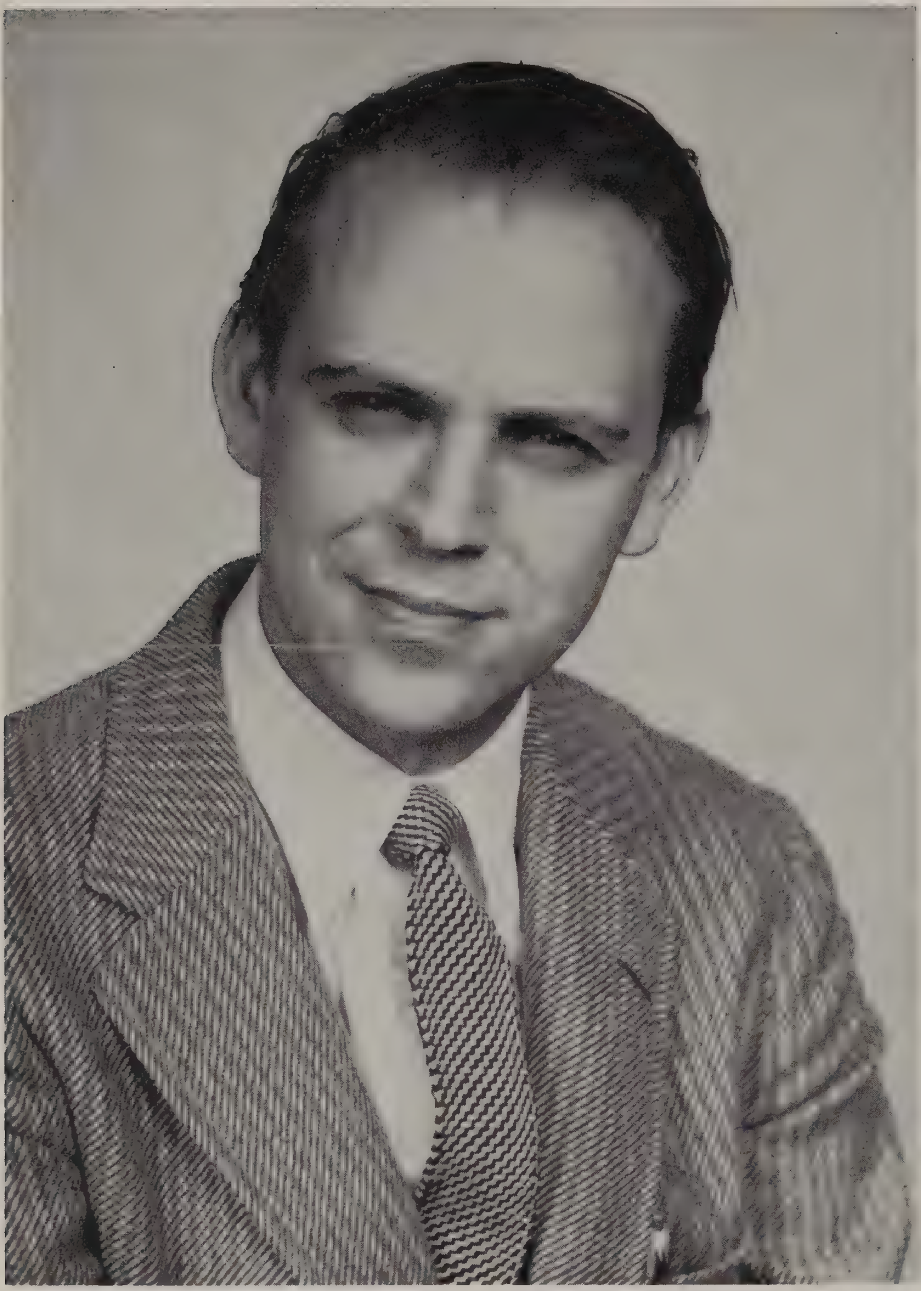
Dr. Leo B. Burgin (*C.M.* 1932), 151 Kent St., Brookline 46, Mass.
Dr. John O. Esslinger (a.r.s. *Or.* 1952), 76 West Adams Ave., Detroit 26, Mich.
Dr. Norman E. Freeman (r.s. *W.S.* 1935), Suite 418, 490 Post St., San Francisco 2, Calif.
Dr. Felix G. Freund (fel. *An.* 1955), 755 Mitre, Lomas de Zamora, Argentina
Dr. Pierre J. Gauthier-Lafaye (fel. *An.* 1953), SP. 58.418, French Forces in Germany
Dr. John H. Kennedy (*S.* 1950), 850 Prospect St., La Jolla, Calif.
Dr. Gordon M. Morrison (*Or.* 1941), 77 San Mateo Drive, San Mateo, Calif.
Lt. Henning Pontoppidan, MC, USAR (a.r.p. *An.*), U.S. Army Hospital, Fort Ord, Calif.
Dr. Kirk H. Prindle (*N.* 1926 & *W.S.* 1928), 23 Baldwin St., San Mateo, Calif.
Dr. Howard Rasmussen (*M.* 1953), University College Hospital, London, England
Lt. Leonard J. Rothfeld, MC, USAR (a.r.p. *An.*), USAH, 8169th AU, Camp Zama, APO 343, c/o Postmaster, San Francisco, Calif.
Dr. Raymond D. Sphire (a.r.p. *An.* 1955), Grace Hospital, 4160 John R. St., Detroit 1, Mich.
Dr. John O. Strom (r.p. *N.P.* 1955), National Hospital, Queen Square, London, England
Dr. Eji Suyama (*S.* 1951), Veterans Administration Hospital, Syracuse, N. Y.
Dr. Malcolm K. Sykes (fel. *An.* 1955), 11 Clystlands, Topsham, Devon, England
Dr. Roger E. Wilcox (*S.* 1949), Beckley, W. Va.

Brief bits:—

On a recent trip to Texas, Dr. Edwin F. Cave delivered two lectures at the meeting of the Texas Academy of General Practice, held in Fort Worth. His subjects were "Injuries to the wrist" and "Derangements of the knee". In Houston, he addressed the Houston Orthopedic Club on the subject "Nonunion of bone", and he was given a luncheon by the Harvard Medical Association of Houston.
At a joint meeting of the Buffalo Surgical Society and the Cleveland Surgical Society, held recently in Cleveland, Dr. Edward D. Churchill gave an address on "The education of the surgeon". M.G.H. was well represented by Drs. Donald M. Glover (*W.S.* 1922), George H. A. Clowes, Jr. (a.r.s. 1948), and Fiorindo A. Simeone (*W.S.* 1936).
Dr. Stanley Cobb gave the Introductory Address at the opening of the Renard Hospital, Washington University, St. Louis, on October 10.
Dr. James H. Currens spoke before the Illinois Academy of General Practice, in Springfield, on October 27. His subject was "Drug treatment of hypertension". He also participated in a panel discussion on the same subject.
Dr. Chester M. Jones has been appointed Chairman of the American Board of Internal Medicine for the year 1955-1956.
Dr. J. Gordon Scannell addressed the Middlesex North District Medical Society on October 19. His subject was "Concepts of cardiac surgery". On November 2 he gave a talk at the Veterans Administration Hospital of Manchester, New Hampshire, on "The practical application of laboratory tests in evaluating patients for cardiac surgery".
Dr. William R. Waddell addressed the Massachusetts Trudeau Society on October 27. His subject was "Cholesterol pneumonitis".

Dr. Edward P. Richardson, Jr. was granted leave of absence last June for the continuance of advanced studies in neuropathology at the University of Giessen with Professors Hallevorden and Spatz, and to visit other neurological centers in Germany. This delightful letter from Dr. Richardson to his family over here has been passed on to us. It was written in October and reads, in part:

We have been doing all sorts of interesting things lately. Perhaps I should mention first our visit last week to Frankfurt, which was an outstanding occasion. While in London, at the Neuropathology Congress, I met Professor Wilhelm Krücke and his wife. He is a very competent neuropathologist, whose work on the pathology of peripheral nerves was mentioned to me by Dr. Raymond Adams even before we left home. He invited us to visit him in Frankfurt when we had a chance. The chance came last week. We drove to Frankfurt (a special trip of about an hour in the autobahn) and were cordially received by Frau Krücke at their home in the southern section of Frankfurt, across the River Main from the central part of the city. They are people of vigorous early middle age, just as friendly and cordial as they could be, with two daughters of about 13 and 15. We had lunch with them there, and in the afternoon Peggy and Clara [Mrs. Richardson and the Richardsons' daughter], with Frau Krücke and her younger daughter visited the excellent Frankfurt Zoo. Meanwhile, Professor Krücke showed me his Institute and some of the fascinating peripheral nerve material he is working on. He is Chief of the Edinger Institute of the Frankfurt University—a neuroanatomical-pathological department which is housed in the Pathology Building of the University Hospital. Ludwig Edinger, for whom the Institute is named, was a famous neuroanatomist of the early part of the century, whose chief contributions were in the field of comparative neuroanatomy. He gathered together in his active life an unparalleled collection of specimens, slides, and literature reprints, all of which are now capably cared for by Professor Krücke—under whom the Institute, after a period of inactivity under the Hitler regime and the war, is again a flourishing research center. Professor Krücke is an unusually fine person, as well as scientist, and he could not have been more friendly to me. He devoted hours of his time showing me the Edinger collection, his own material, and discussing various points as they came up. In the evening, we had dinner at the Krückes', and then were treated to a color-photo show of pictures taken of Professor Krücke recently in England, France, and Belgium. We were comfortably installed for the night in the guest room of the Institute, and the next morning Peggy and Clara went shopping while I spent some more delightful and profitable hours with Professor Krücke. We then took our leave, had lunch in town at a remarkable café where there were innumerable cages and tanks containing fish, parrots, lizards, and even a family of marmosets. Then more shopping, and finally a leisurely trip back to Giessen, during which we had a look at the imposing medieval fortress at Freiberg, with its tall and very handsome tower, and had a quick visit to the fountain court (hot springs) and park at Bad Nauheim. I should have mentioned that while we were in Frankfurt, we visited the Goethe house with Frau Krücke—a splendid example of a prosperous middle-class house of 200 years ago, where Goethe was born and spent the early part of his life. Although destroyed by bombing, it has been perfectly reconstructed and, fortunately, all the interior furnishings were preserved from dam-



No. 55 in a series of Staff photographs

Dr. John D. Stoeckle, Assistant Physician and Chief of the Medical Clinic

age. Clara was particularly interested in some old clocks there which had pendulums and pleasant chimes. Unfortunately, our time was rather limited, so we could get only a quick impression. As you can imagine, the house, together with the appended Goethe museum next door, could well justify many hours of perusal.

Recently, I have made a couple of unusual excursions on my own. First, I was invited by Frau Spatz to attend some of the music festivals in Kassel—an annual event sponsored by people interested in music, for families and similar home groups. Two weeks ago I traveled to Kassel on the train with Dr. Lieper (Professor Spatz's senior assistant) and Liv, the Spatzs' oldest daughter. We were met there by Frau Spatz, who had been attending the previous meetings over the week end, and then went to the auditorium, where we heard some very modern music for voice, and ancient (viols and block flutes) and modern (string and woodwinds) instruments. In the afternoon there was a lecture and demonstration which interested me particularly. This had to do with an attempt to reconstruct brass instruments of the baroque period and earlier, for the purpose of using these with voices and instruments of other types in the way that was customary in those days, apparently. The aim, therefore, was to construct brasses of such characteristics that they would not drown out a solo singer, or block flute group, but would instead blend in and enrich the effect by adding their own tone-color. Thus, we heard and saw trumpets and trombones built according to measurements of some instruments in several museums. The trumpets were equipped with valves, and thus modernized, so that they could be used for practical purposes by players without the specific technique of the Bach trumpet. The trombones had very small bells, and were made with narrow-bore tubing. The mouthpieces, we were told, were likewise somewhat different from those in present use. The result of these modifications was that these instruments were indeed very soft and gentle in tone and not penetrating or assertive. For contrast, there was another group of instrumentalists on the stage who played the modern brass instruments. It was a most interesting comparison. I should think these new-old instruments would have many possibilities for chamber performances and for bass choirs in church services, but they are rather too thin and insubstantial in tone for orchestral purposes. I was not immediately spurred to rush out and buy one of these modified trombones, interesting though they are, but I shall want to keep an eye on future developments.

We spent the night in a Jugenherberge (youth hostel), and that was interesting in itself. Dr. Lieper and I occupied a double-decker bunk in a fairly large, bare room, containing perhaps 15 to 20 such bunks. Some of our ski lodges are very similar. Everything was very simple, but neat and clean and entirely adequate, and we spent a most comfortable night. We returned to Giessen by air the following day.

The other independent trip I made was early last week, with my colleague in the Neuropathology Abteilung, Dr. Spaar. We went to visit Haina, a former monastery which is now a State mental hospital. Haina is perhaps 20 mm. or more northeast of Marburg, at the edge of a vast forest, and has a beautiful situation in the confluence of some small valleys. Its pride is a vast early Gothic church of astounding size and very handsome appearance. When Landgraf Phillipp von Hessen took up the cause of the Reformation, he converted Haina from a monastery to an institution for the sick and the aged. In more recent years it became a mental hospital and is now a very good one, I should say—well run and forward looking. At the same time, it is a monument of great cultural and historic importance, for most all of the old monastery buildings are preserved and in excellent condition. Some of these buildings serve the hospital for wards, library, conference rooms, etc., and have been reconstructed internally in such a way that modern needs are served without destroying the character or effect of the old construction. The church is not used for religious services at present (instead, there is a smaller non-denominational chapel in what was the refectorium), but has been cleaned up inside by removal of unnecessary and disfiguring paint on the roof and walls, and may be used for concerts of religious music.

Yesterday we had a splendid day with our friends the Kellers. We drove to Schiffenberg (the remains of a Benedictine monastery just outside Giessen, where there is a Romanesque church). It was a beautiful afternoon—cool and bracing, but with some pleasant sunshine—and we had a walk in the woods and fields near by. The Kellers have two little girls—one older and one younger than Clara—and the children had a wonderful time together.

This week we are off on another trip, this time to the Pfalz. My friend Engelhardt is giving a lecture there which I want to hear, and afterward we are invited to visit his in-laws in Landau. In another couple of weeks we go to Heidelberg again, and before we leave I hope we shall go to Munich to the Institute there.

We are seriously thinking of staying here for Christmas. The celebration of Christmas in Germany is something so special and unique, and it would be good to have a chance to participate in it—a chance that might never come again. I should think that we would then, a day or two later, return home by plane from Frankfurt. I am determined that we shall all be together again before New Year's day.

* * *

A few weeks ago we happened to see an unpublished poem by Dr. Carl Binger, Consulting Visiting Psychiatrist on our staff. The magic of its symbolism has persisted since then, and we were most grateful to Dr. Binger when, in response to our request to use it in The News, he granted us his permission. Here is the poem:

CHRISTMAS MORNING

The yellow light of sunrise breaks the
white and frosted air.
Across the yellow ice step three white
swans.
Clothed in blue and ermine, crowned with
light,
They move toward the bright East,
Offering the gift of beauty
To the miracle of a new day.

THE NEWS

No. 152 Boston, Mass. January 1956

Ever since "The poliomyelitis story—Massachusetts General Hospital—1955" appeared in the November issue of THE NEWS, letters and telephone calls have continued to come to the Hospital, expressing admiration and appreciation of the role played by the MGH family during the emergency. The following letter from Mr. Thomas Stotler, State Representative of the National Foundation for Infantile Paralysis, Inc. to Mr. Francis C. Gray, Chairman of our Board of Trustees, is an example of what we mean.

> During the worst polio epidemic in the history of Massachusetts, it was our privilege to have played a small role with the great Massachusetts General Hospital in helping to meet the emergency. The efforts of your hospital in facing this problem will always stand out in our memory as an example of the highest tradition of medicine.
>
> Between the months of July and October we were in daily contact with many of the staff of the Massachusetts General Hospital. The devotion of everyone to the welfare of the polio patients was impressive to us and reflected the greatest credit to them, the Massachusetts General Hospital, and the medical profession.
>
> Based upon our experience in working with your institution in the past and during this polio epidemic in particular — we believe that nothing in the field of public health is impossible when great institutions such as yours work hand in hand with a volunteer health agency such as ours.

* * *

DEDICATION OF THE NEW ALBRIGHT AND JONES LABORATORIES

An informal dedication of Dr. Fuller Albright's and Dr. Chester M. Jones's laboratories took place on November 8, on the fourth floor of the Bulfinch Building.

At twelve o'clock a group of twenty-five friends of Drs. Albright and Jones, who came by special invitation of the Trustees, met briefly in the Trustees' Room and then went directly to the laboratories. This small group was selected from former patients and personal friends, outside the Hospital family, who had helped to support research at the Hospital. However, it was arranged that members of the Hospital family could meet with the invited guests in the laboratories, where the current research program was explained by members of the staff.

At one o'clock a luncheon was given by the Trustees in the Doctors' Dining Room. Because of the limited capacity of the room, only those guests who had come from out of town could be invited to the luncheon. Mr. Ralph Lowell, Chairman of the Building Committee of the Board of Trustees, presided. Dr. Dean A. Clark, General Director, spoke briefly about the history of the work of Drs. Albright and Jones in the Hospital; and Dr. Walter Bauer, Chief of the Medical Services, outlined the scientific development of their research program in the Hospital.

After the luncheon, the laboratories were open to visitors during the afternoon.

BIOLOGICAL LABORATORY

The Biological Laboratory, perhaps better known as the Albright Lab, had its beginning in a corner of the Chemistry Laboratory in 1929 (then located on the top floor of the Bulfinch Building). Dr. Fuller Albright had just returned from a year's study with professor Jacob Erdheim in Vienna (who, according to Dr. Albright, knew more about bone structure, normal and abnormal, than any other person) and wanted to pursue his long-standing interest in calcium and phosphorus metabolism. Dr. James Howard Means, then Chief of Service, offered Dr. Albright a small space next to the Chemistry Laboratory with the understanding that Dr. Albright would in return supervise the tests then being carried out there. Dr. Means said he appreciated the fact that this laboratory was not satisfactory because of the run-down state of that section of the building, but he hoped, although he could not promise, that within two years it would be remodeled. (He did not intimate that the previous occupant of the quarters had been much troubled by the leaky pipes overhead.) Actually, 25 years were to elapse before the Chemistry Laboratory was moved to new quarters and Dr. Means's hope of a better laboratory was realized.

While he was abroad, Dr. Albright had witnessed the laying of an important cornerstone in endocrine investigation, as Professor Bernhard Zondek of Berlin had injected pituitary glands from animals into infantile rats, and almost over night had turned these rats into sexually mature rats. Almost simultaneously, Dr. Phillip E. Smith and Dr. Earle Engle performed the same experiment in the United States. Shortly thereafter, Zondek and Aschheim devised the first biological test for pregnancy. These studies, showing that the pituitary contained hormones which controlled the development of the male and female gonads, opened up new fields in endocrinology. Dr. Albright took the first train to Berlin to see these new developments.

In the fall of 1929, the Biological Laboratory of the Massachusetts General Hospital was ready, and the rabbit test for pregnancy was undertaken. At that time the technical help consisted of Dr. Jessie Reed Cockrill and Mrs. Elizabeth Cloney Thompson. Dr. Perry C. Baird, Jr., who was interested in pituitary physiology, also assisted at this time. Research concerning the glands of internal secretions was under way in the Bulfinch Building.

When Dr. Joseph C. Aub left the Massachusetts General Hospital in 1929 to go to the Huntington Memorial Hospital, he left behind a well-organized project to study the ins and outs, the doings and undoings of calcium in the body. The study would have naturally fallen into the hands of Dr. Walter Bauer had he not been committed to a large program to study arthritis. Dr. Albright and those associated with him took over this project and started to work. Papers soon began to appear which were the results of the efforts of Dr. Aub and Dr. Bauer (who had not lost their interest in the work in which they had participated), Dr. Marian W. Ropes, and Miss Elsie Rossmeisl.

In 1934, Dr. Hirsh W. Sulkowitch arrived and took over some of the supervision of the Chemistry Laboratory. He contributed "Sulkowitch solution", a valuable aid to the clinician in estimating calcium concentration in the urine; and he, with Dr. Albright, also concocted "Solution G" which is used in dissolving certain types of kidney stones.

About this time, as an outgrowth of the work on parathyroid physiology, the problem of kidney stones had begun to occupy the attention of the group. Dr. J. Dellinger Barney, then Chief of Urology, obtained a small amount of money for the study of kidney stones. The study led in several directions. All stones are not made of the same thing. It soon became apparent that the problem had to be worked out separately for each kind of stone. Research technician Robin Murdock started the job of determining the chemical composition of stones. The Albright Laboratory has stones from all over the world, the present serial number being 3627. Dr. Howard I. Suby, at that time a Resident in Urology, showed great interest in this work. The reason for this interest became more apparent when Robin and Howard announced their engagement and formed the research team of Suby and Suby, whose laboratory work was subsequently interrupted by the onset of World War II and later by the arrivals of Eric, Janet, John, and Sara. Also interrupted by the war was the work of Dr. Max Rosenheim, who had come over from England. Miss Eleanor Dempsey then joined the group. She was appointed "temporarily" in 1939 and is still working in the Albright Laboratory. Indeed, she is the moving force of the laboratory, being able to take over any of the various procedures in time of necessity. In the stone analyses she is ably assisted at present by Mrs. Mary Cabral. All this time metabolic studies had been in full swing on Ward 4, and Mrs. Leo Gordon (Esther Bloomberg) had been doing the meticulous determinations of calcium and phosphorus in body fluids which were so important a feature of the data upon which the Albright group stood or fell at the "spring meetings" in Atlantic City.

While these investigations were being carried out, Dr. Patricia H. Benedict (Patricia H. Smith) had busied herself with a method for testing one specific hormone from the anterior lobe of the pituitary. This test measures in the urine the follicle-stimulating hormone (FSH). It tells whether the pituitary is making too much (as is the case in the menopause), the right amount, or too little of this particular hormone. Mrs. Elizabeth Dodge assisted with this test. The test has been invaluable in sorting out errors in hormone production, especially in distinguishing between a primary gonadal dysfunction and a gonadal dysfunction secondary to pituitary disease. An example of the value of the test is found in the elucidation of the hormone pattern in ovarian agenesis, a condition associated with short stature and absence of ovaries. This has been considered to be due to a lack of growth hormone of the pituitary to stimulate growth, and a lack of FSH to stimulate the ovaries. The FSH test showed not too little FSH, but too much; the pituitary was doing its best to make an ovary, which was not there, function. Among those who applied this measuring stick was Dr. Russell Fraser from England. He also demonstrated the value of intravenously administered insulin in the diagnosis of endocrine diseases, and still found time to be interested in ovarian agenesis.

Dr. Anne P. Forbes assisted Dr. Russell Fraser with the 17-ketosteroid assay; they were joined by Mrs. Gordon Donaldson (Elizabeth Craighead). The number of 17-ketosteroid determinations done by this laboratory, as of November 9, 1955, is 18,323. This test added another item to the armamentarium for evaluating endocrine function of both the male gonads and the female and male adrenal (androgenic hormone).

At this point nearly everyone in the laboratory took part in another project related to adrenal function, namely the measurement of the growth of axillary hair measured in milligram per axilla per week.

Miss Grace Griswold had come to this laboratory late in 1937 to do pregnancy tests, and soon became responsible for all the biological tests. Dr. Harry L. Klinefelter and Miss Griswold then began to improve the FSH test and soon the hormonal disorder in a condition in males characterized by infertility and enlargement of the breasts (gynecomastia) was recognized; later came the sorting out of the various types of eunuchoidism, both male and female.

With the coming of World War II, metabolic investigation into the effect of hormones on wound healing took first priority. Dr. Edward C. Reifenstein, Jr. supervised these studies on Ward 4. Miss Dorothy Bryant, who had come in 1940, assisted in this work. Over the next four years, Dr. Frederic C. Bartter and Dr. Laurance W. Kinsell took part. Miss Evelyn Carroll arrived in 1946 and first took over the 17-ketosteroid determinations, later the calciums when Miss Bryant became Mrs. Ralph Nodine.

The physical state of the laboratory had indeed worsened by this time. Miss Griswold was found late one afternoon giving the mice their last injection of the day, standing with hat and coat on, underneath an umbrella, to keep the rain off because of a leaking roof overhead. Temporary repairs were made, and the work was carried on.

As the war drew to a close, Dr. Philip H. Henneman began to be actively interested in the Ward 4 projects; and Dr. Harold E. Elrick and Miss Jeanne Brenner began a survey of laboratory methods then in use, with an eye to improvement of certain techniques. With the war over, colleagues from all parts of the world were free to travel here and spend some time with us. Among these were Dr. Gilbert Gordan and Dr. Felix Kolb, both from California. From England came Dr. Paul Fourman, Dr. Victor Coxon, and Dr. John B. Dawson. Dr. Nils Tornblom came from Sweden. More recently, Dr. Martyn Lloyd, from England, Dr. W. P. U. Jackson, from South Africa, and Dr. Helen Thomopoulo, from Greece, did investigational work in the laboratory.

By this time it became evident that the day of reckoning had arrived as far as the state of disrepair of the laboratory was concerned: the hoods no longer carried away irritating fumes, and metal parts of apparatus began to corrode. One could only guess as to what might be going on in one's lungs and trachea! So, at long last, plans were afoot for remodeling. Dr. Henneman worked for one year with Mr. Carleton N. Goff on the plans. One of the major items of importance which at one time occupied an entire morning of Dr. Jones's and Dr. Albright's time was where to locate the ladies' lounge. Dr. Marc Moldawer tried to do some work in the laboratory when the repairs began, but soon his space was needed for storage of equipment. He joined Dr. Roger Melick and Dr. Robert Nielsen in marking time during the waiting period.

Present personnel, in addition to those already mentioned, includes George Boyce, who makes the charts and drawings which are the envy of other investigators who do not have a "George", Evelyn Carroll (calcium and phosphorus and other chemical determinations related to research), Jane Claffey (17-ketosteroids), Mrs. Irma Gramer (FSH tests), and Mrs. Velta Maisins (pregnancy tests).

With the occupation of the new quarters in the spring of 1955 and the coming of Dr. Maurice M. Pechet, there has been an upsurge in enthusiasm to explore new methods.

One of the big improvements which has come out of the rebuilding of the laboratory is the moving of the offices along beside the laboratory.

One final sad note must be faced: the laboratory is too small.

Patricia H. Benedict, M.D.,
Assistant in Medicine

✓ GASTRO-INTESTINAL RESEARCH LABORATORY

Organized work in investigation of the physiology of the digestive tract, as it relates to function or disease, started at this Hospital with Dr. George R. Minot, in whose laboratory I worked for several years from 1920 on. During these early years, attention was primarily directed toward the study of bile pigments in the duodenal contents and in the blood in various hemolytic anemias. From such a start, studies were further carried out on specimens of duodenal contents obtained from patients with various types of disease, particularly diseases of the biliary tract, such as cholelithiasis, cirrhosis, and conditions involving the pancreas. Until the advent of oral cholecystography, the use of duodenal intubation, with a careful examination of the sediment of duodenal contents for crystalline and cellular elements, helped appreciably in the diagnosis of gallstones and in evaluating the various phases of what is now called infectious hepatitis. During these early years, investigations were also made of the activity of various pancreatic enzymes in an effort to provide information concerning existing pancreatic disease — pancreatitis or carcinoma. With the advent of the Graham-Cole method of cholecystography in 1928, the need for study of the duodenal contents in the diagnosis of gallstones diminished rapidly and since that time has been used only in a selected group of patients. Such work, however, is still being carried out in this laboratory, in which duodenal contents are studied for evidence of calculus formation, based on the finding of abnormal quantities of bilirubin or cholesterol crystals, in patients with recurrent biliary colic following cholecystectomy. A recent review of this method of study by Mrs. Gladys Drummey in my laboratory and Dr. Marshall K. Bartlett indicates that analysis of the duodenal contents can provide very valuable diagnostic help in ruling in or out the presence of gallstones in a very high percentage of cases. Inasmuch as radiological methods of study in this group are relatively unsatisfactory, this method still constitutes an important diagnostic procedure.

Following the departure of Dr. Minot to the Huntington Memorial Hospital, the laboratory in its various phases has been under my supervision until the present time. In the early 1920's, still using gastro-intestinal intubation as a method, a very detailed and careful study was made of the phenomenon of referred pain, with particular reference to the entire alimentary tract. Tubes with inflatable balloons were introduced into the esophagus and followed throughout the entire length of the gastro-intestinal tract under fluoroscopic control. By balloon inflation, pain was produced at will and recorded, both as to the nature and quantity of the pain and its more or less precise location. The various usual and rather bizarre types of referred pain were satisfactorily mapped out from observations at different levels in the tract, and these studies have proved of real clinical use in localizing or helping to localize various types of digestive tract disease. In addition, the significance of the symptom "heartburn" was fully studied, and it was found that substernal or high epigastric distress characterized by a distinct burning quality was more frequently due to smooth muscle tension in the lower end of the esophagus than to the degree of acidity that had previously been supposed to be the sole cause of the symptom. These particular studies on pain were carried out with the help of Dr. Wyman Richardson.

During this same period of time, initial studies were made upon the response of gastric acid secretion in ulcer patients and in patients with achlorhydria and achylia. One important point that was recognized was that the secretion of sodium was an important fact in gastric secretion. At the same time, working with Dr. Monroe A. McIver, it was possible to show that losses of large amounts of gastric juice or duodenal juice, which included bile and pancreatic secretions, involved important losses of base as well as acid elements.

During the 1920's the laboratory was located in the basement of the Bulfinch Building. Subsequently, in about 1930, the investigative work was done in a larger laboratory on the first floor of the Bulfinch Building, which was shared with Dr. Walter Bauer. At this time two types of studies were initiated: one directly connected with postoperative nutritional edema, which was frequently encountered in this Hospital and elsewhere; and the second on the behavior of plasma fatty acids after epinephrine injection in patients with liver disease. Postoperative nutritional edema entirely analogous to that noted in the Hospital wards was produced in animals by various measures, which resulted in a lowering of serum albumin and was precipitated or accentuated by the concurrent administration of generous amounts of saline solution. These findings clearly demonstrated the necessity of limiting the amount of sodium chloride and water in postoperatively depleted individuals and in patients with chronic suppurative processes with resulting albumin deficits. The significance of sodium as such was not recognized at this time. This work was carried out with the help of Mrs. Frances B. Eaton and the surgical assistance of Dr. James C. White.

Work on plasma fatty acids, done with the help of Mrs. J. W. Fish, using a method devised by Dr. James L. Stoddard, revealed the fact that normal rises in plasma fatty acids after epinephrine injection did not occur in serious liver disease, and that this finding alone might be of some prognostic significance in patients with hepatic disorders. The method was time-consuming and very difficult, but at the time the work threw some further light on one of the many little-understood liver functions.

A very important series of observations was made by Dr. Benjamin V. White in the later 1930's, studying particularly the effect of irritants and drugs affecting the autonomic nervous system upon the mucosa of the rectum and rectosigmoid. These observations provided very important information as to functional changes occurring in the bowel secondary to disturbances of the autonomic nervous system, and were referable not only to the production of symptoms in "mucous colitis" but to a clarification of many of the factors that are operative in the presence of organic disease of the digestive tract. They were entirely comparable to observations on the stomach originally made by Beaumont and recently by Drs. Harold G. Wolff and Stuart Wolf.

Further collaboration with surgical colleagues continued in the later 1930's, and from 1939 to 1942 work was being done with Dr. Marshall K. Bartlett, with the technical assistance of Miss Anne Ryan, on experimental wound healing, both in animals and in human beings, as it related to vitamin C content. This confirmed the work of Lanman and Ingalls published in 1937, and we were able to demonstrate that in human beings tensile strength in operative wounds was distinctly less in the presence of a serious deficiency of vitamin C. This was particularly true in the presence of local wound sepsis, but was also true in clean wounds. It was shown that the sulfonamides did not affect the tensile strength of such scar tissue.

In 1940 the laboratory unit was moved to the fourth floor of the Bulfinch Building, in the Allen Street wing of the medical section. At this time many of the routine tests of liver function were being worked out to determine their clinical usefulness.

At the end of the war and for several years thereafter, Dr. Wade Volwiler worked in the laboratory. His studies were directed primarily toward diseases of the liver. One of the most important aspects of his work was the establishment of needle biopsy as a proper diagnostic procedure in establishing the identity of various types of liver disease. Still more important was the demonstration by him that "fatty liver" or fatty changes in so-called alcoholic cirrhosis could be reversed by adequate dietary therapy. He demonstrated clearly that these reparative changes could occur simply by the use of a diet containing sufficient calories and sufficient protein, without the addition of supplements of vitamins or lipotropes.

Following the war, work was carried out by Mrs. Drummey, Miss Ryan, and me on the nutritional disturbances subsequent to subtotal gastrectomy. These disturbances in certain patients were of sufficient importance from the point of view of loss of weight and strength to initiate detailed observations on food absorption, to determine, if possible, why the maintenance of weight was a continuing problem for such patients. It was found that many of these patients had very striking steatorrhea, with losses of large amounts of split fat in the stools. Dr. Perry J. Culver helped to carry on this work, and by means of careful balance studies demonstrated that this loss of fat without concomitant loss of protein and carbohydrate explained in part the nutritional problem. The underlying mechanism which prevents normal fat absorption still awaits clarification. These investigators also demonstrated clearly that fat absorption in the digestive tract in various conditions, such as sprue, pancreatic insufficiency, and the post-subtotal gastrectomy syndrome, could be helped by the use of an emulsifying agent.

Dr. Culver also carried out a long series of studies on the existence of specific vitamin deficiencies in hospital patients. From his studies it became evident that real vitamin deficiencies were of much less importance than was currently believed and that prolonged intensive vitamin therapy was totally unnecessary in most instances.

As a result of the studies on faulty fat absorption, work has been continued in subsequent years and is being carried on very actively at the present time in relation to the entire subject of intestinal absorption. The sprue syndrome has been investigated very carefully by means of balance studies by a group of research fellows and others working in the laboratory, particularly Dr. Warren Point, Dr. Culver, Dr. John A. Benson, Jr., Dr. Geoffrey N. Chandler (Leeds, England), and Dr. Stuart Ragland, Jr. These studies have concerned themselves with absorption defects in sprue patients, in Whipple's disease, in pancreatic disease, and in malnutrition states after anastomotic surgery. The striking effect of corticosteroids in improving intestinal absorption in patients with sprue and with Whipple's disease was clearly demonstrated by the group, with valuable clinical assistance from Dr. Daniel S. Ellis. Dr. Ragland, with help from Dr. Fritz Lipmann and Dr. Morris Soodak, has done important work on intracellular enzyme activity, based on material obtained from the mucous membranes in human beings and in animals. His studies are directly related to the work on intestinal absorption. Dr. Chandler and Dr. Benson, using a method previously modified by Dr. Point, made a careful investigation of the site of optimal absorption of olive oil from the small intestine of rats. They clearly demonstrated that the site of maximum absorption was at or near the jejunoileal junction. In the latter part of the work they were helped by Dr. Jacques Gagnon (Montreal), who also collaborated with the Department of Radiology in the introduction of the new method of intravenous cholangiography, using Biligrafin as a radio-opaque dye.

During 1953 and 1954, another field was entered with the work of Dr. Howard M. Spiro. This work concerned the study of gastric pepsin secretion as reflected in the secretions of the stomach and the blood pepsin levels observed under varying conditions. Dr. Spiro was able to confirm the fact that high blood pepsin levels were associated with the majority of patients with duodenal ulcer. He also studied, with Miss Anne Ryan, the behavior of blood pepsin after total gastrectomy and in patients with true achylia gastrica, as well as the effects of subtotal gastrectomy and parathyroidectomy in patients with hyperparathyroidism. Similar studies were carried out in patients with benign stricture of the esophagus, indicating two possible groups of patients, one with and one without a so-called "ulcer diathesis".

Beginning in 1948, in conjunction with the Department of Anesthesia and the Department of Surgery, a series of studies was undertaken by Chester W. Fairlie, Jr., Dr. Arthur French, and Dr. W. Carl Ebeling. These studies related primarily to the effect on hepatic function of anesthesia and operative procedures. They showed clearly that any operative procedure temporarily interfered with a variety of liver functions in normal individuals as well as in patients with hepatic disease. The differences in degree of hepatic disturbance did not bear any demonstrable and proved relation to the type of anesthesia, whether it involved the use of ether, cyclopropane, or, apparently, prolonged spinal anesthesia. The summation of medication, anesthesia, and operation, however, was clearly shown to have immediate postoperative effects on hepatic function, and this was particularly true in the group of patients undergoing shunt surgery for portal hypertension. With the very close cooperation of Dr. Robert R. Linton, patients were carefully studied before and after surgical intervention, and by such measures a great deal of valuable information was obtained, not only as regards variation in hepatic function, but also in relation to the choosing of proper operative risks among patients falling into this particular group. The clinical evaluation of the results of shunt surgery in Dr. Linton's patients has been followed in great detail by Dr. Daniel Ellis.

At the present time, with the rebuilding and re-equipment of the laboratory, which has been brought about by the generosity of the Trustees and by some individual gifts, work on intestinal absorption is continuing, and studies are currently under way by Dr. Lawrence Warbasse on the effect of motility on intestinal absorption. Dr. Munir Shamma'a (Beirut, Lebanon) is studying the behavior of magnesium, with particular reference to hepatic disorders. Balance studies are being carried on in many of the phases of absorption on patients in the Mallinckrodt Ward, and newer techniques are being developed for a continuation of the investigation of various facets of the entire problem of small bowel physiology.

During the past fifteen years, Dr. William P. Chapman has been working more or less with my group, with particular reference to pain thresholds and variations in gastric motility in relation to newer antispasmodic drugs, morphine derivatives, and so forth. He has been assisted in this work by Dr. Eirwyn N. Rowlands (London, England) and by others among the research fellows who have been with the group since the war.

During the thirty or more years during which this laboratory and the gastro-intestinal group have been active at the Hospital, special mention should be made of the fact that the closest collaboration has been present at all times between various members of the Surgical Service and our own group. Many studies have been carried on in direct collaboration with the surgeons, as noted above, and invaluable advice and help have been obtained from and freely given by various individuals throughout the Hospital. Over the last twenty years, approximately, a great deal of the success of the laboratory work has been due to the constant and devoted effort of Mrs. Gladys Drummey and Miss Anne Ryan, who are active members of the group. At the present time the immediate direction of the laboratory is in the hands of Dr. Perry J. Culver and Dr. John A. Benson, Jr.

Chester M. Jones, M.D.,
Visiting Consultant in Medicine

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Dr. Joseph S. Barr, Chief of our Orthopedic Service, has been elected Honorary Fellow of the British Orthopaedic Association.

* * *

The Los Angeles Southeast Kiwanis Club received the top 1954 award of Kiwanis International for community service, for sponsoring the Southeast Los Angeles Crippled Children's Clinic. This Clinic is under the direction of Dr. Harvey E. Billig, Jr. (*Or.* 1935).

* * *

Mr. Elliot L. Richardson, a Boston attorney, has been appointed Secretary of the Corporation of the Massachusetts General Hospital, thus becoming the thirteenth Secretary of the Corporation since the founding of the Hospital in 1811. He succeeds Mr. Reginald Gray, who has served the Hospital in this capacity since 1930.

Mr. Richardson is a graduate of Harvard, where he received his A.B. and LL.B. degrees. He served in the Medical Department of the Army in World War II, and was awarded the Bronze Star and Purple Heart. He was President of the Harvard Law Review in 1947, and was Law Clerk to Judge Learned Hand from 1947 to 1948 and Law Clerk to Justice Felix Frankfurter from 1948 to 1949. He was formerly Assistant to Senator Leverett Saltonstall. He is associated with the law firm of Ropes, Gray, Best, Coolidge, and Rugg. He is a resident of Brookline, where he is a member of the Board of Library Trustees and was formerly a Town Meeting member.

Mr. Richardson's appointment brings into close association with the Massachusetts General another member of a family long connected with the Hospital. He is the son of the late Dr. Edward P. Richardson (who began his affiliation with the Massachusetts General as an Intern in 1906 and subsequently advanced as a member of the Staff until he finally became Chief of the West Surgical Service); and the grandson of Dr. Maurice H. Richardson and Dr. Frederick C. Shattuck (both long associated with the Hospital—the former reaching the rank of Surgeon-in-Chief, and the latter that of Senior Physician). A brother, Dr. Edward P. Richardson, Jr. is Assistant Neurologist and Neuropathologist at the Massachusetts General; and another brother, Dr. George S. Richardson, is Assistant in Surgery at the Hospital.

The Board of Trustees, at their meetings on October 28 and November 25, voted:

To accept the resignation of Dr. Mary S. Coley as Assistant Resident on the Children's Medical Service, as of July 1.

To appoint:

Dr. Anthony C. Allison as Assistant Physician and Assistant Pathologist;

Dr. Sylvia A. Davies as Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Albert C. England, Jr. as Assistant in Neurology, beginning October 1, 1955;

Dr. Robert S. Harper as Third Assistant Resident in Pathology, beginning July 1;

Dr. Philip H. Leiderman as Resident in Psychiatry, beginning July 1;

Dr. Robert C. Lincoln as Assistant Dental Surgeon;

Dr. Jan-Henrik Probst as Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Judson G. Randolph as Second Assistant Resident in Surgery, beginning March 1;

Dr. Paul S. Russell, Jr. as First Assistant Resident in Surgery, beginning November 1, 1955, and as Resident in Surgery, beginning January 1, 1956;

Dr. Theodore van Ravenswaay as Second Assistant Resident in Pathology for one year, beginning July 1.

At their meetings during November, the General Executive Committee voted:

To promote:

Dr. Norman W. Andrew to the position of Resident in Anesthesia, effective November 1, 1955;

Dr. Wayne M. Hebertson from the position of Assistant Resident to that of Resident in Neurology for one year, beginning July 1.

To reappoint:

Robert Crokaert, D.Sc. as Research Fellow in Biochemistry, through April 30;

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1, 1955;

Dr. Nicholas J. Fiumara as Graduate Student Assistant and Clinical Fellow in Dermatology for one year, beginning October 1, 1955;

Theodore O. Macklin, A.B. as Research Fellow in Psychology for one year, beginning July 1, 1955;

Dr. Raymond D. Manchester as Clinical and Research Fellow in Dermatology for one year, beginning October 1, 1955.

To appoint:

Mary D. Albert, Ph.D. as Research Fellow in Medicine, effective as of November 1, 1955;

Dr. Philip W. Baker as Graduate Student Assistant and Clinical Fellow in Dermatology, as of September 1, 1955;

Dr. Immanuel Bitsch-Larsen as Graduate Student Assistant in Surgery, for the period November 8, 1955 through January 8, 1956;

Dr. Gerald E. Davidson as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;

V. V. Koningsberger, Ph.D. as Research Fellow in Biochemistry, beginning December 1, 1955;

Audrey S. Mishler, B.S. as Fellow in Clinical Psychology, beginning September 1, 1955;

Dr. Lakshana Punyasiri as Graduate Student Assistant in Surgery, for the period November 1, 1955 through April 30, 1956;

Dr. Hsien Rin as Clinical and Research Fellow in Psychiatry, beginning on or about December 1, 1955;

Dr. Milton B. Smith as Graduate Student Assistant in Surgery, effective as of November 22, 1955;

Dr. John D. States as Clinical Fellow in Orthopedic Surgery (Poliomyelitis), for the period January 1 through June 30.

Mr. John H. Dobbins has been appointed Assistant Purchasing Agent. He started his duties last October 10.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

DESPITE OUR CONTINUOUS APPEALS FOR CLASSIFICATION OF MATERIAL, THIS MONTH RANKS AS THE LOWEST IN THAT RESPECT SINCE WE STARTED THIS COLUMN. ONLY 4 OF THE TITLES SUBMITTED INCLUDED THAT INFORMATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Randall, W. C., and Kimura, K. K.
The pharmacology of sweating.
Pharmacol. Rev. 7:365-397.

General Medicine

Burrage, W. S., Ritchie, A. C., Mansmann, H. C., Jr., Irwin, J. W., and Russfield, A. B.
The use of cortisone and hydrocortisone in allergy.
Ann. Int. Med. 43:1001-1018.

Harwood, R.
Diabetic acidosis: Prevention and treatment.
Diabetes 4:398-401.

Gynecology and Obstetrics

Fennell, R. H., Jr., and Graham, R. M.
A serial-section study of the cervix in cases with positive vaginal smears and negative biopsies: A report of ten cases.
Cancer 8:310-314.

Graham, J. B., and Graham, R. M.
Antibodies elicited by cancer in patients.
Cancer 8:409-416.

Graham, J. B., and Wolfson, E. P.
The follow-up of cancer patients.
Cancer 8:872-874.

Liu, W.
Vaginal cornification in women with uterine cancer.
Cancer 8:779-784.

Meigs, J. V., and Liu, W.
Surgical and pathologic classification for cancer of the cervix: An evaluation of 250 cases.
Surg., Gynec. & Obst. 100:555-558.

Laboratory Science

Lever, W. F., and Waddell, W. R.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. VII. Effects of intravenously administered fat on the serum lipids.
J. Invest. Dermat. 25:233-248.

Matoltsy, A. G.
In vitro wound repair of adult human skin.
Anat. Rec. 122:581-587.

Neurology, Neurosurgery, and Psychiatry

Farnsworth, D. L.
Emotions and learning.
Harvard Ed. Rev. 25:95-104.

Farnsworth, D. L.
Emotions & the curriculum.
Harvard Alum. Bull. Oct. 22:119, 122-125.

Lougheed, W. M., Sweet, W. H., White, J. C., and Brewster, W. R.
The use of hypothermia in surgical treatment of cerebral vascular lesions: A preliminary report.
J. Neurosurg. 12:240-255.

Orthopedic Surgery

Barr, J. S.
Spondylolisthesis.
J. Bone & Joint Surg. 37-A, no. 4:878-880.

Miscellaneous

Butler, A. M.
Presentation of the John Howland Medal and Award of the American Pediatric Society to Dr. James L. Gamble.
A.M.A. Am. J. Dis. Child. 90:483-486; acceptance by Dr. Gamble: 486-490.

A member of our Board of Consultation asked us the other day if titles of articles or books written by members of that Board are eligible to appear in this column. Our reply was an enthusiastic YES.

BIOGLETS

Dr. Stephen E. Hedberg, Intern in Surgery — born in Boston, Massachusetts, November 17, 1929; attended Phillips Exeter Academy, 1944-48; Harvard College, Class of 1952; M.D., Harvard Medical School, 1955; married; two sons; home: 16 Barbara Road, West Newton, Massachusetts.

Dr. Geraldine M. Peiffer, Assistant Resident in Anesthesia — born in Hammond, Indiana, November 18, 1923; B.S., St. Francis College, Fort Wayne, Indiana, and Indiana University, 1945; M.D., Loyola Medical School, Chicago, Illinois, 1949; Intern, Little Company of Mary Hospital, Chicago, Illinois; private general practice for 5 years; home: Hammond, Indiana.

Dr. Albert L. Rosenthal, Assistant Resident in Dermatology — born in New Bedford, Massachusetts, July 25, 1926; B.S., Tufts College, 1946; mathematics teacher, High School, Fairhaven, Massachusetts, 1946-47; M.D., Tufts Medical School, 1951; Intern, Rhode Island Hospital, Providence, Rhode Island, 1951-52; Assistant Resident in Surgery, Rhode Island Hospital, 1952-53; military service: Captain, USAF, stationed in New Jersey, Alabama (School of Aviation Medicine), and Dallas, Texas, 1953-55; married; one son; present address: 1408 Commonwealth Avenue, Brighton, Massachusetts.

Dr. Charles P. Summerall, III, Intern in Medicine — born in Washington, D.C., September 9, 1929; A.B., Harvard College, 1951; M.D., Harvard Medical School, 1955; home: Belmont, Massachusetts.

Dr. Paul M. Veazey, Intern in Children's Medicine — born in Kendallville, Indiana, June 8, 1929; A.B., Oberlin College, 1951; M.D., Western Reserve University, Cleveland, Ohio, 1955; married; one son.

Dr. James T. Wheeler, Intern in Medicine —born in Abilene, Texas, February 28, 1931; B.S., Baylor University, Waco, Texas, 1951; M.D., Johns Hopkins Medical School, 1955; Pediatric Clerkship, Guy's Hospital, London, England, 1955; home: Abilene, Texas.

MASSACHUSETTS EYE & EAR INFIRMARY

The fall meetings of the New England Oto-Laryngological Society and the New England Ophthalmological Society took place at the Infirmary on November 16. Both societies held clinical sessions in the morning, and the afternoon was devoted to the presentation of papers.

Dr. Frederick T. Hill of Waterville, Maine, Dr. John S. Lewis of New York City, Dr. Anderson C. Hilding of the University of Minnesota, and Dr. Moses H. Lurie, Dr. George F. Reed, and Mr. David B. McClosky of the Infirmary staff participated in the afternoon session of the Oto-Laryngological Society.

Speakers at the Ophthalmological Society meeting included Dr. Taylor R. Smith (Associate Pathologist at the Infirmary), Dr. George B. Corcoran, Dr. Alston Callahan, Dr. Hugh C. Donahue (Associate Surgeon in Ophthalmology at the Infirmary), and Dr. Hugh L. Ormsby.

Dr. William W. Montgomery was appointed Assistant in Otolaryngology by the Executive Committee on September 12. Dr. Montgomery has also been recently named to the staff of the Harvard Medical School as an Assistant in Otology.

Dr. William P. Beetham participated in the Sixth Postgraduate Course, November 10 and 11, at the State University Medical Center, Syracuse, N. Y. He gave three lectures, whose subjects were: "Keratopathies associated with lacrimal secretion", "Ocular changes in endocrine diseases", and "Diabetic proliferating retinopathy".

Dr. Richard B. Chapman addressed the monthly meeting of the Parents of Blind Children at the Perkins School for the Blind in Watertown, on November 17. Dr. Chapman, one of the founders of this group, spoke on the use of oxygen for newborn babies and the strides made in the prevention of blinding eye diseases in this group of children.

No. 56 in a series of Staff photographs
Dr. Fuller Albright—Physician

No. 57 in a series of Staff photographs
Dr. Chester M. Jones—Consulting Visiting Physician

Dr. Robert K. Abraham, from the Institute of Ophthalmology, London, England, will be working in Dr. W. Morton Grant's office until June. Prior to his work in London, Dr. Abraham studied at the Kresge Eye Institute in Detroit, Michigan.

Dr. Charles J. Rife was attached to the Howe Laboratory before he started his residency this month.

Dr. David G. Cogan and Dr. Toichiro Kuwabara spoke on "Aberrant lipogenesis in the corneal explant" at the Harvard Medical Society symposium on lipoproteins and atherosclerosis, on December 13.

The following votes were passed at a meeting of the Executive Committee of the Infirmary, held on October 17:

To grant Dr. Knud K. Dreisler leave of absence for one year, effective September 1, 1955, for special study in Europe.

To appoint:

Dr. Adolfo Correia Branco as Resident in Otolaryngology, as of October 1, to replace Dr. Achira Sakudo;

Dr. Alfred W. Scott as Assistant in Ophthalmology, on completion of his residency, November 1;

Mr. Charles T. Wood to the position of Assistant Director, to replace Mrs. Wayland.

At a meeting of the Executive Committee, held November 21, the following appointments were made:

Dr. Peter Beck — Assistant in Ophthalmology

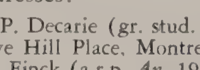
Dr. Alan S. Freemond — Fellow in Ophthalmology

Leave of absence was granted to:

Dr. Calvin M. Cerrato, Assistant Surgeon in Otolaryngology, for one year;

Dr. S. Forrest Martin, Assistant Surgeon in Ophthalmology, for three months, beginning November 1, 1955.

In a very roundabout way the editor of The News recently heard of an unusual and outstanding tribute that was paid to Miss Anita B. Mangiaracine at the Alumnae Day ceremonies held at Radcliffe College last June. For her notable work in the professional field since her graduation, an honorary Phi Beta Kappa award was conferred upon Miss Mangiaracine. The following citation accompanied the award: "Miss Anita B. Mangiaracine, as Bacteriologist at the Massachusetts Eye and Ear Infirmary, through industry and perseverance has developed bacteriological techniques indispensable to the practice of ophthalmology and otolaryngology."



New addresses:—

Dr. Leandre P. Decarie (gr. stud. a. *M.* 1955), 5383 Grove Hill Place, Montreal, Canada

Dr. Albert J. Finck (a.r.p. *An.* 1949), 39 Somerset Rd., Brookline 46, Mass.

Dr. Mark R. Knapp (a.r.p. *An.* 1955), 135 North Bluff, Wichita, Kan.

Dr. Lowell W. Lapham (res. fel. *N.P.* 1955), Institute of Pathology, 2085 Adelbert Rd., Cleveland 6, Ohio

Dr. Alberto Mazzoleni (gr. stud. a. *M.* 1955), Beth Israel Hospital, 330 Brookline Ave., Boston 15, Mass.

Dr. J. H. Thomas Rambo (*Otolar.* 1948), 535 Park Ave., New York 21, N. Y.

Dr. Marvin D. Siperstein (a.r.p. 1955), Department of Internal Medicine, University of Texas Medical School, Dallas, Tex.

Dr. Wilder Tileston (*E.M.* 1900), Box CC, Carmel Valley, Calif.

Brief bits:—

Dr. Benjamin Castleman conducted the Tenth Annual Tumor Day Slide Seminar at the Albert Einstein Medical Center in Philadelphia, on November 15.

On November 3, Dr. Robert R. Linton left by Pan American Airways to see a patient in Montevideo, Uruguay, at the request of the Uruguayan Embassy here in Boston and our State Department in Washington. After seeing the patient and advising treatment, Dr. Linton was back in Boston on November 7. Modern air travel has certainly shrunk our world!

At the New England Cardiovascular Society meeting on November 14, Dr. J. Gordon Scannell presented a paper written by Dr. Edward F. Bland, Dr. William R. Brewster, Jr., and Dr. Scannell. The subject of the paper was "Successful removal of a myxoma from the left atrium".

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VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

The next teas for our visitors from other lands will be held on January 26 and April 2. It is hoped that the Staff Wives and the visitors will make a note of the dates and attend these pleasant occasions.

Recorded music was played in the Chapel, Monday through Friday, for the two weeks before Christmas. Members of the Music Committee took turns attending to the placing of proper holiday music on the recording machine.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 153 Boston, Mass. February 1956

CHILDREN'S MEDICAL SERVICE

OUT-PATIENT CLINIC — A PROGRESS REPORT

This brief report on the doings of the Children's Medical Out-Patient Service concerns: first, things done during the past ten years that we believe are essential to improving the quality and efficiency of out-patient care and teaching; and second, things that haven't been done that need doing.

In 1945 a staff physician with part-time salary (provided by hook and crook) was appointed to direct the Out-Patient Clinic. The first appointee was Dr. Gertrud Reyersbach, who was succeeded by Dr. Frederic Blodgett. This staff physician, in daily attendance during clinic hours, makes sure that each "old" patient sees his own clinic doctor, assigns each new patient to a doctor, sees his own patients, acts as consultant to staff and students or aids in obtaining proper consultations, calls the staff's and students' attention to interesting patients, goes over records at end of clinic to see that they are complete and that information obtained and treatment given or recommended are promptly given to referring physicians by telephone or letter, consults with the nurse in charge and social workers about operation of the clinic, and directs the secretary and volunteer workers in performance of their functions.

In 1948 an Out-Patient Resident receiving salary and board was appointed. The clinical experience incident to the care of ambulatory patients effectively bridges the gap between in-patient residency training and pediatric practice. This year of residency has been approved for training by the American Board of Pediatrics. The opportunities and responsibilities include seeing his patients, assisting the staff physician in charge in performing the functions enumerated above, and in the afternoons attending either ward rounds, well baby clinic, rheumatic fever clinic or endocrine-metabolic clinic. In addition, he rotates with other Assistant Residents of the Children's Medical Service nights, holidays, and week ends. His presence daily in the clinic throughout the year has greatly increased the efficiency and continuity of the clinic's health and medical care.

Also in 1948 Out-Patient Service rounds from 12:00 - 1:00 each Wednesday were inaugurated. Here selected cases that cover diseases or problems not encountered with in-patients are presented to the full-time, out-patient and resident staffs, medical students, and social service and nursing staffs.

In 1950 a preview session to review the history and discuss current problems, needs, and therapy of the patients coming to the endocrine-metabolic clinic was inaugurated. This is held in the Children's Medical Service Conference Room on Fridays, 12:45 - 2:00 P.M., prior to seeing the patients in the Out-Patient Clinic at 2:00 P.M. The senior staff of the endocrine-metabolic unit, interested staff physicians, research fellows, house staff, and graduate and undergraduate students attend. Each week one of the research fellows of the unit, having assembled and abstracted records of patients to be seen, presents the history of each. Following discussion by the group of the problems, needs, and therapy, each patient is then designated to be seen in the clinic by his or a particular physician. This preview session provides an opportunity for excellent teaching, permits a single physician to promptly apply the knowledge of the group to the care of the patients, and to obtain further consultation at the clinic from any member of the group should the need arise. As in other clinics, findings and treatment are promptly reported to referring physicians, responsibility for future treatment by referring physician or clinic being determined according to the former's preference.

In 1952 a full-time salaried secretary was appointed who not only manages the distribution of the records of each clinic, but also checks them for completeness at the end of each clinic, writes letters dictated by the director of the clinic and the out-patient resident, and keeps track of the return and new appointments of patients.

In 1953 the appointment system that we had introduced several years before really became effective, covering 80% of out-patient visits of new and return patients.

In 1953 we also made a beginning in improving consultations by consultants in psychiatry and convulsive disorders coming to the Children's Out-Patient Clinic and there seeing the patients with the pediatrician and students, graduate or undergraduate.

In 1954 such consultants in the Children's Out-Patient Clinic became available daily for dermatology, Tuesdays and Fridays for allergy, Thursdays for hematology and by arrangement with Dr. William Quinby for surgery. And this year, consultations in neurology are available daily in the Children's Clinic.

Also in 1954 we again started, after several years' lapse, having fourth year students participate in out-patient care. We and, we think, they like it.

Perhaps mention should be made that there is now provision whereby patients whose incomes exceed out-patient eligibility may be seen by staff physicians in the offices available to the staff of the Children's Medical Service and Child Psychiatry Unit.

Finally, this past year after years of effort, appointments were and are made not only for a particular day but also for a specified hour and for a particular doctor.

And what is needed?

First, those things that require no construction:

The collaboration of all Services, this one included, in providing consultations where the patient and attending physician are. This will avoid shunting the patient to a consultant at another clinic, usually on another day, to be seen without benefit of the presence of the referring physician. In many instances a consultation at the Children's Clinic with the pediatrician will complete in one visit the medical care that all too often takes three visits under the shunting system. The on-the-spot consultation will also provide far more education for pediatrician, consultant, and graduate or undergraduate student. Though there are difficulties to be overcome, of which inertia and traditional conformity are not the least, the benefit to patient, pediatrician, and consultant may be such as to overcome them, if only the start is made. Staff, out-patient attendance, and interest could even boom.

The provision from the Department and/or Service budgets of an appropriate half-time salary for the physician in charge of the Out-Patient Service would seem essential for each of the 8 or 9 major divisions of Out-Patient Services, if the Hospital is to make a serious effort to improve its out-patient teaching and the efficiency and quality of its service to ambulatory patients. The approximate cost of $35,000 per year for such salaries would appear small in proportion to the benefits obtained, including an economy per medical service rendered. Under the present undirected shunt system the cost of service obtained here may exceed that incurred in obtaining care through the facilities of private practice.

Improvement in the manner in which out-patients pay for x-rays and laboratory tests.

Reappraisal of patient's ability to pay after the costs of his illness, particularly chronic illness, can be appraised. Not infrequently the patient's ability to meet the costs of medical care are determined at the first visit by an individual who does not have the information on which to base an estimate of ultimate costs, even if the admission complaint or referral note indicates the correct diagnosis.

Means by which patients coming to the M.G.H. for medical care, whose incomes disqualify them for "clinic" care, may obtain the benefit of M.G.H. medicine at the M.G.H., the fees for service to such patients accruing to the staff of the Services that provide the care.

And last but not least, the physical needs:

More waiting and playroom space.

A room for Out-Patient Rounds.

Better clinical laboratory facilities where doctors carry out procedures.

Better toilet facilities for collecting specimens and for ordinary use.

An Out-Patient X-ray Service that is geared to provide prompt examination of the ambulatory patient who should be in the Hospital for only a few hours and should not have to return another day for x-rays, with all the inconvenience, loss of patient and parent time, extra expense and delay in obtaining needed medical care.

Of course, when the Massachusetts General Staff Associates are established in the revamped jail (with its beautiful old cupola replaced, with colorful print curtains accentuating the lovely windows now masked by bars, and with the dignity and grace of its architecture a fitting symbol of the healing arts housed therein) and when a new building for ambulatory patients is functioning, all these things and more too will be accomplished. But let's hope that some of the things that need to be done will have been done before then; for the more we learn how best to function with the physical plant at hand, the better will we know what to do when we are blessed with the bounty that will make all our wishes for the better serving of our patients come true.

Allan M. Butler, M.D.,
Chief of Children's Medical Service

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The 1956 *Modern Medicine* Award for Distinguished Achievement was presented to Dr. Stanley Cobb by the Board of Editors "in recognition of outstanding contributions to the progress of medicine as exemplified by a lifetime of leadership in neurology and psychiatry and his studies of the relation of neurophysiology to clinical disease".

Dr. John L. Wilson (*E.S.* 1940) was awarded the Order of the Cedars by the Lebanese Government, at the graduation exercises of the American University of Beirut last summer. It is a very rare honor for a non-Lebanese to receive this decoration. Dr. Wilson has been serving as Professor of Surgery in the American University of Beirut, and the award was primarily in recognition of his service to the fire victims last winter. We are grateful to Mrs. Claude E. Welch for this information.

Dr. Mary A. B. Brazier was elected a Fellow of the New York Academy of Sciences last December 1. The citation reads: "Election to Fellowship is a distinguished honor, conferred on a limited number of members, who, in the estimation of the Council, have done outstanding work toward the advancement of Science".

The Board of Trustees, at their meetings on December 23, 1955 and January 6, 1956, voted:

To grant Dr. Richard L. Rovit, First Assistant Resident in Neurosurgery, leave of absence for six months, beginning January 1.

To promote:

Dr. Dagoberto Sosa from Clinical Fellow to Second Assistant Resident in Neurosurgery, beginning January 1.

To appoint:

Dr. Adelbert Ames, III, as Research Associate in Neurosurgery, for the period September 1, 1955 through August 31, 1958;

Dr. Robert C. Coe as Assistant in Surgery, effective January 1;

John D. McLean, D.S.C. as Assistant Podiatrist on the Orthopedic Service, effective December 1, 1955;

Dr. Elliott L. Mancall as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1;

Dr. Otto Mollestad as Visiting Anesthetist pro tempore, for the two-month period beginning January 7;

Dr. Lloyd H. Smith, Jr. as Chief Resident in Medicine for one year, beginning January 1;

Dr. Madan M. Singh as Resident in Medicine, for a period of six months, beginning January 1.

At their meetings during December, the General Executive Committee voted:

To promote:

Dr. Roy J. Barry from Second Assistant Resident to First Assistant Resident in Radiology, beginning January 1;

Dr. Herbert B. Locksley to the position of Senior Resident on the Neurosurgical Service, as of January 1.

To extend the appointments of:

Dr. Richard A. Mayo as Assistant Resident in Orthopedic Surgery, for six months, beginning January 1;

Dr. Christopher H. Wood as Clinical Fellow in Medicine, from December 1, 1955 through February 29, 1956.

To reappoint:

Dr. Winnifred P. Chase as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. William B. Clapp as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Albert I. C. DeFriez as Clinical Assistant in Medicine, effective as of December 15, 1955;

Dr. Theodor F. Hueter as Research Fellow in Physics, assigned to Neurosurgery, for one year, beginning January 1;

Dr. John W. Irwin as Clinical and Research Fellow in Medicine for one year, beginning January 1;

Dr. Irving H. Itkin as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Louis Kunian as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Donald P. Pederson as Assistant Resident in Anesthesia for one year, beginning April 1;

Dr. Raymond J. Savignac as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. John T. Sharp as Clinical and Research Fellow in Medicine for one year, beginning December 1, 1955;

Morris Soodak, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning January 1;

Dr. Gordon DuF. Winchell as Clinical Assistant in Medicine for one year, beginning January 1.

The General Executive Committee also voted:

That Dr. John F. Kelly be officially appointed as Podiatrist at the Hospital, under the Orthopedic Service;

That Dr. Alfred J. Luessenhop return to the Neurosurgical Service as First Assistant Resident, having completed his term of service in Neuropathology as of December 31, 1955.

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ST. LUKE'S HOSPITAL — TOKYO

For many reasons St. Luke's Hospital, Tokyo, should be of interest to members of the MGH family, and the most compelling of these is that both institutions are dear to the heart of Henry Knox Sherrill. He it was who, together with Dr. Hirotoshi Hashimoto, the Director of St. Luke's, cooked up the plan of sending me to Tokyo to visit this famous hospital. Dr. Hashimoto visited Massachusetts General Hospital shortly after World War II—some of you may recall him—and Bishop Sherrill was in Tokyo the autumn of 1953. The project now to be described resulted from their meeting at that time and place.

As I understood it, what they wanted me to do was to pay a goodwill professional visit to St. Luke's, make friends with its staff, exchange ideas with them, observe the scope and character of their activities, and give thought to the possibilities of future development of the hospital. Accordingly, since I cannot refuse anything Henry Sherrill asks me to do, I took off for Tokyo on June 13, 1955—happily for me, accompanied by my wife and my 19-year-old stepdaughter, Beth Butler. We made the entire trip by air, out by Northwest Airlines, with stopover at Seattle and fuelling stops at Anchorage, Alaska, and Adak in the Aleutians, and back by Pan American, with four days at Honolulu *en route*. All this flying was very comfortable, without mishap, and we enjoyed it very much. The northern route is 1000 miles shorter, but the southern is far pleasanter.

Striking the Japanese coast at Sendai in late afternoon of June 16, we had good views of the plains and mountains of Japan and a brief glimpse of Mount Fuji, silhouetted against the setting sun. Arrived at Tokyo's fine new airport at Haneda, our first and unexpected greeting came over the loud-speaker as we were in customs, from Mr. M. Kametani, M.I.T. 1925, President of the MIT Club of Japan! He presently turned up in the flesh and invited me to the next dinner of the Club. In short order we were welcomed next by the St. Luke's people, Dr. Hashimoto and Messrs. Henry F. Budd and J. Earle Fowler. They were all most cordial and whisked us off to the fabulous Imperial Hotel, which was to be our home for the next two months. Without much delay we started a pattern for our activities, which carried through our entire stay. Briefly, it was for me to spend most of my time at St. Luke's, with side trips to various other hospitals, medical schools, and laboratories. Mrs. Means and Beth quickly made friends—both Japanese and American—and proceeded to get for themselves rich experience in delving into the culture—social, artistic, and educational—of Japan. On week ends we visited some of the great sights —Nikko, Kamakura, and Hakone, and made one tour of a week to Gifu, Toba, Nara, and Kyoto. We were greatly aided in our sight-seeing by advice from our friends, Mr. Kojiro Tomita of the Boston Museum of Fine Arts, and Mrs. Tomita, and also by that wonderful book, *The enduring art of Japan,* by the late Langdon Warner.

But for me the chief objective was St. Luke's. This hospital was founded in 1900 by a zealot, Rudolf Bolling Teusler, a graduate of the Medical College of Virginia, as a medical mission of the Episcopal Church in the United States. Starting literally from scratch, Dr. Teusler, by sheer devotion and indomitable persistence, carried this project through the first thirty-four years of its distinguished institutional career, and died in the present superb building, of coronary thrombosis, on August 10, 1934. His final concern for the hospital was expressed in the words, "Let the work go on." It has done so.

Today's edifice, as it now stands, a 300-bed modern hospital, was opened in 1933. It represents about two-thirds of the architect's original plan. One more wing remains for completion. Preceding the erection of this building, St. Luke's had sustained a series of disasters beginning with complete demolition in 1923 of the then hospital by the greatest earthquake Japan had had for years, and two years after that, the destruction by fire of a temporary wooden structure which had been built after the earthquake. These tragic setbacks did not daunt Dr. Teusler. They merely stimulated him to raise vast sums of money, and to broaden the scope of his operations. The concept of a great medical center was born, and St. Luke's was well on the road to becoming just that when another blow struck in 1941 in the shape of the Pacific War and the confiscation of the property by the Japanese government. St. Luke's, however, continued to function as a civilian hospital until the allied occupation began in September of 1945. Then it was commandeered by the U.S. Armed Forces and became Tokyo Army Hospital, which it still is today. In the meantime, however, the civilian hospital staff have carried on under the aegis of the National Episcopal Church of Japan—the Nippon Sei Ko Kwai—in a set of wooden one-story pavilions next door. It was to this institution, now known as St. Luke's International Hospital, that I paid my visit.

What I found in operation was a voluntary, non-profit, general hospital of about 150 beds, with a nearly full-time professional staff, a good training program for interns and residents, but without university or medical school affiliation. It was also operating a polyclinic type of O.P.D. which cared for 600 patients per morning, on an average, six days in the week. This total service is approximately half that which St. Luke's permanent facility was previously providing, but is a very creditable job under existing circumstances for all that.

A very charming and excellent physician, head of the medical service, Dr. Shigeaki Hinohara, was appointed by Dr. Hashimoto to be my immediate guide, counsellor, and friend, and he performed that duty with the utmost efficiency and kindliness throughout my stay. Each week he provided me with my program of activities at St. Luke's—ward rounds, inspection tours, conferences, and interviews with a variety of key people. Altogether, an excellent opportunity was afforded me to see the whole operation and evaluate its quality.

We had round table conferences on such topics as endocrinology and medical education, and we started a thyroid clinic patterned after that of the M.G.H. Within the month (November) I have heard from Dr. Hinohara that it is rolling well and will continue. The cross section of clinical material, both in the thyroid clinic and in the hospital as a whole, is remarkably similar to what we have in the United States. They have more tuberculosis than we, but they are treating it in very modern fashion, and the mortality from it has been greatly reduced. I did see one patient with a condition which I have not seen for many years at the M.G.H.—acute syphilitic meningitis—a classical picture of it. This patient had all the fixings—stiff neck and Kernig, high lymphocytic white count in the spinal fluid, etc. He entered practically in coma, but made a very rapid recovery under full doses of penicillin.

I met the whole St. Luke's family twice at garden parties in the hospital grounds. The first, on June 20, was in honor of Colonel Charles L. Kirkpatrick, M.D. (retiring C.O. of Tokyo Army Hospital), Mrs. Kirkpatrick, and the Meanses. The second, on July 28, was in honor of the Right Reverend H. W. B. Donegan, Episcopal Bishop of New York, who was making a professional tour of Japan. Both occasions were very delightful and gave an opportunity to make many acquaintances among the staff, trustees, advisory committee, and friends of the hospital. St. Luke's is now entirely Japanese-owned, with its board of trustees corresponding to our own, of which the presiding bishop of the Sei Ko Kwai, Bishop Hinsuke Yashiro, is the chairman. He is the Sherrill, both of St. Luke's and of Japan. On the advisory committee, which is largely a prestige-giving body, are many distinguished persons. Of this committee at the garden parties I met such people as Admiral Nomura, who was Japanese Ambassador in Washington at the time of Pearl Harbor; Mr. Mikimoto, grandson of the famous "Pearl King"; and H.I.H. Prince Takahito Mikasa.

At the first garden party it became apparent that Colonel Kirkpatrick had been a good friend of St. Luke's. He had made many friendly gestures to its staff and was greatly liked by them. He was eager for the Japanese staff to regain its own facility, and I am sure he did all he could to promote this good cause. He told me of his high regard for the professional work at St. Luke's, and it is interesting in this connection that he had a number of young Japanese civilian doctors on his own intern staff in the Army Hospital.

Perhaps the brightest jewel in St. Luke's crown is the College of Nursing. Dr. Teusler started this way back in 1902, and it has been the prototype for all western style nursing in Japan. At present it has the status under the Ministry of Education of an independent junior college. As Miss White, its principal, said to me, "It is a university school of nursing without any university attachment." In medical social service, St. Luke's also pioneered. It did not start a school, but did start a department, with American trained workers as early as 1929. In my further jaunts about Tokyo, arranged and conducted by Drs. Hashimoto and Hinohara, I visited such places as the Imperial University of Tokyo, its medical school, and its University Hospital. I gave a clinical lecture there to the third and fourth year students, complete with patient, interpreter, and so forth. All Japanese are now taught English in school, and I discovered that many of the students were understanding me, through the expedient of making a wisecrack now and then and observing the number who laughed. I also gave on another day, in the same place, a lecture on the thyroid to the Endocrinological Society of Japan and the faculty.

I visited other hospitals and medical schools. At the First National Hospital, Tokyo, I gave another thyroid lecture, and at the Second National I found a very impressive radioiodine program. At the Tokyo Red Cross Hospital we found a very fine College of Nursing, patterned after St. Luke's. Of the private universities, Keio seemed tops. It has a very ambitious building program which includes a fine modern teaching hospital, part of which is completed.

Other interesting medical and educational places visited in Tokyo included the Institute of Public Health, founded in 1938, largely with funds supplied by the Rockefeller Foundation. I had the opportunity to see this through the courtesy of Dr. Oliver R. McCoy, its Chief Consultant. This institute, I am sure, has been the most important center from which public health work has spread through the country. It is operated under the Ministry of Welfare of the Japanese Government.

Two other universities visited were Rikkyo, or St. Paul's, an episcopal church university, now Japanese-owned and under the Sei Ko Kwai, and Japan International Christian University. The latter is quite new, with ambitious dreams for the future which include a medical school. Dr. Hashimoto is a member of its University Council, and Dr. Hinohara is Professor of Hygiene and University Physician. In Boston we find Mr. Robert F. Bradford a member of I.C.U.'s supporting foundation in the United States.

In my further wanderings I lectured on the thyroid at the Prefectural University Medical School at Gifu. I visited the medical school and hospital of the University of Kyoto, where I saw the Asiatic practice of having the family abide in the hospital to care and cook for the patient!

Dr. S. Nishizaki, Director of St. Barnabas' Hospital, Osaka, was extraordinarily kind to us. He had studied gynaecology, obstetrics, and female urology in Boston shortly after World War I, and had abundant recollections of the Boston Lying-in Hospital, the Free Hospital for Women, and particularly of the late Dr. Granville Crabtree. His obstetric and gynaecology hospital, St. Barnabas', is a beehive of activity and is giving, as far as I could judge, very good and modern care. Not only did he personally conduct us through Nara, Kyoto, and Osaka, but he arranged for my benefit at Osaka a round table discussion on the use of radioisotopes in medicine, which was attended by about 30 doctors, some of medicine interested in isotope work, while others were physicists of one sort or another. There was no language barrier; most of them spoke English and, also, we had an excellent interpreter, thoroughly bilingual, Dr. Yasushi Nishiwaki, biophysicist of the Osaka City University. Dr. Nishiwaki is working on problems of the Bikini fall-out and of *No. 5 Fukuryu Maru.*

At the request of Dr. Shields Warren, I paid a short visit to Hiroshima to observe the work of the ABCC research unit there. Dr. Robert H. Holmes, the Director, was most cordial and showed me everything that is going on, chiefly a long-term study of 6000 persons exposed to radiation at the time of the bombing 10 years ago. At present I gather that the most definite findings are the cases of leukemia, and of cataracts, but Dr. Holmes is confident that in subsequent years evidence of effects on maturation and the rate and quality of the aging process will become apparent.

From the aeroplane on which I went to Hiroshima I got some glimpses of the beautiful Inland Sea of Japan, but Mrs. Means and Beth, who independently went to the extreme western end of it at Beppu and returned by ship to Kobe, really saw it in all of its full beauty. It awakened memories of cruising Penobscot Bay on the old steamboat *J. T. Morse.* One not infrequently finds views in Japan that remind one of the coast of Maine, but there are great differences also, particularly as far as scenery goes, in the far greater abruptness of the mountains of Japan.

But let us return to the future possibilities of St. Luke's. Before I left the United States, Mr. Francis B. Sayre, who had recently spent a year in Japan working for the Episcopal Church, said to me that he hoped St. Luke's would become the greatest medical center in far eastern Asia. I agreed that this is a noble objective, but pointed out to him that no hospital can attain to such stature without a university medical school attachment. St. Luke's is already doing a good job of graduate teaching with its intern and resident training program, but the presence of undergraduate medical students and teaching and research programs must be added if it is to reach the top echelon of medical centers. Dr. Hashimoto and the staff of St. Luke's understand this fully and greatly desire it, but how it is to be accomplished is the $64 question.

It should be pointed out that modern medicine in Japan has been primarily German in pattern—authoritarian and didactic—Geheimrat medicine, in fact. In none of the existing medical schools do students get to the bedsides of patients in a responsible role as they do with us. At St. Luke's, on the other hand, although the professional staff is entirely Japanese, the spirit of American medicine is all-pervasive. The soil is ready for the implantation of American style clinical teaching with the focus on the patient instead of exclusively on the disease. Because of these dissimilarities I think it very doubtful that a union of St. Luke's and any of the existing Japanese medical schools can be consummated. It is my belief that only through the establishment of a new medical school along American lines, for which St. Luke's would provide the clinical departments, can the dream of a truly great medical center be realized. Dr. Hashimoto has for some years visualized all this. It would be a happy thing if St. Paul's University and St. Luke's Hospital, both under the Sei Ko Kwai, could be united in such an undertaking. There are, however, very great obstacles, financial and other. International Christian University, also, if it succeeds in developing a good medical school, might look upon the teaching facilities of St. Luke's as a godsend.

There are those who look with dismay at the establishment of yet another medical school in Tokyo, there being already about a dozen, but the point is that the new school visualized in conjunction with St. Luke's could constitute a pilot demonstration of a newer type of medicine which might spread through the country from that focus, as has public health work already done from the Institute of Public Health. There are the considerations, also, that there is always room for something better, and that Tokyo is an enormous and rapidly growing city. In all probability it will before long be the largest in the world.

Finally, it should be remembered that the decision lies entirely with the Japanese—they own and control all the institutions involved. However, I am convinced that the will exists at St. Luke's to do something of the kind I have indicated; and if this is correct, all the moral, financial, and other help we can give them from the United States, the better. First, St. Luke's must get back its own building from our Army. That should be soon. Then there will be a long developmental period. During that time, one thing that a place like the M.G.H. can do is to send over visiting doctors, either for relatively short periods, as in my case, or perhaps younger men would go for a year or so. They would, I am sure, be welcome, and they would have a rewarding medical experience.

James Howard Means, M.D.,
Member of Board of Consultation

New addresses:—

Dr. Irving P. Ackerman (*M.* 1951), E & M Clinic, Out-Patient Bldg., University Hospital, Ann Arbor, Mich.

Dr. Leland C. Brannon (r.s. *N.S.* 1955), U.S. Naval Hospital, Philadelphia, Pa.

Dr. Robert L. Brent (*C.M.* 1955), Dept. of Biophysics, Graduate School of Walter Reed Hospital, Washington 12, D.C.

Mr. James U. Casby (res. fel. *An.* 1955), Eastern Pennsylvania Psychiatric Institute, Philadelphia, Pa.

Dr. Richard Chute (*E.S.* 1929), Veterans Administration Hospital, 150 S. Huntington Ave., Jamaica Plain, Mass.

Dr. Lincoln D. Clark (*M.* 1948), Veterans Administration Hospital, Fort Douglas Station, Salt Lake City, Utah

Dr. George H. A. Clowes, Jr. (a.r.s. 1948), Cleveland City Hospital, Cleveland, Ohio

Dr. George Eisenman (res. fel. *An.* 1955), Eastern Pennsylvania Psychiatric Institute, Philadelphia, Pa.

Dr. Richard H. Eppright (a.r.s. *Or.* 1955), 5426 Windswept Lane, Houston 19, Tex.

Dr. Richard A. Field (*M.* 1950), Washington University School of Medicine, St. Louis, Mo.

Dr. James A. Flagg (a.r.p. *An.* 1955), 16 White Plains Rd., Trumbull, Conn.

Dr. Boy Frame (*M.* 1949), Henry Ford Hospital, 2799 W. Grand Blvd., Detroit, Mich.

Dr. Thomas R. C. Fraser (res. fel. *M.* 1940), Postgraduate Medical School, Hammersmith Hospital, Du Cane Rd., London, Eng.

Dr. Willy Hijmans (clin. & res. fel. *M.* 1955), Dept. of Rheumatology, University Hospital, Leyden, The Netherlands

Dr. Francis M. Ingersoll (*W.S.* 1939), 226 Marlborough St., Boston, Mass.

Dr. Verner S. Johnson (sr. r.s. *Or.* 1955), 27 Elm St., Worcester, Mass.

Dr. Edward Karamanoukian (a.r.p. *D.* 1955), En face du Cine Dianna, Aleppo, Syria

Dr. Glenn A. Langer (*M.* 1955), 195 W. Central Ave., Pearl River, N.Y.

Dr. Zwi Laron (r.p. *C.M.* 1955), Children's Hospital, Philadelphia, Pa.

Dr. Joseph L. Lewis (*C.M.* 1936), 25 Grant St., Waltham 54, Mass.

Dr. Robert C. Lincoln (*Dn.* 1953), 160 Longwood Ave., Boston, Mass.

Dr. George D. Ludwig (a.r.s. 1950), Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia 4, Pa.

Dr. Marc P. Moldawer (clin. & res. fel. *M.* 1955), c/o Dr. Young, Dept. of Biochemistry, Cambridge University, Cambridge, Eng.

Dr. Donald O. Rudin (res. fel. *An.* 1955), Eastern Pennsylvania Psychiatric Institute, Philadelphia, Pa.

Dr. Alfred W. Scott (a. *Oph.*), 5 Bay State Rd., Boston, Mass.

Dr. Kadhim H. Shubber (clin. fel. *Or.* 1956), Director of Orthopedic Dept., Royal Hospital, Baghdad, Iraq

Dr. Lamar Soutter (a.r.s. 1941), 80 E. Concord St., Boston, Mass.

Dr. Bernard B. Stone (r.s. *N.S.* 1955), 65 Elm St., Worcester, Mass.

Dr. Iwao Uyeda (*C.M.* 1950), 2425 Geary Blvd., San Francisco 15, Calif.

Dr. Albert Van Eerde (a.r.p. *An.* 1955), Paterson General Hospital, Paterson, N.J.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Contribucion de la anestesia al exito de la cirugia toracica.
Separata de Septimas Jornadas Argentinas de Cirugia Toracica, 1-35.

Beecher, H. K.
Hazards in the field of anesthesia.
Imprimerie Medicale et Scientifique (Soc. An.), 1-19.

Dermatology

Lever, W. F.
Hauterscheinungen bei lipoidosen.
Dermat. Wchnschr. 132:1086-1094.

General Medicine

Chapman, E. M., and Maloof, F.
The use of radioactive iodine in the diagnosis and treatment of hyperthyroidism: Ten years' experience.
Medicine 34:261-321.

General Surgery

Cope, O., Hopkirk, J. F., and Wight, A.
Metabolic derangements imperiling the perforated ulcer patient. I. The dehydration and fluid shifts.
A.M.A. Arch. Surg. 71:669-681.

McDermott, W. V., Jr., Wareham, J., and Riddell, A. G.
Treatment of "hepatic coma" with L-glutamic acid.
New England J. Med. 253:1093-1102.

Sewell, W. A., Koth, D. R., and Huggins, C. E.
Ventricular fibrillation in dogs after sudden return of flow to the coronary artery.
Surgery 38:1050-1053.

Wight, A., Hopkirk, J. F., DeMuylder, E., and Cope, O.
Metabolic derangements imperiling the perforated ulcer patient. II. Derangements and shifts of intracellular electrolytes: The need for potassium.
A.M.A. Arch. Surg. 71:839-852.

Otolaryngology

Kelemen, G.
Acute poliomyelitis of the mother, with aural lesions in the premature infant.
A.M.A. Arch. Otolaryng. 62:602-610.

Kelemen, G.
The pharyngeal orifice of the eustachian tube in the aged.
Eye, Ear, Nose & Throat Monthly 34:809-812.

Neurology, Neurosurgery, and Psychiatry

Matarazzo, J. D.
Comprehensive medicine: A new era in medical education.
Human Organization 14:4-9.

Matarazzo, J. D., Guze, S. B., and Matarazzo, R. G.
An approach to the validity of the Taylor Anxiety Scale: Scores of medical and psychiatric patients.
J. Abnorm. & Social Psychol. 51:276-280.

Matarazzo, J. D., Ulett, G. A., and Saslow, G.
Human maze performance as a function of increasing levels of anxiety.
J. Gen. Psychol. 53:79-95.

Books

Bakay, L.
The blood-brain barrier with special regard to the use of radioactive isotopes.
Springfield, Ill., Charles C. Thomas.

[This is the last issue of THE NEWS in which 1955 titles will appear.—*Editor*]

MASSACHUSETTS EYE & EAR INFIRMARY

Three doctors from the Infirmary will attend the Philadelphia Sectional Meeting of the American College of Surgeons on February 13-16. Dr. LeRoy A. Schall will speak on "The surgical management of malignancies of the paranasal sinuses". Representing the eye service will be Dr. Paul A. Chandler, who will speak on "Glaucoma surgery" as part of the Symposium on Recent Advances in Ophthalmological Surgery, and Dr. Charles L. Schepens, who will speak on "The present status of surgery of retinal detachment".

On January 1, Dr. Kevin Hill of Belgrade Lakes, Maine, began his research work in the Howe Laboratory. Dr. Hill, who will be here for one year, is the first recipient of the Eye Research Fellowship which was established by the Lions Club in honor of Dr. Edwin B. Dunphy, Chief of Ophthalmology at the Infirmary.

Among the eye specialists from the United States who attended the Fifth Pan-American Conference of Ophthalmology, held in Santiago, Chile, January 8-15, were Dr. William Stone, Jr. and Dr. Ichiro D. Okamura. Dr. Stone spoke on the implants used most commonly at the Massachusetts Eye and Ear Infirmary, and the surgical techniques used in secondary implants. Dr. Okamura presented a paper written by Dr. Charles L. Schepens on "The peripheral retina: Anatomy and clinical observations".

Mr. Alan Feldman of the Winthrop Foundation will be giving two courses at local colleges this month. He will teach "Diagnostic hearing testing" at Boston University, and "The nature, management, and special education of the exceptional child" at the Graduate School of Education of Northeastern University.

Mrs. Mary B. Doehler spoke on "Esophageal speech" at Emerson College in January. Mrs. Doehler conducts the Esophageal Voice classes for the laryngectomy patients at the Infirmary. She is also the secretary of the International Association of Laryngectomies.

Brief bits:—

Dr. Earle M. Chapman addressed the staff of the Beverly Hospital recently. His subject was "Recent advances in diseases of the thyroid".

Dr. Oliver Cope attended the Conference on Burns at Brooke Army Medical Center in San Antonio last November. On December 1, Dr. Cope delivered the AOA lecture at Baylor College of Medicine in Houston.

Dr. Richard H. Sweet and Dr. Grantley W. Taylor will participate in the Philadelphia Sectional Meeting of the American College of Surgeons, February 13-16. Dr. Sweet will speak on "Total gastrectomy, using the abdominothoracic approach", and in the Symposium on Lesions of the Esophagus he will talk on "Achalasia of the esophagus: Report based on 50 cases". In the Symposium on Surgery of the Neck, Dr. Taylor will lecture on "Radical neck dissection".

Dr. William A. Tisdale won honorable mention in the recent international photography contest for his colored picture of a mother and child in Korea. A black-and-white copy of his photograph appeared in the January 7 issue of *Saturday Review*. A copy of the picture is on the bulletin board near the foot of Treadwell stairs.

We were very glad to receive this interesting letter from Dr. Frederic W. Rhinelander (*E.S.* 1937 and *Or.* 1938), bringing us up to date on his activities and giving us a new address for him:

> I was in California for eleven years — three years in the Army, and eight years practising Orthopedics in San Francisco and San Rafael. That included teaching at the School of Medicine, University of California. While there are many MGH graduates in San Francisco, I was the only one in San Rafael, as you indicated in your letter. While I was in California, I believe I paid a visit to the M.G.H. at least once a year.
>
> Private practice in San Rafael became so hectic that my time for the University became regrettably curtailed. I did continue participation in the Orthopedic Resident Training Program, however.
>
> Last summer I moved to Cleveland, to become Chief of the Orthopedic Service at Cleveland City Hospital. This is a full-time job. I enjoy the type of work more than private practice. We are in the process of setting up an Orthopedic Resident Training Program. We

Dr. Edward D. Churchill and his Interns in Surgery

have a fine new research building, but are awaiting equipment.

My HMS classmate and MGH contemporary, Simeone, is, as you know, Director of Surgery at this Hospital, and was responsible for my leaving California. I may say that it was a very difficult decision to make. I hope that I may be able to return there again when I retire.

Dr. Oscar deF. Barretto (*An.* 1944), our "singleton" in São Paulo, Brasil, has sent us this interesting letter, together with his new address:

Your letter of July 20 arrived when I was on vacation in the north of the country. The one that you mention as having been sent to me some time ago didn't reach me.

Following are my activities since 1945. As soon as I arrived here I went to work in the Anesthesia Department of the Hospital Medical School (Hospital das Clinicas da Universidade de S. Paulo—1100 beds). Being a new hospital at that time, the knowledge and practice I acquired in the Massachusetts General Hospital greatly helped the Anesthesia Department which had just been born.

Under our influence, a Section of Anesthesiology had been created in the local Medical Association. I was the first secretary of the Association, and, last year, was the president of its Anesthesia Section.

In 1954 I was the treasurer of the 1st Brasilian and 2nd Latin-American Congress of Anesthesiology.

From February to August 1955 I was Medical Assistant to the General Director of the Hospital das Clinicas.

I have been elected assistant secretary of the Insurance Department of the Medical Association and of the Medical Syndicate for the period 1955-1956.

Besides all this, I have had my private clinic of anesthesia, oxygen therapy, and blood bank since 1945.

If you have the opportunity, please remember me to all my old MGH friends.

My new address is R. Armando Penteado 356 (Pacaembú), São Paulo, Brasil.

Dr. William N. Christenson (*M.* 1949) sends us this cordial letter from the Postgraduate Medical School, Du Cane Road, London W. 12, England:

The delay in my subscription to The News was occasioned by a pleasant period of travel this summer through Scandinavia and the Low Countries of northern Europe, prior to starting a year's fellowship in the Postgraduate Medical School. I am now working here in the laboratory, and am very happily settled in London, where so many MGH offspring have recently flourished.

I would like to pass on the information that any others from Massachusetts General who are presently on this trek will receive a warm welcome, either professionally in the Department of Haematology of the Postgraduate School, or socially at my home, or both.

From San Juan, Puerto Rico, has come this letter from Lt. Col. Frank L. Bauer, MC, USAR (*Path.* 1941):

Thank you for your 13 October letter inquiring about my address. I am located at Rodriguez Army Hospital, APO 851, c/o Postmaster, New York, N. Y. My assignment is Chief of the Medical Service.

Rodriguez Army Hospital is located in San Juan, Puerto Rico. It is roughly 600 beds in capacity and provides in- and out-patient service for Army, Navy, and certain categories of Air Force personnel located in the Caribbean area. The hospital itself occupies two buildings which were once part of the Spanish garrison. Part of these structures go back to the 1700's. They are built on a large quadrangle type of pattern and, depending upon one's viewpoint, are either "delightfully quaint" or "somewhat physically cumbersome and inefficient".

The island of Puerto Rico is being aggressively presented as a winter haven for North American tourists. Climatically it has everything that is to be desired. In addition, there are several ultra-modern hotels and associated swimming, boating, a professional baseball league, golf, etc. There is no horse racing, but legalized gambling of all types is offered. For anyone who wants all modern comforts elegantly served, this is the place. For the visitor seeking atmosphere and quietude, a less developed tropical isle would be in order.

* * *

On December 31, 1955, Mr. George E. Hamilton ended his services at M.G.H. For 23 years he had been a familiar figure at the Hospital as custodian of the doctors' parking lot. A coffee party, given in his honor in the Baker Lounge on January 3, was attended by scores of his friends, including members of the staff as well as non-professional personnel.

Before Mr. Hamilton left for a vacation in Florida he presented his last yearly award, for best parking during 1955, to Dr. Rita M. Kelley.

* * *

Of the grants totaling $500,000,000 made by the Ford Foundation on December 12 for privately supported institutions in the United States, $51,652,900 was designated for New England educational institutions and hospitals. Of this amount, Massachusetts General Hospital received $250,000—the largest single donation to the hospitals in Massachusetts.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 154 Boston, Mass. March 1956

BIOCHEMICAL RESEARCH LABORATORY

During the last few years* we have continued our efforts to enlarge on our early proposition that the energy of living organisms, although derived primarily from respiration, is used predominantly in the form of phosphate bond energy. It becomes now more and more apparent, indeed, that the energy-rich phosphate bonds of adenosine triphosphate (ATP) represent what we like to call the energy currency of the organism. Recently we concentrated (1) on the mechanisms by which the respiration process yields phosphate bond energy. And (2) we have followed various pathways by which phosphate bond energy is used for biosynthetic operations and, specifically, for urea synthesis.

The study of the mechanisms of respiratory energy transformations led us quite naturally to an interest in thyroxine, the hormone which regulates the animal's energy supply. Recent work in this laboratory by S. Harvey Mudd, Janey Harting Park, and Fred Hoch on the effects of thyroxine on cell-free preparations of liver (mitochondria suspensions) shows it to interfere with the transformation of respiratory into phosphate bond energy. Thyroxine, in higher concentrations, disrupts the linking between respiration and ATP formation. This uncoupling of respiration from the production of utilizable energy can explain the wasting of energy in the Basedow patient. Although many aspects of thyroxine action will still require considerable refinement, the action of the thyroid hormone, or rather, of the family of thyroid hormones, appears to channel through a regulation of the outflow of the utilizable energy from the primary process of respiration.

Turning now to utilization of phosphate bond energy, we concentrated on the study of the mechanism of urea synthesis. Urea, of course, is formed in the liver from ammonia and carbonic acid, ammonia being produced by respiration of amino acids. Ammonia is very toxic, as Dr. McDermott's recent studies in this hospital have beautifully amplified. It is detoxified to urea by combining two parts of ammonia and one of carbonic acid. This, however, requires energy and it had already been found by others that the energy used here by the liver again is phosphate bond energy. However, what was not known until recently was the form in which phosphate bond energy was chemically integrated into the process of urea synthesis. From studies in cell-free systems, carrying on the overall urea synthesis by using ATP as source of energy, we eventually arrived at the conclusion that a very unusual phosphorylated intermediary should be formed, a compound which we call carbamyl phosphate. The existence of carbamyl phosphate seemed to many organic chemists rather doubtful because it was thought to be too unstable to exist, unjustly as we know now. Through expert work by Dr. Mary Ellen Jones and the fine chemistry contributed by Dr. Leonard Spector, loaned to us by the Huntington group, we were able to verify our suspicions that carbamyl phosphate was indeed an intermediary in urea synthesis after it was found that carbamyl phosphate could easily be obtained by chemical synthesis.

The total process of urea formation is rather complex. We need not, however, presently go into the minute details of what is known as the "urea cycle" except that we want to point this out as a relatively simple example of how phosphate bond energy is used in biosynthesis: respiratory energy converts to ATP and ATP reacts with ammonia and CO_2 to form carbamyl$\sim$phosphate. This leads to further condensations, eventually yielding urea.

This may serve as an example that the early contention that phosphate bond energy is the general energy carrier in cellular reactions had been generally fruitful. It has permitted us, as well as a large number of other laboratories, to approach the energy problem much more rationally. The complex and intricate process of respiration, mostly the ultimate source of energy, can now very often be replaced by simply putting into our biosynthesis an energy-rich phosphate source, most often ATP. We are able in this manner to study the crucial phases of the biosynthetic process much more reasonably in a greatly simplified system.

This outline may serve as a general survey of what we are doing. The actual scope of our activities goes further and at the present includes such reactions as the activation of sulfate for formation of, e.g., phenol sulfate, steroid sulfate, or chondroitin sulfuric acid. This study is now beginning to give us the clue to a very curious and unusual process of activation of an inorganic compound, sulfate, by our phosphate bond carrier, ATP. This process, although of considerable biochemical and, I dare say, medical importance, I would prefer not to discuss in detail in order not to lead on too far into the maze of chemistry.

Fritz Lipmann, M.D.,
Biochemist

The Board of Trustees, at their meetings on December 9 and January 27, voted:

To accept with regret the resignation of Dr. Alfred L. Duncombe from the position of Clinical Associate in Medicine.

To appoint:

Dr. Richard M. Barry as Assistant Resident in Medicine for one year, beginning July 1;
Dr. Daniel K. Bloomfield as Resident in Medicine, beginning October 1;
Dr. Carl N. Brownsberger as Assistant Resident in Medicine for one year, beginning July 1;
Dr. John F. Burke as First Assistant Resident in Surgery, beginning January 1;
Dr. Chung H. Cho as Assistant Resident in Anesthesia for one year, beginning July 1;
Dr. Mandel E. Cohen as Assistant Neurologist;
Dr. Leslie J. DeGroot as Resident in Medicine, beginning January 1, 1957;
Dr. Ruth K. Freinkel as Assistant Resident in Dermatology for one year, beginning July 1;
Dr. Lester H. Grant as Assistant Resident in Medicine for one year, beginning July 1;
Dr. Guy W. Leadbetter, Jr. as Assistant Resident in Urology, beginning July 1;
Dr. David J. L. Luck as Assistant Resident in Medicine, beginning January 1, 1957;
Dr. Richard F. Mayer as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Jack H. Mendelson as Assistant Resident in Psychiatry, beginning July 1;
Dr. John A. Mills as Assistant Resident in Medicine for one year, beginning July 1;
Dr. William L. Morgan, Jr. as Resident in Medicine for one year, beginning July 1;
Dr. Raymond L. Robillard as Assistant Resident in Neurology for one year, beginning July 1;
Dr. John C. Rowe as Resident in Medicine for one year, beginning July 1;
Dr. Arthur A. Sasahara as Assistant Resident in Medicine for one year, beginning July 1;
Dr. Katharine E. Spreng as Resident in Medicine for one year, beginning September 1;
Dr. Arthur H. Thayer as Assistant Resident in Anesthesia for one year, beginning July 1.

At their meetings during January, the General Executive Committee voted:

To accept the resignation of Dr. Melvin L. Taymor from the position of Clinical Assistant in Surgery and his duties in the Ovarian Disfunction Clinic.

To promote:

Dr. A. Robert Arnstein from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;
Dr. John R. David from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;
Dr. G. Richard Dickersin from the position of Third Assistant Resident to that of Sec-

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* Cf. last report: *M.G.H. News,* May 1953

ond Assistant Resident in Pathology for one year, beginning July 1;

Dr. Thomas G. Gabuzda from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Charles S. Keevil, Jr. from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Allan B. McNie from the position of Third Assistant Resident to that of Second Assistant Resident in Pathology for one year, beginning July 1;

Dr. Allan I. Sandler from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Charles P. Summerall, III, from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. William M. Thurlbeck from the position of Third Assistant Resident to that of Second Assistant Resident in Pathology for one year, beginning July 1;

Dr. Sumner I. Zacks from the position of Intern to that of Third Assistant Resident in Pathology for one year, beginning July 1.

To reappoint:

Dr. Thomas C. Hall as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Myron H. Matz as Clinical Assistant in Dermatology, as of October 1, 1955;

Dr. Ruth S. Weiss as Clinical and Research Fellow in Psychiatry, beginning January 1.

To appoint:

Dr. Rodman B. Finkbiner as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Verner S. Johnson as Clinical Assistant in Orthopedic Surgery for one year, beginning January 1;

Dr. Edwin P. Maynard, III, as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Joseph R. Petranek as Clinical and Research Fellow in Medicine, assigned to the Tumor Clinic, for one year, beginning September 1;

Dr. Bernard B. Stone as Clinical Assistant in Neurosurgery for one year, beginning January 1;

Dr. Claribel Westermeyer as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning July 1.

Brief bits:—

Dr. Francis M. Ingersoll addressed the staff of the Memorial Hospital, Worcester, Massachusetts, recently. His subject was "Management of abnormal vaginal bleeding".

Dr. Chester M. Jones acted as Moderator of a panel discussion at the January 9 meeting of the Boston Surgical Society. The subject of the discussion was "Esophagitis, hiatus hernia, and carcinoma of the esophagus". Participants in the discussion were Drs. Herbert D. Adams, Edward B. Benedict, Franz J. Ingelfinger, Richard Schatzki, and Richard H. Sweet.

Dr. Robert R. Linton has recently been to Kingston, Jamaica, and Havana, Cuba. He spoke at the University Hospital in Kingston on "Arterial grafting procedures", and before the Pan American Gastroenterological Society in Havana on "The surgical treatment of bleeding esophageal varices".

At the Annual Meeting of the Radiological Society of North America, held in Chicago in December, an exhibit presented by Drs. Laurence L. Robbins and Chiu-chen Wang won a *cum laude* — one of three to receive the highest honor. The exhibit was entitled "Cushing's disease: Roentgen manifestations". A paper on the same subject was read at the meeting by Dr. Robbins. Dr. Robbins attended a conference at the Armed Forces Institute of Pathology, Washington, D.C., January 23-29, where he took part as a teacher.

Dr. Hermann B. F. Seyfarth announces the opening of offices for the practice of General Dentistry at 105 Mount Rose Street, Reno, Nevada.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
The subjective response and reaction to sensation.
Am. J. Med. 20:107-113.

Gastrointestinal Research

Ebeling, W. C., Bunker, J. P., Ellis, D. S., French, A. B., Linton, R. R., and Jones, C. M.
Management of patients with portal hypertension undergoing venous-shunt surgery.
New England J. Med. 254:141-148.

General Medicine

Knowles, J. H., Gorlin, R., and Storey, C. F.
Clinical test for pulmonary congestion with use of the valsalva maneuver.
J.A.M.A. 160:44-48.

Laboratory Science

Rosenberg, R. M., Lever, W. F., and Lyons M. E.
The interaction of human serum *beta* lipoprotein with certain small molecules.
J. Am. Chem. Soc. 77:6502-6505 (Dec. 20) 1955.
[This journal did not reach library shelves until too late for the above title to appear in the February issue of THE NEWS—the deadline issue for 1955 titles—hence the inclusion of the title this month.—*Editor*]

Neurology, Neurosurgery, and Psychiatry

Saslow, G.
Psychiatric problems of medical students.
J. Med. Ed. 31:27-33.

Neurophysiology

Brazier, M. A. B.
Neuronal structure, brain potentials and epileptic discharge.
Epilepsia 4:9-18.

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Late in February 1955, my wife, five children, and I boarded the *Maasdam*, and ten days later turned into the Maas at the Hoek van Holland to dock a short time later at Rotterdam. During the next eight months, while my family absorbed as much of Holland as possible, I was to work with Professor Andries Querido as a guest member of the staff of the Academisch Ziekenhuis of the University of Leiden.

We were met at the dockside by Professor Querido, who spent 1949 as a Rockefeller Fellow in our own Thyroid Laboratory. He had arranged a pair of buses for transportation of family and baggage to a little vertical house in Oestgeest, a suburb of Leiden, which was our home for the rest of our stay. We viewed the house with misgivings when we learned that there was no central heating against a late Dutch winter, and no refrigeration; but we survived, and learned that survival is not only possible but even pleasant without many of the comforts and conveniences of Chestnut Hill.

Day-by-day living in Holland was pleasant indeed. Some aspects were particularly comforting to my wife. For example, the butcher paid three calls daily, once for orders and twice for delivery. The greengrocer called daily with his rig full of fresh vegetables, including peeled potatoes. A beach with a magnificent strand was only fifteen minutes away. Schools were close by and the streets swarmed with playmates of all ages for our children. Life was pleasant for me, too. The laboratory was five minutes from the front door, and with scarcely any intervening traffic except for the swarming bicycles. It was always possible to have lunch at home with the family. The academic atmosphere of scholarship and industry in Professor Querido's department was a never-failing source of satisfaction and stimulus.

There was always something for spare moments. Amsterdam, with its shops, museums, and theaters was only an hour away. The Hague was a half hour from our street, and Delft and Rotterdam were not much farther. Only ten minutes away, on the canal, with Dutch meadow and windmill beyond, was our favorite restaurant where we could have a glass of genever and a little later a rijstafel with thirty-five different courses from Indonesia.

The Academisch Ziekenhuis is near the center of Leiden, but isolated from the busy town by lawns and gardens. Each major department has its own building. There are advantages to this, but disadvantages as well, for it tends to keep the departments separated, and when a patient must go from one building to another he may do so through a few hundred yards of North Sea weather.

Much of the daily program of the hospital was familiar to a visitor from the Massachusetts General Hospital. Grand rounds and pathological conferences were held weekly. I was particularly struck by the excellence of the contributions from the X-ray Department. Case material was excellent and well presented. Discussions seemed at times limited to the more senior persons present, as is also too often the case with us. That important voice from the back row was seldom heard.

For a refugee from the basement of the Bulfinch, the most impressive aspect of work in Holland was space and cleanliness. Professor Querido's magnificent new quarters for his Department of Endocrinology and Metabolism are beautifully equipped and ideally suited for the fusion of clinical endocrinology and the laboratory sciences. A corridor lined by offices and the departmental library connects the ambulatory clinic for metabolic diseases at one end with the research and clinical laboratories at the other. On the floor above are the wards and metabolic beds. In the basement are animal rooms, animal surgery, photographic and charting shops, and more laboratories. There is even a staff for electronic engineering and instrumentation.

Professor Querido has managed to create a most pleasant atmosphere in his department. People work long hours, but the pace is a bit more relaxed than at the Massachusetts General Hospital. Even the members of the professional staff take a coffee break occasionally. Every Thursday there is a group clinic which is reminiscent of our own thyroid clinic or that of Dr. Albright. Case material is varied and thoroughly worked up. There is an excellent spirit of democratic inquiry. These meetings were particularly instructive for me, because the clinic includes all varieties of endocrine disease, including diabetes. Dr. Querido has been successful in broadening the resources of his clinic by promoting attendance of surgeons and gynecologists and, on occasion, neurologists and pediatricians.

The medical school is an integral part of the Academisch Ziekenhuis. It is difficult to draw parallels between medical education there and at Harvard. The system and structure of the curriculum are quite different. The major distinction seemed to be in the amount of didactic teaching given the Leiden student, the lack of individual instruction, and the lack of individual responsibility. Nevertheless, the student emerges from his educational experience as a reasonably qualified physician. From what I could determine, the standard of medical practice in Holland would well withstand comparison with the prevailing standards here. Even so, Professor Querido and his colleagues are making every effort to broaden and individualize the teaching program. One of the problems which hampers instruction is the lack of teachers. There is little or no utilization of the community physicians in the teaching program. There is interest in breaking this barrier between the academic and the practical, but the old patterns are difficult to alter.

One of the nice things about working in Holland was its central location. This made it possible for us to undertake quick trips to many places without major interruption of the schedule of work in the laboratory. Our first trip was for three days to London, where I visited Dr. Pochin in order to talk over some of his interesting results in the treatment of cancer of the thyroid. We stayed at the home of Mr. Selwyn Taylor, who was a Rockefeller Fellow here in 1949, and visited Dr. Rosalind Pitt-Rivers, who spent a year here in 1953-54 jointly with the thyroid group and Dr. Lipmann.

Our brief trip to Paris and another through the Moselle Valley and Luxembourg were conducted purely on the pleasure principle, but in July we were off to Scotland and England. In Glasgow we were the guests of Dr. Edward McGirr of the Royal Infirmary and of the Royal College for a talk under most elegant and frightening circumstances. Dr. McGirr visited the Thyroid Laboratory at the Massachusetts General Hospital for a month in 1954. We then saw Edinburgh, did some ancestor hunting in County Ayre, spent a day in the English Lakes district, and then a day in Oxford with Dr. Alexander Leaf. From there we explored Cambridge and the Cam, and finally attended an excellent three-day conference on calcium at Ciba House in London.

Our last big trip was to Scandinavia. In Copenhagen we visited the Carlsberg Laboratories and Dr. Thorkild Friis, who is now at the Massachusetts General Hospital. Across the Öresund in Malmö we had a pleasant day with Bengt Skanse and his wife. Dr. Skanse was with the Thyroid Laboratory here from 1946 to 1948. His new laboratory in the Allmanna Sjukhuset is wonderfully equipped. In Stockholm we paid a brief call at the Carolinska Hospital and Institute and saw more laboratory equipment assembled in more ample and beautiful surroundings than I could have imagined.

Apart from Holland, Finland proved to be our favorite country. We stayed with friends fifteen miles from Helsinki on the Baltic, and went into town only for a shopping tour and a talk at the Finnish Endocrine Society, whose president, Dr. Uotila, was at Harvard Medical School some years ago. Several old friends of the Massachusetts General Hospital were at the talk. It was particularly good to see Dr. Kalervo Ohela, who spent the first half of 1954 in the Thyroid Laboratory. Finland is like the best of Maine: rivers, forests, and lakes. Most pleasant of all was a long automobile trip up through the center of the country, with smoked reindeer for lunch, a Finnish sanna (steam bath) and dip in the Baltic when we returned, and dinner on crayfish and schnapps with our hosts and their guests, Dr. and Mrs. Ohela, Dr. and Mrs. Lamberg, and others. Dr. Lamberg comes to the Thyroid Laboratory this fall.

After our return from Scandinavia the pressure of work in the laboratory precluded any but the briefest trips. In September we took a quick turn around the Ijsselmeer (formerly the Zuider Zee), the inland sea which is being pumped dry for farmland, exploring some of the villages and unfrequented spots like Urk and Spakenburg where the traditional costumes still survive. In October we had a day in Brussels for a talk in the department of Professor Bastenji at the University.

Our months in Holland suddenly became a glowing memory late in November when Pan American transplanted us over night in Boston. We arrived at home with many fresh appraisals of our work and our values, and with only the warmest affinity for Holland and the Dutch. We have already calculated the earliest possible moment when we can return.

John B. Stanbury, M.D.,
Assistant Physician

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BACTERIOLOGY LABORATORY

Although the conquest of infectious diseases was widely proclaimed in quasi-scientific periodicals coincident with the introduction of new antibiotics in the late 1940's, subsequent experience has refuted such premature reports of the decline of the microbial diseases. Experience, rather, has emphasized the importance of a more careful and penetrating evaluation of bacteriologic laboratory science in the treatment of infectious diseases with the new antibiotic agents. Hence, the infectious diseases which are now amenable to antibiotic therapy should put greater demands on the bacteriology laboratory and on the clinician's intelligent use of it, if the great promises of the conquest of disease are to be fulfilled in specific instances.

This increasing emphasis on the prudent use of antibiotics has, in part, accounted for the almost doubling of the number of examinations performed in the Hospital bacteriology laboratory in the last three years, and is more accurately reflected in the fact that antibiotic sensitivity testing has tripled during the same period. However, sensitivity tests and the additional examinations, requested by physicians because of their concern for the dynamics of the host-parasite relationship, are responsible for only part of the increased use of the diagnostic bacteriology service. Changes in hospital admission policies and other factors which have tended to increase the patient census likewise have placed further demands on the laboratory, as has been the case with other ancillary services.

It is to be expected, then, that the bacteriology laboratory has met the added call on its services by increases in its staff and by expansion of facilities to the point where, as with most other service units, it approaches the time when physical expansion must be considered. In the meantime, more efficient use of existing space and the employment or training of competent laboratory technicians seem to have satisfactorily solved these problems for the time being.

The shortage of adequately trained technicians is perhaps most pressing and is a perennial problem. In this respect, we are constantly indebted to Miss Marguerite E. Burke, Head Technician, whose long experience and faithful service have made it possible to train qualified candidates who lack only practical training and experience to become good laboratory technicians. That these technicians can be trained without compromising the quality of the work performed in the laboratory is a tribute to Miss Burke, who usually has at least one neophyte technician in addition to one or more members of the house staff under her guidance. Also responsible for the maintenance of the high standards of performance of the laboratory is Dr. Louis Dienes, Consulting Bacteriologist and formerly Hospital Bacteriologist, on whose advice and experience we not infrequently depend.

Recognition must also be given to the Hospital Administrators, who have made available not only the resources by which the increasing work load could be sustained by the laboratory without a corresponding decrease in the quality of performance, but also the means by which services could be extended and improved in certain areas during the period of expansion. A typical example of this cooperation is the recent establishment of a mycology-T.B. section within the bacteriology laboratory. The Administration recognized the advisability of establishing a special tuberculosis-mycology section in order to provide at the laboratory level a more logical association of these two groups of microorganisms by a specially trained person. One of our senior technicians, Miss Marilyn Holland, attended a special course in Mycology at Duke University, and subsequently a separate laboratory was furnished and equipped to permit closer attention by Miss Holland to the examination of clinical specimens for both fungi and acid fast bacteria. After only a short period of operation, tangible results are already being noted, although it will be some time before this improved service will become noticeable on the ward level. Further efforts in this area will continue to be expended so that the bacteriologic diagnosis of the granulomatous diseases will be improved — a source of constant dissatisfaction because of the long time it takes for these slowly growing organisms to become apparent in the laboratory.

It is to be taken for granted that any routine performances in an institution like the Massachusetts General Hospital should be at a high level of competence. In other words, it is expected that excellence be routine and that the "routine" be excellent at the M.G.H. Assuming, then, that the routine performances of the bacteriology laboratory are at a high level of competence, greater attention must be paid to improvements relating to the extraordinary bacteriological problems in the Hospital in order to make the laboratory outstanding according to MGH standards. To this end, in addition to constantly reviewing and revising our routine procedures, special emphasis has been placed on these extraordinary events which are not easily encompassed by the ordinary procedures of a diagnostic bacteriology laboratory.

This *modus operandi* has led to an attempt on our part to collate information and services relative to infectious diseases in the Hospital and in the community, and to try to effect, in this respect, a closer collaboration between the Hospital on the one hand, and the Medical School, State and Federal Public Health services and other cooperating laboratories on the other. In short, we have attempted to a modest degree to act as a link between the ward and the laboratory and between the Hospital and outside agencies in relation to infectious diseases.

Such an understanding has indeed become necessary on a practical basis because of the development of complex and expensive diagnostic tests which are impractical to perform even in a general hospital laboratory, but which are available to us through State and Federal laboratories on a routine basis, and through the laboratories of colleagues on a personal basis. This collaboration, consequently, has us collecting and storing acute phase sera, providing forms required for certain tests, collecting clinical information required by some laboratories, transmitting specimens to the appropriate laboratories, and seeing that the results of such tests are reported to the interested physicians and inserted in the patients' records. It finds us arranging for certain tests to be performed in research laboratories, inquiring about the incidence in the community of diseases suspected in certain patients, giving epidemiological leads to Public Health officials, and supplying the latter with helpful information on request.

At times, it has been practical to attempt more complicated laboratory diagnoses in the Hospital laboratory because of the research interests of the staff and the availability of the necessary facilities. A fair amount of success, for instance, has been achieved in isolating etiologic agents in cases of certain virus diseases. Similarly, it has been possible to prepare skin test antigens for cat scratch disease from material obtained from MGH patients. These have been assayed through the cooperation of clinical associates and made available for testing MGH patients as well as patients in many other hospitals in New England and other parts of the country.

It is felt that more of this type of work can be done in the Hospital, and the advisability of extending these techniques is being explored. Although it will probably not be practical to perform diagnostic serological tests for virus diseases of individual patients (inasmuch as they are "routine" in Federal Public Health laboratories), it will most likely be feasible to study certain interesting cases and to investigate outbreaks of disease among Hospital personnel or patients when circumstances warrant investigation. Such studies have been done occasionally in the past, as will be described below.

Moreover, it is certain that more extensive use can be made of the volumes of data which get buried in the form of laboratory test results in the course of time. To this end, we are examining the practicability of putting all laboratory data on business machine cards from which it would be a simple matter to extract a variety of statistics which might prove useful for many purposes. Several examples of this type of salvaging of data may be given to illustrate the possible value of such a procedure. For instance, last year an analysis was made of the serological classification of Salmonellae isolated in the Hospital during the previous two years. These data had fortunately been collected in a separate file, obviating the necessity of fumbling through some five thousand laboratory reports. From the analysis it was determined that the Widal test might be used more profitably in a modified form since we had encountered no infections by Group A Salmonella which, nevertheless, was represented in the Widal test during that period. On the contrary, 63% of the Salmonellae isolated from patients had Group C Salmonella antigens which were not being used in the classical Widal test employed in the laboratory during the same period. Accordingly, in April of last year, we modified the Widal test, making it possible now to detect antibodies elicited by Salmonella organisms of Group B, Group C (which includes the important, invasive S. cholerae suis), and Group D which includes the typhoid organism.

Further instances of the value of easily collated data may be derived from the reports, circulated periodically by the laboratory among Hospital physicians, of the relative sensitivities to antibiotics of organisms isolated from MGH patients. The results of our routine sensitivity tests comprise a mass of data which accumulates and gradually gets buried in our files. It was felt that such information pertaining to organisms which are associated with chronic or intractable infections may be of some interest to physicians confronted with such infections, provided the information were collected, tabulated, and summarized. Although such reports which are now circulated about twice a year seem to be received with interest by some of the staff, it still remains a tiresome chore to collect the data manually rather than by an efficient time-saving machine.

A final example of the usefulness of readily available data is illustrated in an epidemiological investigation of the several cases of salmonellosis which occurred in the M.G.H. On examination of the separate file of Salmonellae in the bacteriology laboratory, it was noted that several of the infections seemed to have occurred in patients who were hospitalized at the time of onset of symptoms, which indeed proved to be true. Further investigation absolved personnel as a common source of infection for these patients and suggested that an infected food may have been the vehicle of transmission. Cultures of dried inactive yeast (brewer's type) used in tube feedings of the patients revealed the presence of three different serological types of Salmonellae and the source of the infections. In the absence of a device for segregating the original laboratory reports, it is possible that the source of these infections may have been neither investigated nor uncovered. How many other interesting and important experiences lie buried which might be brought to light by better control of such data remains to be determined.

It might be of interest to recall briefly the participation of the bacteriology laboratory during the acute emergency that ensued consequent to the polio epidemic in Massachusetts in 1955. Because of the large number of patients with respiratory difficulties, the shortage of professional personnel on the wards, and the need for constant bacteriological surveillance, a special section of the laboratory was temporarily set up on White 9 in charge of a second year medical student, John Livingstone, who, fortunately for us, had been working in the bacteriology laboratory during the summer. This temporary expedient made it possible to keep an up-to-date account of the bacterial flora of these patients who were under continual risk of contracting complicating bacterial infections. At the same time the house staff and nursing service were relieved of the necessity of collecting specimens and obtaining preliminary reports of the previous day's cultures. During this period considerable interesting bacteriological data were amassed which Mr. Livingstone is in the process of analyzing for future reference. At the very least, it would seem that the extensive bacterial examinations which were made will contribute to our understanding of the ecology of bacterial flora of hospital areas and of patients occupying these areas for extended periods of time.

In addition to the clinical bacteriologic research of the type mentioned above, research activities of a less immediately practical nature are being pursued in the bacteriology laboratory. Dr. Dienes, a member of the arthritis group, continues to study the L form, its relationship to parent bacterial forms and its possible implications in disease. Drs. John T. Sharp and John Ward, also of the arthritis group, are also exploring the L forms. Dr. Thomas C. Peebles of the Children's Medical Service is continuing his research on the virus of measles in tissue cultures of human tissues, being interested particularly in the viremic phase of measles and the mechanism of carriage of the virus in the circulation.

The tissue culture laboratory also attracts the attention of Dr. Lawrence J. Kunz as a device for exploring the etiology of certain diseases presumed to be of virus origin. At the same time, he is testing the effect of ultraviolet irradiation of cells in tissue culture with a view toward liberating masked viruses or causing mutations of cells, which may merely be two ways of describing the same phenomenon. The presence of these several avenues of research in the bacteriology laboratory provides not only a diversity of interests which is both stimulating and productive, but also makes available extraordinary techniques which are adaptable to more extensive bacteriologic diagnostic procedures.

At the time of this writing, the laboratory and the staff look forward to the return to M.G.H. of Dr. Morton N. Swartz, who will assume the position of Chief of Infectious Diseases. Dr. Swartz will bring with him a different research interest and will also provide a closer link between the laboratory and the wards in his capacity as clinical consultant in infectious diseases. In this connection, also, informal plans have been discussed for the house officers' training program in Bacteriology whenever it becomes possible to resume this practice. Consideration has been given to a proposal whereby an infectious disease resident would be assigned to Dr. Swartz in the place of a bacteriology resident. Formerly, the time spent on this rotation was designated as laboratory time. Under the new proposal, this rotation will involve rounds of infectious disease patients correlated with work-up by the resident of cultures pertaining to the patients seen on the wards. In this manner, greater significance of the laboratory side of the infections can be imparted and the training of the individual resident extended to other house officers on the service by discussions between the latter, the infectious disease resident, and Dr. Swartz.

It was hoped that this biennial report of the activities of our bacteriology laboratory could be delayed until the arrival of Dr. Swartz, so that his plans and viewpoints could be included. Because of the schedule of publications by THE NEWS, however, we will have to wait until another time when Dr. Swartz can give his progress report.

In conclusion, we continue to invite from all who may be interested in the bacteriology laboratory, comments, criticisms, and suggestions for improved service. Furthermore, if you think that your patient presents special problems which cannot be adequately handled by a routine treatment of specimens or cultures, you are urged to visit the laboratory on the fourth floor of the Domestic Building and discuss possible methods which might provide the answer to your questions.

Lawrence J. Kunz, Ph.D.,
Head of Bacteriology Laboratory

MASSACHUSETTS EYE & EAR INFIRMARY

The election of officers for the coming year took place at the 428th meeting of the New England Ophthalmological Society, held at the Infirmary on January 18. The new officers include Dr. Edward A. Cramton, President; Dr. Virgil G. Casten, Vice-President; Dr. Edwin B. Goodall, Secretary; and Dr. John M. Hill, Recorder. These officers will not take up their duties until after the April meeting of the Society. At the January meeting Dr. Albert E. Sloane gave his second lecture on "The management of subnormal vision".

The Annual Meeting of the New England Oto-Laryngological Society was held on February 8 in the Upper Amphitheatre of the Massachusetts General Hospital. Following the regular Wednesday morning clinical conference, seven New England doctors presented papers to the group. Guest speaker at the evening banquet was the Reverend John P. Fitzsimmons, former Supervising Chaplain of the Flying Tigers, under General Chennault.

The Haut-Collège International pour l'Étude des Langages, Faculty of Sciences, University of Paris, has elected Dr. George Kelemen to be a Président Général Adjoint for the special branch of Comparative Anatomy and Physiology of the Larynx.

Eighteen doctors, including 2 from Mexico and 1 from Brazil, are attending the Harvard Medical School postgraduate course in an introduction to clinical ophthalmology. These students have recently completed a 3½-month basic science course at Harvard. This is the 11th year since the war that the course has been given. It consists of lectures, demonstrations, and exercises. Techniques of examination are also taught, with the students themselves as subjects. The course is being held in the new project laboratory on the 6th floor of the Infirmary, from January 16 to March 3. Dr. Henry F. Allen is director of the postgraduate program, and there are 45 instructors—mostly from the Infirmary staff.

Dr. David D. Donaldson has recently organized a group of 33 stereoscopic goniophotographs. Sets of these slides, together with a descriptive book, are being distributed at cost to various teaching institutions throughout the country, in-

No. 58 in a series of Staff photographs

Lawrence J. Kunz, Ph.D., Assistant Bacteriologist—Head of Bacteriology Laboratory

cluding the University of California at San Francisco and the University of Ottawa.

On January 26, Dr. Donaldson spoke to the Biological Photographic Society in New York. His subject was "The use of stereoscopic photography in the medical field".

Dr. LeRoy A. Schall took part in a symposium at the sectional meeting of the American College of Surgeons in Philadelphia on February 15. The subject of the symposium was "Surgery of the larynx", and Dr. Schall discussed "Surgery of the neck after external irradiation".

Dr. George F. Reed presented a paper at the Eastern Section meeting of the American Laryngological, Rhinological and Otological Society on January 13. In this talk on "Neck dissections" Dr. Reed noted, "If the metastatic lymph-nodes were removed while the nodes were small there was an 85% survival rate, but if the nodes were allowed to enlarge the survival rate was only 5%. This points out the extreme importance of detecting these nodes early."

Dr. Matthew D. Davis has been appointed as Fellow in Ophthalmology, assigned to the Retina Service, for six months, beginning January 1.

At a meeting of the Executive Committee, held January 16, the following votes were approved:

Dr. Henry F. Allen — promoted to the position of Assistant Surgeon in Ophthalmology;

Dr. Bernard H. Zeavin, Assistant in Ophthalmology — granted leave of absence for military duty, beginning as of January 1.

New addresses:—

Dr. Peter R. Bally (a.r.p. 1956), Peter Bent Brigham Hospital, 721 Huntington Ave., Boston 15, Mass.

Dr. Richard T. Barton (*Otolar.* 1945), 9730 Wilshire Blvd., Beverly Hills, Calif.

Dr. Martin J. Bellinger (clin. a. *S.* 1949), Professional Bldg., 114 Waltham St., Lexington, Mass.

Dr. John T. B. Carmody (a.r.s. *N.S.* 1936), 65 Elm St., Worcester, Mass.

Dr. Francis L. A. de Marneffe (a.r.p. *Psychiat.* 1952), 274 Commonwealth Ave., Boston, Mass.

Lt. Gerald M. Edelman, MC, USAR (*M.* 1955), 386 General Dispensary, Paris, France, APO 128, c/o Postmaster, New York, N. Y.

Mr. Raymond V. Kinsman, Superintendent of Works, Western Pennsylvania Hospital, 4800 Friendship Ave., Pittsburgh 24, Pa.

Dr. Si Chun Ming (r.p. *Path.* 1956), Beth Israel Hospital, 330 Brookline Ave., Boston 15, Mass.

Dr. William D. Shorey (*E.S.* 1946), 59 East Madison St., Chicago 3, Ill.

Dr. James H. Townsend (*W.M.* 1923), U.S. Veterans Administration Hospital, 150 South Huntington Ave., Jamaica Plain, Mass.

Dr. Roger E. Wilcox (*S.* 1949), 107 Wilson St., Beckley, W. Va.

This fine letter has come from Dr. Howard Boyd (*C.M.* 1922), our "singleton" in Manchester, Connecticut — an alumnus who thought he didn't have anything interesting to tell us about himself:

> I ignored your former note because I couldn't think of anything about me that might be of general interest. Now that you write again, I shall give you a few details which you may use as you see fit, cutting out the unimportant parts.
>
> Just before coming to Massachusetts General Hospital I married Janet Mandell, a Peter Bent Brigham nurse. We have four daughters, all of whom are married. There are five grandchildren.
>
> After leaving M.G.H. I was at Hartford Hospital for 20 months and then at Manchester, Connecticut, in general practice for 10 years. During this period I organized the Department of Pediatrics at the Manchester Memorial Hospital, where I am still chief. The next 10 years of my practice was limited to medicine at any age. In this period I was elected a Fellow of the American College of Physicians, which recognized both internal medicine and pediatrics. The remaining years have been limited to the practice of pediatrics. Four other pediatricians have now joined me, so that we have a very active and enjoyable department. At present I am Chairman of the Department of Pediatrics of the Connecticut State Medical Society.
>
> I try to attend all of the meetings of the New England Pediatric Society at Boston and thus maintain my friendships.
>
> When I took a refresher course with Dr. Nathan Talbot, I was impressed by how much the M.G.H. had improved since I was there.

All of the many friends of Dr. William H. Trethowan (a.r.p. *Psychiat.* 1951) will be interested in this letter from him, written from Manchester, England:

> You have been kind enough to write to me on several occasions, requesting news of my activities for publication in The News. The last occasion (a reminder!) was, I am almost horrified to find, as long ago as last July. I must apologize for being so remiss. My only excuse is that things have seemed to be very much as usual. However, I am about to take up a new appointment and it strikes me that this might conceivably be of interest to some of my old friends and colleagues.
>
> I have been appointed Professor of Psychiatry at the University of Sydney, N.S.W., Australia, together with which goes the appointment of consultant psychiatrist to the Mental Health Services of New South Wales and the clinical directorship of Broughton Hall — a 200-bedded acute hospital for voluntary patients. This is a great venture for me, but certainly an exciting one. Although it brings me no nearer to Boston, paradoxically it may give me a better chance to see you all again, as Sabbatical leave ("Once every seven years or thereabouts" — as it is so worded) will give me the chance to travel, and you may be sure that Boston, and especially the M.G.H., will be on the itinerary. We sail on April 12 and in doing so will not regret exchanging the "smog" of Manchester for the sun and sea air of Sydney.
>
> Best wishes to you and all at the M.G.H. for 1956.

THE NEWS

No. 155 Boston, Mass. April 1956

BRAIN WAVE LABORATORY

In January 1951, THE NEWS carried an account of this laboratory and the work that was going on in it. This, therefore, represents a sequel with approximately a 5-year interval between the two reports.

When the laboratory was started in 1937, it was supported by the Departments of Neurology, Neurosurgery, and Psychiatary. As a result of this combined support it never fell strictly within one of these 3 departments and developed a type of autonomy which made it appear as if it were a separate department within the Hospital. All of its staff, however, were associated with neurology or psychiatry by their Hospital appointments, and this arrangement functioned fairly well for the first 14 years of its existence. Because of this partial autonomy and lack of identification with any specific department it was difficult to obtain adequate research funds under certain situations.

In July 1951, the Neurology Department was taken over by Dr. Raymond D. Adams, and the laboratory was wisely placed within his Department of Neurology exclusively and with him exercising full responsibility for it. No better arrangement could possibly have been made, in the eyes of its present director, since the entire background of the clinical utilization of the electrical recording of brain impulses properly belongs within the neurological field. There has been a noticeable improvement in the laboratory's ability to serve and coordinate its resources within the Hospital, and also to obtain research assistance when required, since this arrangement took place.

Although it is quite customary to accept the abbreviation "EEG" in this Hospital as specific for the electroencephalographic examination, not everyone understands it in the country far distant. For example, an elderly farmer was sent down from northern Maine because he was having considerable difficulty with his eyesight. His physician recommended that he spend a morning at the Ophthalmology Department of the Eye and Ear Infirmary for refraction, hoping he would obtain a better pair of spectacles. However, he turned up at the Admitting Desk of the Massachusetts General, with a slip in his hand on which "Eye" was scribbled so illegibly that the Admitting Clerk understood it to read "EEG". He was taken to the laboratory where a complete study was made, including the flashing of the stroboscopic light in his eyes, when both opened and closed, while he was lying on a bed. At the end of the examination, this very puzzled farmer asked the technician about his glasses, which were on a table beside him during the test. She returned them to him, stating, "These are yours, all right"; and he, sorely puzzled, went back to Maine. What he told his physician is not quite known, but the latter's letter indicated a good degree of misunderstanding.

Since 1951, the laboratory space has not been enlarged or altered; but in the summer of this year (1956), the entire laboratory will move into new quarters in the new Medical Science Building. In this new location, we expect to have a more efficient layout of space, so that it will not be necessary for patients to wander through the room where the apparatus is in order to reach the examining room. Bed and litter patients will be able to get prompt attention without the necessity of moving filing cabinets, etc. Furthermore, the new laboratory rooms will be shielded against electrical interference in the most modern manner; and the electrical power to run the various pieces of apparatus will be free of the alterations and artifacts that sometimes occur. We expect to have new electroencephalographic amplifiers in the new building, which will make the running of tests more efficient and, perhaps, more rapid.

In the previous laboratory report, we commented specifically on the gradual increase in the number of patients over the years. At the present time, the annual turnover has reached a fairly stable value of approximately 3500 examinations per year. However, the amount of time spent on each examination has gradually increased because of the development of new techniques of bringing out abnormalities. For instance, in 1950 we developed and built in the laboratory a very practical and efficient stroboscope for flashing a bright light in the eyes of the patient during a test. These are now produced commercially and are used elsewhere. In 1950, the stroboscope was applied in only 10 percent of the patients, compared to 90 percent at the present. In 1950, sleep as a form of activation was used perhaps once a week. Now, at least 2 such examinations are made each day, and, in the new quarters where special arrangements will be available for sleep study, we expect to do more. In 1950, the procedure was utilized in the operating room perhaps 5 times a year. At the present time, recording the brain discharges in the operating room, from the exposed brain, to aid the surgeon in identifying an epileptic focus, occurs once a month; but a new development has occurred in the operating room.

In surgical procedures which may last the entire day, the electroencephalogram monitors the operation along with other electrical and mechanical aids of the Anesthesia Department. It assures the continued presence of normal electrical brain activity — a requirement which is a critical part of the procedure. Such is the case in operations where the patient's body temperature is lowered 15-20 degrees in order that an aneurysm or diseased brain artery can be replaced by healthy tissue. It is hoped that in the near future the same kind of monitoring of the brain's electrical activity during some of the intricate surgery of the heart will aid the surgeon in preventing or becoming aware of the very first signs of deficient brain circulation that may result from certain parts of these procedures.

As mentioned in 1951, we were one of the first laboratories in this country to have an automatic wave analyzer as part of our routine equipment. The unit was purchased by the United States Navy, which was supporting some of the research in the laboratory. For 9 years this very complicated and exceedingly expensive electronic machine functioned, but it finally expired after a series of hopeless breakdowns in 1954. Before the new laboratory opens, we hope that a much more efficient and less complicated wave analyzer will be in operation. It is, at present, still in the construction stage at the manufacturers.

In August 1953, there occurred at Radcliffe College in Cambridge the 3rd International EEG Congress. Our laboratory was one of the principal hosts in organizing this Congress, which was attended by nearly 600 persons from all parts of the world. The secretary-general was Dr. Robert S. Schwab; the treasurer, Dr. Mary A. B. Brazier; and one of the laboratory's secretaries, Mrs. Freda Clark, was the official Congress secretary. Dr. John A. Abbott was in charge of all arrangements. Other members of local committees were Dr. William H. Timberlake and Dr. Morris E. Chafetz; our nurse, Mrs. Sylvia Walker; our secretary, Miss Teresa Delaney; our head technician, Mr. Angelo Bonazzi; and the Misses Eliott, Garvey, Gray, Peterson, and Potts.

One of the first 15-channel French EEG machines, on display at the Congress, was acquired by our laboratory. Since that time, American manufacturers have gone into the production of such large units and they are no longer a rarity.

In the same year as the Congress, a new Laboratory of Neurophysiology, under Dr. Mary A. B. Brazier, was opened as part of our general setup within the Department of Neurology. Dr. John S. Barlow is her assistant. Very elaborate and efficient recording equipment was set up in this new laboratory. Access to the autocorrelator at the Massachusetts Institute of

Technology was also effected, so that the recording of simultaneous and other electrical events closely linked in time can be accurately sought out by this technique. As with any new procedure, its first applications are in collecting information about animals; and later on we would expect that a number of the unanswered clinical questions associated with electrical activity of the brain may be cleared up by the use of this equipment. Its clinical application already seems to be promising.

In the same laboratory with the EEG machines, we have developed and used regularly other types of equipment, such as ergographs, electronic stimulators that produce painless ergograms (electronic ergograms), tremor recorders, etc. We have also continued to record the muscle potentials (electromyograms), collaborating with the Department of Physical Medicine. Dr. Arthur L. Watkins has one of our units in his laboratory at the present time, and we use our own cathode ray equipment for this purpose. We were the first in this area to apply the Polaroid camera which gives a developed picture in one minute to clinical electromyography.

Our staff now shares the time of Dr. Mary Louise Scholl, a pediatrician, who spends her afternoons at the Epilepsy Center EEG Laboratory at the Children's Medical Center. This gives us an excellent liaison there. Dr. Albert C. England, Jr. joined us in the fall of 1955, after a year of part-time work in the laboratory.

We have always trained technicians and physicians in our laboratory, and have continued to do this since the last report. There are usually 2 technicians in training for a period of 6 months at a time, all day, and such trainees usually obtain positions in laboratories throughout the country. They must pass monthly examinations and a final examination before the Hospital certificate is given to them. A number of clinical men have spent 6 months or so in the laboratory in the past 5 years, and they constitute a growing alumni.

Members of the laboratory staff are closely associated with both the national and regional societies in electroencephalography, as well as the editorial board of the special quarterly called the *EEG Journal*. Dr. Schwab was secretary of the American EEG Society for 3 years, beginning with its formation in 1947, and then was president in 1950. He is an associate editor of the *EEG Journal* and one of the vice-presidents of the International Federation of EEG Societies. Dr. Brazier was treasurer of the American EEG Society from its beginning until 1954, when she was made president. She is the treasurer of the International Federation of EEG Societies and an editor of the *EEG Journal*. Dr. Abbott was secretary of the American EEG Society for 3 years and president of the Eastern Association of Electroencephalography.

We are now nearing our twentieth birthday, and at the present time both the staff and the patients of this Hospital regard the EEG examination in the same way as any other laboratory test. It has lost all its novelty and mystery. On the other hand, there are still new facets of our technique of which others are unaware. For the first time in the history of courts, in May 1955, one of our microfilms of an EEG record was introduced and projected on a screen in a Superior Court in New Hampshire.

In closing this report, the author wishes to state once more, in as strong terms as he can, that this electrical test of the function of the human brain can contribute very little, by itself, in a diagnosis; but when it is closely integrated, as it is in this Hospital, with the other physical and laboratory procedures, it can be of true value in establishing a diagnosis and even in helping with therapy.

Robert S. Schwab, M.D.,
Neurologist

The Board of Trustees, at their meeting on February 17, voted:

To accept with regret the resignation of Dr. Robert H. Talkov from the position of Assistant in Medicine.

To appoint:

Dr. John T. Pollard, Jr. as Second Assistant Resident in Radiology, beginning January 1, 1957.

At their meetings during February, the General Executive Committee voted:

To promote:

Dr. Fleming McConnell to the position of Resident in Radiology, effective as of January 1;

Dr. Paul M. Veazey from the position of Intern to that of Assistant Resident on the Children's Medical Service for one year, beginning July 1.

To reappoint:

Dr. Jimmie C. Brockman as Clinical and Research Fellow in Psychiatry, for the period January 1 through June 30;

Dr. Bryan Williams, Jr. as Clinical Assistant in Medicine for one year, beginning March 1.

To appoint:

Dr. Karl-Erik Aström as Clinical and Research Fellow in Neurology for one year, beginning March 1;

Dr. Peter R. Bally as Clinical Fellow in Medicine for one year, beginning February 1;

Dr. Noemi Della Bella as Research Fellow in Surgery, effective as of February 1;

Dr. Walter B. King, Jr. as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Willem deK. Kruger as Fellow in Anesthesia for one year, beginning November 1;

Dr. Thomas E. Macnamara as Clinical Fellow in Anesthesia for one year, beginning October 1;

Dr. Phyllis MacNeil as Clinical Assistant in Surgery, assigned to the Tumor Clinic;

Dr. Jacob S. Mager as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. Carol Meyers as Graduate Student Assistant on the Orthopedic Service, for three months, beginning February 13;

Dr. Olcay R. Neyzi as Clinical and Research Fellow on the Children's Medical Service for one year, beginning February 1;

Dr. Nelson L. Portnoy as Clinical Assistant in Urology;

Dr. Claus W. Reichle as Fellow in Anesthesia, effective as of January 1, 1957;

Nathan Sharon, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. Praphreut Thirakhupt as Graduate Student Assistant in Surgery, for the period February 1 through July 31;

Martha S. White, Ph.D. as Research Fellow in Psychology for one year, beginning February 1.

Miss Jean Ervin has been appointed Supervisor of the Occupational Therapy Department.

* * *

The Simmons College School of Science and the Massachusetts General Hospital recently announced a new program of training in medical technology, which will lead to a bachelor of science degree.

The original request that Simmons College consider such a program was made by Dr. Dean A. Clark, and both he and the Director of the School of Science at Simmons, Dr. John A. Timm, agreed that such a program would help fill the need for more properly trained medical technologists.

The program has been approved by the American Medical Association's committee on hospitals and education. Co-directors of the program will be Dr. Benjamin Castleman, our Chief of Pathology, and Dr. Charles H. DuToit, Director of our Chemical Laboratory.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Gastrointestinal Research

Benson, J. A., Jr., Chandler, G. N., Vansteenhuyse, F. E., and Gagnon, J. O.
Studies concerning the site of fat absorption in the small intestine of the rat.
Gastroenterology 30:53-61.

McDermott, W. V., Jr., Bartlett, M. K., and Culver, P. J.
Acute pancreatitis after prolonged fast and

subsequent surfeit.
New England J. Med. 254:379-380.

General Surgery

Scannell, J. G.
Medical progress: Thoracic Surgery
New England J. Med. 254:271-279.
Wight, A., Hopkirk, J. F., and Cope, O.
Metabolic derangements imperiling the perforated ulcer. IV. Derangements of nitrogen metabolism and the nitrogen deficit.
A.M.A. Arch. Surg. 72:336-345.

Neurology, Neurosurgery, and Psychiatry

Lindemann, E.
The meaning of crisis in individual and family living.
Teachers College Record 57:310-315.
Murphy, J. T., and Schwab, R. S.
Diphenylhydantoin (Dilantin) sodium used parenterally in control of convulsions: A five-year report.
J.A.M.A. 160:385-388.

Neurophysiology

Brazier, M. A. B., Hamlin, H., Delgado, J. M. R., and Chapman, W. P.
The persistence of electroencephalogram effects of pentothal.
Anesthesiology 17:95-102.

MASSACHUSETTS EYE & EAR INFIRMARY

Graduate and undergraduate students from Boston University and Northeastern University are at the Winthrop Foundation every day doing clinic work as part of their educational courses. This student program, under the auspices of the educational staff of the Winthrop Foundation, is a good example of the increasing cooperation between local colleges and the Infirmary.

While working at the Foundation, the students have an opportunity to observe diagnostic procedures and rehabilitation in its various phases. They learn that there are many approaches, other than medical, to hearing problems. Some of the patients, for example, need psychological help or the assistance of a social worker to straighten out their educational or personal problems. At the Winthrop Foundation the staff members work as a team to help the patient in both medical and educational aspects.

This is the second year that Northeastern students have had a course on "The nature, management, and special education of exceptional children". This course is designed to give greater understanding and insight into many problems of the exceptional child, including speech and hearing disorders, vocational problems, and delinquency. Their clinic work takes place at the Winthrop Foundation, where they observe patients. Course instructors are Mr. Alan Feldman, Speech Pathologist and Audiologist, and Mr. Robert L. Berk, Educational Psychologist.

For the first time, Boston University students are also participating in clinical observation. Enrolled in a course on "Diagnostic hearing testing", taught by Mr. Feldman, these students also have an opportunity to give hearing tests.

Both groups of students are able to sit in on the discussion of individual cases at the weekly staff conferences of the Winthrop Foundation. This program is of special interest to those who, in their professional work, will be concerned with one or more aspects of the exceptional child.

The New England Ophthalmological Society held its monthly meeting at the Infirmary on February 15. Dr. Frederick H. Verhoeff, Consulting Chief of Ophthalmology, spoke on "Are Moore's lightning streaks of serious portent?". In his third, and concluding, lecture on "The management of subnormal vision" Dr. Albert E. Sloane gave a summary of the methods and technical aids that are being used at the Infirmary to help persons with subnormal vision.

Dr. Edwin B. Dunphy has been re-elected to the Board of Directors of the National Society for the Prevention of Blindness. Dr. Dunphy will serve a three-year term for this organization, which is devoted to sight conservation.

Dr. Dunphy gave the Charles H. May Memorial Lecture before the Section of Ophthalmology of the New York Academy of Medicine on March 19. His subject was "Radioactive isotopes in Ophthalmology".

On April 27, Dr. Dunphy will give a paper on "The role of radioactive phosphorous in the diagnosis of ocular malignancy" before the Ophthalmological Society of the United Kingdom, in London, England.

The Pan-American Congress of Otorhinolaryngology and Broncho-Esophagology will hold a four-day meeting at the Caribe Hilton Hotel in San Juan, Puerto Rico, beginning April 8. Among the outstanding speakers from both parts of the American hemisphere who will participate in the scientific program will be several members of the Infirmary staff. Dr. LeRoy A. Schall will speak on "Laryngeal surgery after irradiation failures"; "Mechanics of congenital deafness" will be Dr. George Kelemen's subject; and Dr. Robert L. Goodale will discuss a paper to be given on "The pathology of the frontal sinus: Present status of its diagnosis and treatment".

During the month of March, Dr. Albert E. Sloane participated in the Instructional Lectures given at the Postgraduate Course in Ophthalmology in Columbus, Ohio. Dr. Sloane also lectured on "Eye disorders in adolescence" at the Adolescent Unit of the Children's Medical Center in Boston.

Dr. David G. Cogan spoke on "Neurology of the ocular motor system" at the National Institutes of Health in Bethesda, Maryland, on March 5 - 15. At this same conference, Dr. Cogan and Dr. David D. Donaldson gave a course on "Neuro-ophthalmology and Neuro-anatomy".

Dr. David S. Johnson is living in Detroit, Michigan, after completing his residency in Ophthalmology in February.

A visitor to the Ophthalmology Service at the Infirmary is Dr. Paul O. Braendstrup, from Copenhagen, Denmark.

At a meeting of the Executive Committee of the Massachusetts Eye and Ear Infirmary, held February 16, the following appointment was made:

Dr. S. James Bullington — Assistant in Ophthalmology.

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

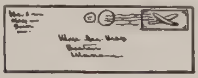
There will be a tea for our visitors from distant shores on April 23 in the Doctors' Dining Room, from 4:30 until 6 P.M. It is hoped that the staff physicians, also, will attend at that time for a pleasant interlude in their work.

Our Annual Meeting will be held on May 1, at 10 A.M., in Bartlett Hall. Coffee will be served first, and the meeting will begin at 10:30. It is hoped that we can adjourn promptly at noon. Try to come to this very important meeting. Many interesting subjects will be brought up.

On May 30, the Annual Picnic will be held at the Bradford Cannons' in Lincoln. Since the holiday falls in the middle of the week, the picnic will begin at 12 noon. Lunches should be brought, but ice cream and beverages will be provided. This is the day when the staff and their wives and children can meet our visitors from other lands and their wives and children, so all please come.

There is a wading pool for the little ones and pleasant walks in the woods for older ones. It should be delightful, and we hope to see you there.

Sign up for transportation at our Reception Desk if you need it.



New addresses:—

Dr. Joseph J. Barlow (r.p. 1955), c/o Dr. Alexander Kellie, Middlesex Hospital, London, England
Dr. Albert G. Engelbach (past a. dir.), National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y.
Dr. James J. Ferguson, Jr. (r.p. 1955), 4855 Westbourne Rd., Lyndhurst 24, Ohio
Dr. Falls B. Hershey (*E.S.* 1947), U.S. Veterans Hospital, 915 North Grand Ave., St. Louis, Mo.
Dr. William Nicholas Jones (a.r.s. *Or.* 1954), 35 Huntington St., New London, Conn.
Dr. Philip L. McCarthy (a. *D.*), 36 Adams St., Quincy, Mass.
Dr. Thomas C. Peebles (*C.M.* 1952), 100 Summer St., Weston, Mass.
Dr. William P. J. Peete (*S.* 1948), School of Medicine, Duke University, Durham, N. C.
Dr. Richard H. Sweet (*E.S.* 1928), 87 Chestnut St., Boston 8, Mass.
Dr. Earle W. Wilkins, Jr. (*W.S.* 1945), 87 Chestnut St., Boston 8, Mass.

In response to our persistent pleas, Dr. Faxon has at last given us this interesting and colorful account of the trip Mrs. Faxon and he made to Turkey some months ago:

In March 1955 I was asked by Mr. Luther R. Fowle, acting for the Directors and Managers of the American Hospital of Istanbul, to survey the hospital and make recommendations relating to future operation and development. The survey was to be financed by the Ford Foundation. Dr. Bernard T. Daniels, a Denver surgeon, was selected to evaluate the technical adequacy of Turkish surgery and medicine. Both of us were to be concerned with the operation of the hospital, the medical organization of the Turkish doctors, the nursing situation, the government Public Health program, and similar problems.

The American Hospital of Istanbul was started in 1920, to serve American naval personnel on temporary duty in Turkish waters and Americans in the area. It also has served the local population of Turks, Armenians, Greeks, Jews, and others, including many refugees. Locally, it is called the Admiral Bristol Hospital to commemorate a great American who, acting as High Commissioner to Turkey following World War I, caught the vision of a modern, democratic Turkish Republic rising from the ruins of the Ottoman Empire, and was instrumental in the establishment of this hospital. He was beloved of Turks and Americans alike. Surviving many vicissitudes, the hospital now occupies a modern building erected in 1939, accommodating 75 patients. Its School of Nursing and nursing personnel are housed in an attractive Nurses' Home which was completed in 1950. It has a small endowment fund administered by the Directors of the American Hospital of Istanbul, Inc. — a nonprofit corporation with offices at 40 Worth Street, New York City. A Board of Managers, composed of Americans resident in Istanbul and Turkish citizens, is responsible for the actual operation of the hospital. It is not a missionary hospital.

On May 18 our party — consisting of Dr. and Mrs. Daniels, their 14-year-old daughter Jean, Mr. Fowle (who was to act as guide and interpreter), Mrs. Faxon and I — took off from Logan Airport in a Pan American plane. Our flight across the Atlantic, including a brief stop at Gander, Newfoundland, was smooth and uneventful. The sunrise high above the Atlantic cloud belt was beautiful. We made a short stop at Shannon, Ireland, and another at Paris. Flying just west of the French Alps, we were treated to some splendid views of those rugged mountains. We continued along the Riviera, with Corsica and other islands in the distance, to Rome, where we broke our journey. We stayed in Rome for two days, visiting the usual places of interest.

A British European Airway plane took us to Istanbul Airport, where we arrived at about midnight—another comfortable flight. A bus ride of 12 miles over rather poor roads took us to Istanbul (which translated means "The Town"). We passed through the old city, with the minarets of the mosques gleaming with rows of electric lights around the balconies from which the muezzins call the faithful to prayer, and crossed the Ataturk Bridge to Beyoglu (old Pera) on the eastern side of the Golden Horn, to the new Istanbul-Hilton Hotel which had opened that morning.

On May 29 we moved to quarters in the Nurses' Home on the hospital grounds, which were pleasantly landscaped with flowers, cedars, pines, and deodars. While the men went to work going over the hospital, visiting Turkish hospitals, and talking with Turkish doctors and laymen, the ladies had a grand time exploring Istanbul streets and shops, including the famous Bazaar — a gloomy building housing about 2000 shops which display every kind of merchandise imaginable. On Saturdays and Sundays the men had their turn.

The Turkish hospital system is predominantly governmental, i.e., federal or municipal. There are a number of proprietary hospitals much like the British nursing homes or the small private hospitals that flourished in Boston round 1900. The government is developing a type of Workmen's Compensation hospitals, somewhat smaller than the other governmental units, where most of the accident and much other surgery is done. There is a German and a French hospital, both subsidized by their governments. The American Hospital is the only representative of the voluntary, nonprofit hospital corporation which is the backbone of our hospital system. It occupies a unique position, unhampered by the suspicion attached to the French and German hospitals by reason of their connection with their governments.

We visited many Turkish hospitals and, with one exception, found them to be 50 years behind those of the United States. Although the buildings were mostly fireproof, they were poorly planned and according to our standards poorly equipped. Utility rooms were practically nonexistent. The kitchens were substandard in every way. Little attention was paid to food service. It was simply so much nourishment, take it or leave it, but the Turks usually cleaned up their plates. Hot water was often at a premium and dishwashing was all hand work. Maintenance and housekeeping were poor. Their operating rooms were up to date, usually well equipped and well kept. Technically, surgery and medicine were nearly on a par with ours, but postoperative care was not too good. While there were a few rooms for private patients, most all were ward cases. People who can pay go to the proprietary hospitals. These are only fair —not bad but not good. The only hospitals I would dare to be sick in over there are the Admiral Bristol and the German Hospital.

The exception among the Turkish hospitals mentioned above was a university unit in a federal hospital, directed by the Professor of Medicine of the University of Istanbul Medical School. This was modern in construction and arrangement, up to date in operation, well equipped and admirably conducted, though on the German Herr Professor system. It was the one bright spot among the Turkish hospitals.

There are 2 universities in Turkey, both with medical schools — one in Istanbul and one in Ankara. They are state schools and have been strongly influenced by French and German medicine, but they are now beginning to recognize American medicine, also.

At last we come to the American Hospital. As stated before, it is a nonprofit institution, controlled by a Board of Managers composed mostly of Americans living in Istanbul but with some Turkish members. Dr. Lorrin A. Shepard, the only American doctor on the staff, has been Medical Director and Chief Surgeon for 29 years. He retires this year and it is necessary to find a successor for him. Under him is a strong, well-balanced team of specialists in medicine, surgery, obstetrics, pediatrics, anesthesia, radiology, biochemistry, bacteriology, and pharmacy. These are all Turkish doctors, some of whom have received training in the United States. There is an intern and resident staff of 6.

The Nursing Service has always been supervised by one or several American nurses who have also taught in the School of Nursing. The number of students ranges from 20 to 30 and, to date, there are 188 graduates. As there are only about 1000 active nurses in all Turkey, the importance of the school is apparent.

My impression of the hospital is that it approximates the general arrangement and operation of an American hospital of the same size. The admission of patients is not handled as carefully; the records are not as well kept; there is more informality in handling the patients in Dr. Shepard's and the other doctors' offices; the floor discipline of nurses is less strict, with some minor variations in practice; and the admission of visitors is more closely guarded. The surgical and medical care is excellent. The training of residents has been improved lately through the introduction of grand rounds and more personal instruction by the staff. After 3 years of training these residents are eligible for government board examinations and accreditation as specialists. Maintenance was fair. It is a Turkish weakness to build and then neglect upkeep. Consequently, buildings deteriorate rapidly and in a few years look twice their age. Part of this is due to difficulty in obtaining materials and money, but part of it is a national defect. Housekeeping was alternately good and poor, depending upon the quantity of help which fluctuated widely. This fluctuation was partly due to a general scarcity of labor and partly due to an inflationary wage situation which the hospital had not been able to meet. The kitchen was below par according to our standards. The coal range could be excused, as gas or electricity is unreliable and oil very expensive; but the wooden tables and cabinets, the dirty floor with burlap bags to wipe feet on, the unsatisfactory dishwashing facilities both in the kitchen and on the floors, and the lack of labor-saving equipment gave a very poor impression. Likewise, the distribution of food to patients was poorly handled, in spite of ward kitchens. Here is one department that should be brought up to standard. Food handling in Turkey is very casual. Dietitians are definitely indicated. There is a good x-ray department, a good laboratory, and pharmacy— all well run.

The nurses' dormitory provides a complete teaching unit with offices, classrooms, library, laboratory, and diet kitchen. There are bedrooms for 34 students and 16 graduates, and a suite with 4 bedrooms for supervisors. There is a large assembly hall for games and stage plays. Wide balconies provide a chance for fresh air and a wonderful view of the Bosphorus. Any hospital could be proud of this building.

The nursing situation in Turkey is serious. There are only about 1000 active nurses; there should be 30,000. The attitude of the recently emancipated women of Turkey toward nursing is much the same as existed in the United States in 1875. It is considered as a menial job, but according to the Chief Nurse of the Turkish Red Crescent (which is the same as our Red Cross) this attitude is changing and respect for nursing is increasing. An affiliation with the American Girls College is being planned, which should provide students competent to become teachers and superintendents, thus increasing the prestige of the School of Nursing.

Our 4-weeks' visit ended, we flew to Athens for a 2-day stop-over. We stopped again for 2 days in Rome, and then started on a bus trip to Florence, Venice, and Milan. From Milan we flew over the Alps, close to Mont Blanc, stopped for a moment at Geneva, and then went on to Paris. During our few days there I visited the American Hospital in Paris which I surveyed in 1950. We then continued on to London, and after a few days there took off for home via Pan American. I just can't get used to the marvel of air travel. At 3 P.M. on a Thursday we were on a bus going to Hampton Court, about 15 miles from London; at 3 P.M. the next day we were on our train bound for West Falmouth.

Why should there be an American Hospital in Turkey? There are several reasons. The most obvious is that it will provide a satisfying hospital for American residents in Turkey. A more important reason is the provision of an example of the American way of hospital operation, the doctor-patient relationship, the staff organization, and our methods of diagnosis, treatment, postoperative care, and, lastly, as an example of our private nonprofit hospital corporation which has played such an important role in the development of our hospital system. Such organizations are almost unknown in Turkey. Almost everything stems from the government over there. If Turkey is to become a real democracy it must encourage private initiative — both individual and collective, and a successful demonstration of a nonprofit hospital is one means of showing them that hospitals do not have to be government institutions.

On the way to Turkey I found myself wondering whether there *was* any need for the continuation of the American Hospital. At the end of my stay I was convinced that there was, and that there exists a wonderful opportunity for us to help in developing a better hospital system in Turkey; also, that we might, by example, help in building a medical organization — since practically none exists now — which could play an important role in guiding Turkish medicine.

It was a wonderful trip, from which I returned enthusiastic about the American Hospital and its work. As I said before, Dr. Lorrin A. Shepard, the present Director, will retire this year after 30 years of service. The position of Director affords the opportunity for a man to develop an extensive surgical practice, to exert a beneficial influence on medical affairs in the growing Turkish Republic, and, at the end of service, to retire with the satisfaction that he has helped to make this a better world. Financially, he will probably not be as well off as he would have been had he stayed in the United States, but from the standpoint of accomplishing worthwhile objectives in life, he will be far ahead. He must be a well-trained surgeon, interested in leading and teaching his staff. He must have high ideals and a touch of the missionary spirit, although the American Hospital has no connection with any missionary organization. The position offers a real challenge and one which will give lasting satisfaction if successfully met.

Brief bits:—

Dr. Edward B. Benedict attended the February 16 meeting of the Boston City Hospital House Officers' Association and discussed a paper on laparoscopy (peritoneoscopy) by Dr. Jacques Caroli, Gastroenterologist at the Hôpital St. Antoine, Paris.

On February 18, at Williams College, Dr. Chester M. Jones received the Rogerson Cup and Medal, presented to him by President J. Phinney Baxter, III, at an Alumni Meeting. Dr. Jones graduated from Williams College in 1913, and was awarded an honorary degree of science from the same institution in 1942. The Rogerson Cup and Medal are awarded by the College each year to an outstanding alumnus for service and loyalty to the College and for distinction in any field of endeavor.

Dr. Robert R. Linton recently visited Dr. Eric Cruikshank, Professor of Medicine at the new University of the British West Indies Medical School. Dr. Cruikshank, formerly of Aberdeen, Scotland, spent 1938-39 working with Dr. Champ Lyons at the Massachusetts General Hospital. He later joined the British Armed Forces, was taken prisoner at Singapore by the Japanese, and remained there throughout the rest of the war. Starting from scratch, he and others have done an excellent job in the last five years in establishing this new University Medical School. Syphilis is still a very common disease in Jamaica, and there is also much general interest in the new methods of treating aneurysms; so Dr. Linton gave a talk to the hospital staff and the doctors in the vicinity of Kingston on modern surgical methods of the treatment of major arterial lesions. On February 2, Dr. Linton took part in the Cardiovascular Symposium in Albany, N. Y., at the Albany Hospital, speaking on "The surgical treatment of obliterative arterial disease".

At the Atlanta Graduate Medical Assembly, held in Atlanta, Georgia, last February, and attended by over 800 doctors from the State, Dr. George Saslow gave 2 papers on "A practical approach to comprehensive medicine". On one panel, with 4 psychiatrists from Georgia, tape-recorded questions submitted by Georgia's doctors were answered by the panel. The questions were concerned chiefly with: 1. When do you refer a patient to a psychiatrist? 2. What are effective referral procedures? 3. What can a referring doctor expect from the psychiatrist in the way of communication?

Dr. Richard C. Webster and Dr. Richard J. Coffey are scheduled to present a paper entitled "The posterior pharangeal wall flap in rehabilitation of complicated palate cases" at the 14th Annual Meeting of the American Association for Cleft Palate Rehabilitation, to be held in Kansas City, Missouri, on May 4.

Dr. and Mrs. Claude E. Welch recently were guests of the Los Angeles Surgical Society. Dr. Welch gave an address on "Some unusual manifestations of intestinal obstruction", at the President's dinner meeting on January 19, and followed it with several presentations at the meeting of the Southern California Chapter of the American College of Surgeons in San Diego. At the same time, Dr. William H. Snyder (*W.S.* 1933) was awarded a special medal by the Los Angeles Surgical Society for special work in children's surgery. This is the third time this medal has been awarded in 40 years. Other MGH men who were present and found to be flourishing were David Sheldon, who is now an instructor in the University of Southern California Medical School, and John Kennedy, who has acquired a great interest in vascular surgery and who is practising in San Diego.

Dr. Weldon W. West (*S.* 1948), our "singleton" in Stockton, California, has sent us this interesting letter:

I have been in Stockton for approximately 13 months. I arrived here after having canvassed most of the areas in northern California in search for a place for a general surgeon. This town would seem to be the most suitable. Incidentally, it is my own home town and I am delighted to be back. My decision was not the only one being made during this time, apparently, because 4 other new young general surgeons of good training came to the community at the same time. Business has been slow, as you might well imagine, and I have been having considerable difficulty learning the economic facts of life. For the first 6 months I tried on my own to establish a surgical practice, without great success. I thereupon joined an office of 3 other surgeons and gained considerable respite, money-wise, but also had considerable distress professionally. Therefore, the first of October 1955 I again embarked on solo surgical practice.

I have found the medical community to be most congenial, with many well-trained men in the fields of general practice, internal medicine, cardiology, neurosurgery, orthopedics, and general surgery. My special interest is vascular surgery, and during this past year I have finally been able to organize and establish what we call "The Delta Artery Bank" in conjunction with the local blood bank. This bank is just now beginning to function, and we have arranged to have vessels obtained in this area processed by the Freeze-Dry method in San Francisco and returned here. It has been of great interest to me to find that there is a definite need in this community for human homografts. In conjunction with this, I have been fortunate to be appointed to the staff of the local County Hospital and permitted to establish a vascular service and vascular clinic there. I hope to establish soon a similar service at the State Mental Hospital in Stockton, which has a population of about 5,000 inpatients.

Fortunately, we are near San Francisco and I am able to see many of our mutual friends there on frequent occasions. Dr. John Erskin and Dr. Leonard Rosenman are on the committee with me for the Northern California Artery Bank. I occasionally see Dr. Benson Rowe doing chest surgery at the University of California. Dr. Dexter Richards is in Berkeley, doing a thriving general surgical practice.

Other personal notes are: the passing of the American Board of Surgery last spring, current application for the American College of Surgeons, organization of the Stockton Surgical Society, and the enjoyment of the College of the Pacific football games.

P.S. We could use one or more good nose and throat men in this area if any of the boys are interested.

We were so *very* glad to receive this letter from Dr. Chiu-an Wang (*W.S.* 1944), together with a most interesting and informative booklet containing 120 large pages of fascinating pictures of Hong Kong and its many activities and industries. The booklet may be seen in the office of The News. It would be well worth your while to come in and look at it. When we opened it we expected to spend a few minutes with it, but found when we put it down that an hour of complete absorption had elapsed. Dr. Wang's letter reads:

I received your letter in which you ask me to write for The News as the "singleton" MGH-ite of Hong Kong.

Just to give you and my friends at M.G.H. some idea about Hong Kong I am sending you a little booklet called *This is Hong Kong.* It is actually Hong Kong in pictures. You may keep it for reference or leave it at Treadwell Library for those interested in Hong Kong.

We have been here since 1950, and have enjoyed living and working here. It is a lovely place. Just how long it can remain as it is nobody knows, not even the British.

My wife and I often talk about the M.G.H. and our friends there. You probably know that she was in Boston last April, visiting the M.G.H. and her alma mater, Wellesley. She has told me a good deal about the expansion of our great institution. I hope to visit all of you again in the near future.

We have four girls now. The two older ones are in the primary school, learning rather well the art of Chinese brushing and the Chinese way of life. The two little ones are as yet too small to enter the kindergarten. We live in the mid-level on the Island side, overlooking the beautiful harbor. With many new housing projects either going on or near completion, living quarters are not as scarce as they once were. Cost of living is not high. One can get an Arrow shirt for less than US$3.00, eat a good steak dinner for less than US$1.25, or have a haircut for US$.75. The reason is that we do not have many kinds of taxes as you do.

Professionally speaking, the doctors have much more work than they can handle. For a population of over two millions, we have a little over four hundred doctors. These are all western trained. The majority are local graduates of the Hong Kong University. A few, like me, are imported, so to speak. Clinical materials are voluminous. Diseases, in many ways, are much the same in nature as those in the States. Exceptions: we have practically no postoperative phlebothrombosis or embolism, yet we have many more cases of carcinoma of the liver and contagious diseases such as tuberculosis, and childhood diseases such as measles, chickenpox, mumps, etc. We have few cases of poliomyelitis, the majority of them being Europeans and Americans. The Chinese seem to have immunity against it.

Please convey my best wishes to all our MGH friends.

This exciting letter from Dr. Isaac M. Taylor (*M.* 1946) to Dr. Means — who has thoughtfully passed it on to us so that Dr. Taylor's many friends may enjoy it — comes from a part of the world never before represented in The News. The letter was written on December 29, from Hut Point, Cape Armitage, Scott Island, McMurdo Sound, Antarctica, with "Operation Deep Freeze, Task Force 43" added on the back of the envelope. Dr. Taylor

Probably the last picture to be taken of the old EEG Laboratory in action. Mrs. Sylvia Walker, R.N., who will retire this spring, is with the patient. Mrs. Frances Potts is at the 15-channel French machine.

is a Commander in the Navy's Medical Corps, and is Medical Officer to Admiral Byrd's Operation Deep Freeze. The letter reads:

Your Christmas card and your letter reached me today. How delightful to hear from you. Our last mail leaves New Zealand on 15 January, so you won't have the opportunity to answer this until next September, but I shall hope to hear from you then.

I can't begin to tell you what a marvelous and exciting time I'm having. The trip is turning out to be as good as I could possibly have hoped for — better, even. We had a delightful three days in New Zealand and then an eight-day passage to the ice. We've been here at Hut Point for ten days in an advance camp, and now the camp ships are being escorted in by the icebreakers to a point close enough to unload material and supplies for flying and for our winter base.

Hut Point is the site of Captain Robert F. Scott's winter camp for two years in the 1901-1903 expedition. You will find good descriptions of it in Scott's *The voyage of the discovery*. The older editions have good photographs of the area. I don't think Scott gives an adequate picture of the natural beauty of this place, and I'm sure I can't. We are on the west side of Ross Island, looking south and west across McMurdo Sound at the mountains of the mainland 30 miles away. These are gorgeous and dramatic peaks, rising to 15,000 feet, covered with snow. The Sound between is still frozen hard with the winter's ice. Our weather has been good except for two days of blizzard, and, of course, the sun is up twenty-four hours each day. Unusual beauty accompanies the illumination of the land from each of the 360° of the sun's course. The air temperature does not get above freezing, but the snow is melting under the constant sun. Behind the camp are low basalt hills which make excellent hiking areas for one like me — unaccustomed to walking.

Captain Scott's cabin still stands in good condition after 54 years. It is filled with snow and ice, and we hope to excavate it and restore it as a memorial. On one hill near by stands the memorial cross to Scott, erected in 1913 after his body was found, and on another a cross to Seaman Vince, who died in Scott's first year here in 1902. Shackleton spent the winter here in 1908, and I don't believe many people have been ashore since. The reminders of the English are everywhere about us.

Every day is a new adventure, and I live in constant anticipation or excitement or appreciation of nature. I suppose things will be duller through the winter night, but even then there will be absorbing things to see and learn and do. Medically, we are operating at a very primitive level in this base camp, but the ships are available for any serious problems and I will be well equipped when the winter base is built.

We are very grateful to Dr. Butler for passing on to us this delightful letter from Dr. Boris Senior (*C.M.* 1950), written from South Africa:

I don't know whether your many far-flung ex-trainees regularly say hello. If so, you must be inundated with letters and that must be yet one more of the multiple tasks of a service chief. Well, even if it is a task and a duty to you, it remains a pleasure to us. A happy experience becomes rose-tinted with time, and yet more time has only served to add a richer glow. This florid phraseology is indicative of the warmth that envelops one on consideration of the M.G.H.

The tranquil South African medical scene was recently shaken by an epoch-making occurrence — namely, my entry into private practice. Unfortunately, the shudder was not violent enough to reach the public, and at a patient a week my conversion rate can hardly match that of Billy Graham.

Am in practice in Johannesburg with two senior men and Lennie Braudo (a.r.p. *C.M.* 1953). Am actually enjoying the clinical side very much, as I have always preferred palpating a spleen to a test tube. The material is excellent. Apart from the over-all run, there are two adrenogenitals, two Turner's, two panhypopits (reads like Noah's Ark to here), and a hypoparathyroid.

The past year saw me settled in a home and the father of a little boy who is well up to Gesell and heavy on the calories.

Possibly this letter gives the impression that I am well and truly settled here like a barnacle to a keel, and with only an explosion able to dislodge me. Nothing could be farther from fact. The weekly routine is to check with the U.S. Consulate regarding visas, try to work out just how few dollars one needs for hamburgers and covering, and ascertain whether anyone would be willing to employ one, anyway. The latest news is that I can slide in as an immigrant attached to my wife's apron strings. She, apparently, is highly eligible for a visa. I know that the rule is something like that of heavyweight champs — "they never come back" — but lightweight pediatricians do!

THE NEWS

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McLEAN HOSPITAL

Dr. W. Franklin Wood, Director of McLean Hospital since 1932, began a leave of absence on March 1 which will lead to his retirement later in the spring. The end of twenty-four years of devoted service by Dr. Wood signalizes a turning point in the general program at McLean Hospital. Dr. Wood has been replaced by Dr. Alfred H. Stanton, who has been at McLean for the past four months as Psychiatrist in Chief. The new program was planned to complement the appointment of Dr. Lindemann as Chief of the Psychiatry Service of the Massachusetts General Hospital. Dr. Stanton has a past experience which closely parallels that of Dr. Lindemann in his special interest in social psychiatry, but is complementary to it in his focus upon the psychiatric hospital.

The change in administration at McLean comes at a time of active critical study of current psychiatric hospital practice throughout the United States and Western Europe. Although the new tranquilizing drugs and other physiological therapies have contributed to making the psychiatric hospital of today a very different place from that of a decade ago, the main development has derived from the better understanding of the implications of psychotherapy and group techniques. A modern mental hospital is a lively place indeed, with its many group meetings of all sorts — some straightforward group psychotherapy, some committee meetings of patients, frequent staff meetings, and group teaching methods — and an active program of individual psychotherapy, in addition to the more usual hospital activities of physiological treatment and general nursing care. In such a general atmosphere, many previously accepted practices have come to be widely questioned or replaced by other practices at both the administrative and the group level which had been thought to be unrelated to the matter of mental health or illness. The world of the modern psychiatric hospital is consequently an exciting and interesting one indeed.

While even psychotherapy is not yet included in many current textbooks on therapeutics, the modern psychiatrist not only uses psychotherapy but has added still another new area of therapeutic activity in the use of ward group functions as part of treatment and in the careful recognition of the clinical importance of the patient's position in the ward group or in the family group.

In a number of respects the psychiatric hospital has recently become more like the general medical and surgical hospital; in others it has become different. The idea of a long-term treatment hospital in which patients were put away because they were "insane" and "couldn't take care of themselves" has been replaced in modern medical centers for a considerable period of time; like other stereotypes, this image of the psychiatric hospital tends to persist in spite of changed practices. It is true, of course, that general custody and skilled nursing care for elderly patients is an important feature in many of the best general psychiatric hospitals, and that this function is likely to become more important as the average age of the general population rises. But such gerontological wards are very different indeed from the usual picture of a place where patients are "put away". With very few patients in bed, even among the very aged, and with a bright and active atmosphere, such wards can clearly be places where patients go on living.

The wards for elderly patients are only one part of the hospital where nursing and medical care make increasingly skilled use of the group of patients as a primary part of the hospital program. Such group experiences may be even more important, playing a crucial role in the actual clinical course of the patients. It is usual, for instance, for a new patient just admitted to a psychiatric hospital to show a rapid change in his clinical condition immediately after admission. Often this is simply a matter of the continuation of the changes which had led to his being brought to the hospital. Often, however, it seems to be actually related to the patient's way of dealing with the double problem of adaptation to a new and strange setting on the one hand, and on the other to his separation from an old and familiar, and usually troublesome, environment which his family or his ordinary place of living comprise.

A few years ago, before the importance of this acculturation period for the patient was recognized, this rapid clinical change was very likely to be for the worse. Patients immediately after coming to the hospital would fairly frequently become considerably more disturbed than at the time of admission. Even though this was usually temporary, it comprised a serious problem. It is now becoming more frequent that the patient shows a striking, rapid, and substantial improvement upon admission to the psychiatric hospital—often an improvement which the same psychiatrist treating the patient in the community was unable to bring about. The adaptation period of patients to the new hospital situation has, as a result of study in a number of places, been turned into an asset rather than a liability.

Improvement in admission techniques has been carried to such an extent in Amsterdam, that the psychiatry personnel are called on an emergency basis to the scene of an acute disturbance anywhere in the city, rather like an ambulance being called to an automobile accident. A violently disturbed family situation is often met by a team of psychiatrist, nurse, and social worker within half an hour of the time of its breaking out. Such a team is often able to obviate hospitalization altogether. If hospitalization does occur it is carried out much more easily, more skillfully, without the deception of the patient, and in a way which augurs well for the patient's later treatment, rehabilitation, and return to the general community. The modern psychiatric hospital, in contrast to usual practice before World War II, meets its new patients with a complete examination, carries out systematic studies, and arrives promptly at a diagnosis of what is the matter with the patient; this means, in psychiatry, not only a name for a disease but it also includes those factors in the patient's interpersonal situation which helped in precipitating or continuing it. A treatment program is prescribed on the basis of this general diagnosis. These aspects of the modern psychiatric hospital have developed by trying to approximate the care of patients given in general hospitals where a rapid work-up of the patient is done in a quite analogous manner. The expectation of an early discharge is also increasingly characteristic of the psychiatric hospital, although arrangements for continuing treatment of the patient after his return to the community have not been worked out to match the ability of the hospital personnel in sending the patient back into the community. Psychiatry services in general hospitals, in which the Massachusetts General Hospital was a pioneer, may help greatly in solving this problem.

The purely psychiatric hospital, however, has other problems and techniques which differentiate it from the general hospital. The psychiatrist picked up many of these techniques from psychotherapy and from the study of general and social psychology more than from his affiliation with the rest of medicine. If a patient does not improve in many hospitals within a month or two, active treatment is generally abandoned or the interest in the patient goes to a low level and "ancillary" treatments like occupational therapy, physiotherapy, and several others tend to replace it in the hospital's program for the patient. Recent developments in psychiatric hospital practice, however, have tended to bring new sidelights to this. The timetable of psychiatric hospitals (for those patients who do not improve and return to the community rather quickly) is considerably longer than that which is usual for doctors and nurses. In the mental hospital a patient is not thought of as a "chronic" patient for a year or two or even longer. Active treatment is planned, carried out, and worked through by psychiatrists and the whole group of personnel who compose the modern psychiatric hospital, on a month-to-month basis rather than on an hour-to-hour basis. While this relatively longer time scale may serve as a euphemism for no treatment at all ("continued treatment" was one of these euphemistic phrases), treatment which takes a full year may be worked out carefully, systematically, in the psychiatric staff conference according to the nature of the patient's disorder. However, this time scale and rate at which change occurs is rather more like that of a school than like that of a general hospital, and consequently the modern psychiatric hospital resembles a boarding school in some respects more than it does the general hospital. This longer time scale has brought with it not only problems but also special insight. Outstandingly it has been increasingly recognized in psychiatric hospitals that the activity of the patient is the most important thing which the hospital can facilitate in bringing about recovery. The modern psychiatric hospital has left far behind the idea that patients should be in bed. Patients in a psychiatric hospital are, of course, rarely kept in bed; they are up and around and are often engaged in strenuous physical activity. But patients not only engage in physical activity; they also take part in serious, long-term, and relatively effective mental activity. Educational programs are a regular part of the modern psychiatric hospital. Patients may live in the hospital and go out to work every day, returning to the psychiatric hospital for treatment in the evening.

An instructive example was presented by a recent problem which arose at McLean Hospital. Following this general policy, the patients at McLean have organized two associations, one of which is devoted to planning and arranging for their own recreation. The other provides a vehicle for the patients to express their views and perhaps to take part in the management of the ward or in contributing to the working and planning for the hospital. This latter patient group has organized a hospitality committee whose purpose will be, following procedure used in certain other hospitals, to greet and welcome visiting psychiatrists and nurses, new patients, and, interestingly, new affiliate nurses. This partly worked out plan calls for the patients to appoint a small group of their own number to meet the new affiliate student nurses who come to the McLean Hospital and who always show signs of a certain amount of unfamiliarity and uneasiness. This group of patients will orient the students to the hospital and, to some extent, to the nature of psychiatric nursing care. Primarily, it was designed by the patients explicitly, to put the affiliate nurses at their ease. The staff expressed apprehension over only one aspect of this plan. The past record of success of the patients' groups is such that there is little concern about whether or not this group will succeed. The main concern was that the young student nurse, accustomed to patients who are essentially in the position of being taken care of, might find it unsettling to be put in the position herself of being taken care of by a group of patients. That it might be somewhat disturbing to the affiliate nurses was clear, but that it would be more instructive than disturbing was even clearer, and consequently there were really no serious apprehensions about how this plan of the patients will work out.

This new point of view by no means implies that patients in the hospital are not ill or that they do not need some sort of nursing. But the nature of much psychiatric illness has apparently been poorly identified. It is now clear that the type of nursing which has been taught in the past is only a part of the type of nursing which is needed. Nurses with group and organizing skills, nurses able to identify isolated areas of personality defect and to support patients in these areas while allowing them to go ahead in other areas — these are the psychiatric nursing skills needed particularly.

The recognition that this type of patient care was needed developed primarily from experience in psychotherapy. In individual psychotherapy, the patient and the doctor both work hard at trying to understand the nature of the patient's personality disorder and his particular handicaps in his personal relations. The fact that the doctor is very active indeed does not mean that the patient does not work hard also. Being a patient in a mental hospital is similar. This development of organized activity for patients gives a new dimension to conventional occupational therapy, recreational therapy, physical therapy, and so forth. Therapists work with patients as part of a whole plan in which the activity of the patient is both encouraged and assumed; patient initiative is not regarded as rebellious, but is taken as a matter of course.

The psychiatric hospital consequently offers an excellent opportunity to study the relation between group performance and individual disorder. Study of this sort can be expected to contribute not only to an understanding of its own effects but also to an understanding of the general hospital. The patient who stays in a hospital for a week or two usually has no serious interpersonal problem created by the fact of his being in the hospital. True, he misses time at the office, he loses a certain amount of money, and misses appointments. He may become restless because he wants to be doing more, or he may be gratified at the chance to do some reading which he has had to postpone. If, however, the patient must remain in the hospital for eight to ten weeks, his problem becomes quite different. Now loneliness and homesickness become important. The people in his immediate environment— the nurse, the other patients (if they are accessible to him), his doctor, and the occasional visitors — assume a very great and rather unusual importance. Childlike dependence upon them may appear in patients who had no such problem before. Many patients suffer from the fact that they are in bed and that all initiative, thought, planning, and the things that make life worth while are transferred to the hands of others. The ability to work out ways of ameliorating this situation or even of turning it to advantage has developed in psychiatric hospitals and is applicable in general hospitals. Thus, wards may be considerably better places for long-term patients than private rooms if the private rooms keep patients isolated from each other. Patients in general hospitals also form informal groups with no awareness of their importance, unless the groups are formed surreptitiously. In any case, the usual structure of the general hospital is such that the patient is seen as a single being and the physician is unlikely to know of the existence of such groups of patients. Since all the patients in such wards are likely to affect each other, to get uneasy or comfortable at the same time, it is not unusual that a perceptive nurse knows exactly why a particular patient is "worse" when the physician has no clue; she knows that all the other patients are "worse", also, and is likely to know something about why. Often the high morale — or the partial demoralization —of a particular ward is the effect of easily correctible oversights or of staff conflict which is unrecognized, or other similar, personal factors. It may occasionally be a quite easy matter to effect a simultaneous improvement in many patients — if the importance of the usually unrecognized group is appreciated.

The new program at the McLean Hospital will undertake both to exploit these new understandings of hospital treatment and to investigate them. The first measure taken has been to arrange for the addition to the staff of more psychiatrists. The addition of several residents will permit much more rapid and detailed study of each individual patient and will considerably increase the availability of systematic psychotherapy. At the same time, the residents will free the regular staff to become more familiar with the patient's family setting and his interpersonal relations in the hospital — information needed for the planning of his whole therapeutic program. The greater amount of free time should permit the nurses and the doctors on the wards to coordinate their efforts so closely that managing a ward becomes a program with clear clinical implications for each patient staying on it.

The education of the residents will require experienced supervisors in psychotherapy; some of these will be drawn from the general psychiatry community and others will work at the hospital. Supervision of psychotherapy—the planned and regular meeting of a resident psychiatrist with a senior psychiatrist to discuss in microscopic detail the contents of psychotherapeutic interviews—is a relatively new technique developed widely in psychiatric hospitals since World War II. It was first developed in psychoanalytic training institutes and has been adapted quite successfully to hospital practice.

Two new people have come to McLean to begin to put this program into effect. Dr. Merton Kahne, an experienced psychiatrist, has joined the staff on a full-time appointment. Dr. Kahne will bring to the hospital a considerable teaching experience, a special interest in psychotherapy and in psychiatric hospital practice, and valuable experience in group psychotherapy.

Miss Golda Edinburg comes to the hospital as its first social worker in psychiatry in some years. She is thoroughly experienced in psychiatric hospitals, having worked at the Veterans Administration Hospital in Medford, the Beth Israel Hospital, and the Chelsea Naval Hospital. McLean offers many natural advantages for studying the problems involved in discharge of patients as well as upon admission, and Miss Edinburg's experience will permit the hospital to give much more help to patients in especially critical areas.

This is a particularly interesting time for the new program at McLean. It is now generally recognized that group and institutional factors are of great importance in determining the clinical course of the patients, but little more than this is known exactly. Much of what is known is known only intuitively, vaguely, or in a general way. Just what their importance may prove to be and how these aspects of treatment can be used best are matters which will not be known until a good deal more is found out about them. But the methods necessary for research are available from the psychological and social sciences, and this field of research will be exploited at McLean along with its current program of biochemical research.

Alfred H. Stanton, M.D.,
Psychiatrist in Chief

* * *

We think that all members of the Hospital family — both professional and nonprofessional — should know of the liberal discounts that are available on purchases of many items, by simply procuring discount cards from our Personnel Department. Reductions of from 20 to 50 percent are allowed to holders of these discount cards, by a selected list of dealers, on such articles as the following:

air conditioners
automobile accessories
batteries
bedspreads
bicycles
billfolders
blankets
blenders
blouses
brushes
cameras
can openers
children's apparel
chimes
clippers
clocks
copperware
curtains
cutlery
dishes
dishwashing machines
disposal units
draperies
electric appliances
electric ranges
electric razors
fans
fire extinguishers
fountain pens
freezers
fryers
fur coats
furniture
furniture covers
gas ranges
hair dryers
hampers
hardware
heaters
hosiery
irons
jackets
jewelry
kettles
kitchen cabinets
knives
lamps
lingerie
luggage
mirrors
mixers
mops
motors
paint
pajamas
phonograph records
phonographs
photography equipment
pillows
power mowers
power tools
pressure cookers
pyrex dishes
radios
refrigerators
rifles
rugs
scissors
shears
sheets
shirts
sinks
skates
slippers
socks
sporting goods
stoves
sun lamps
tablecloths
tape recorders
toasters
tinware
tires
tools
toys
trousers
typewriters
umbrellas
vacuum cleaners
wallpaper
washing machines
watches
water heaters
weather stripping
wheelbarrows
wire

An additional bit of advice: It would be to your advantage to secure from the Personnel Department the name of the dealer who gives the most liberal discount on any particular item before you make your purchase.

New addresses:—

Dr. David W. Compton (r.p. *An.* 1946), 2740 61st Ave., S.E., Mercer Island, Wash.
Dr. Richard H. Eppright (a.r.s. *Or.* 1955), 4520 Rossmoyne St., Houston, Tex.
Dr. Jesse T. Nicholson (r.s. *Or.* 1933), 1740 Bainbridge St., Philadelphia 46, Pa.
Dr. Kurt H. Thoma (hon. s.), 1146 Beacon St., Brookline, Mass.

The Board of Trustees, at their meetings during March, voted:

To accept with regret the resignation of Dr. Bernard D. Briggs from the position of Associate Anesthetist.

To appoint:

Dr. Carl A. L. Binger to the Board of Consultation, effective July 1;
Dr. Jack R. Dreyfuss as Assistant Radiologist;
Dr. Edward Hamlin, Jr. to the Social Service Advisory Committee, to succeed Dr. Oliver Cope;
Dr. William E. Karnes as Clinical Fellow in Neurology, acting as Assistant Resident on the Service, for one year, beginning July 1;
Dr. Ruth Murphy as Clinical Fellow in Psychiatry at McLean Hospital, beginning March 15;
Dr. Allan C. Oglesby as Exchange Assistant Resident on the Children's Medical Service, for the period April 1 through May 31;
Mr. Norman Roberts as Visiting Orthopedic Surgeon pro tempore;
Dr. Max L. Rosenheim as Visiting Physician pro tempore, for the period April 3 through April 15;
Dr. Morton N. Swartz as Assistant in Medicine;
Dr. Gerald G. Woodruff, Jr. as Exchange Assistant Resident on the Children's Medical Service, for the period April 1 through May 31.

The Trustees also voted to appoint the following Interns for one year, beginning July 1:

Medicine

Dr. Arthur F. Amick
Dr. Paul H. Black
Dr. Norman K. Brown
Dr. Leon I. Goldberg
Dr. Edgar Haber
Dr. John W. Josse
Dr. Arnold M. Katz
Dr. Herbert E. Kaufman
Dr. William M. O'Brien
Dr. Robert K. Osborne
Dr. James A. Rose
Dr. John D. Turner
Dr. Arnold N. Weinberg

Pathology

Dr. Richard T. N. Hunt
Dr. Sanford I. Roth

Surgery

Dr. Bob Bullwinkel
Dr. Louis H. Edmunds, Jr.
Dr. Jack J. Greenberg
Dr. John W. Grover
Dr. Dale G. Johnson
Dr. Donald M. McKee
Dr. Alfred E. Miller
Dr. Anthony P. Monaco

Children's Medicine

Dr. John P. Connelly
Dr. Nathan H. Fearer
Dr. Nathan T. Griscom
Dr. Gerhard Nellhaus
Dr. Renee B. O'Sullivan
Dr. Philip J. Porter
Dr. Margaret A. Single (Jan. 1, 1957)

Dentistry

Dr. Irwin I. Ship
Dr. John B. Taylor

At their meetings on January 18, during March, and on April 4, the General Executive Committee voted:

To reappoint:

Dr. Robert S. Adams as Clinical Fellow in Psychiatry, beginning July 1;
Dr. Munir H. Shamma'a as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Leonard Weiner as Clinical Fellow in Psychiatry for one year, beginning July 1.

To appoint:

Dr. Miriam W. Carmichael as Clinical Fellow in Neuropathology for one year, beginning July 1;
Dr. George Chalpin as Clinical Fellow in Psychiatry for one year, beginning July 1:
Dr. Beverly W. Cobbs, Jr. as Clinical Fellow in Medicine, beginning July 1;
Furio D'Abramo, Ph.D. as Research Fellow in Biochemistry, for the period September 1, 1956 through April 30, 1957;
Dr. Conway J. Don as Clinical Fellow in Radiology for one year, beginning on or about October 1;
Anna Maria Galdo, Ph.D. as Research Fellow in Psychology for one year, beginning March 1;
Dr. Jorge L. Litvak as Clinical and Research Fellow in Medicine, beginning March 1;
Dr. Herman L. Matern as Graduate Student Assistant in Orthopedics, for the month of March;
Dr. Maxwell G. Potter as Clinical Assistant in Psychiatry, beginning April 15;
Dr. Murray Rabinowitz as Research Fellow in Biochemistry, beginning September 1;

Dr. Alfredo A. Ramirez (de Arellano) as Clinical Fellow in Medicine, beginning July 1;
Dr. Claude E. Raynaud as Clinical and Research Fellow on the Children's Medical Service, beginning January 1;
Mr. Harold H. Rothstein as Research Fellow in Orthopedics, for the period February 10 through June 30;
Dr. Simon Thiry as Clinical and Research Fellow in Neurosurgery, for the period September 1, 1956 through July 15, 1957;
Dr. Henry deF. Webster as Clinical Fellow in Neuropathology for one year, beginning October 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you fail to include it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Medicine

Benedict, E. B., and Atkins, L.
Gastritis: Its differential diagnosis and treatment.
In M. Clin. North America, vol. 40, no. 2, Philadelphia, W. B. Saunders Company, pp. 343-352.

General Surgery

Bartlett, M. K., and Quinby, W. C., Jr.
Surgery of the biliary tract. I. Mortality and complications of cholecystectomy and choledochostomy for chronic cholecystitis.
New England J. Med. 254:154-156.

Bartlett, M. K., Quinby, W. C., Jr., and Donaldson, G. A.
Surgery of the biliary tract. II. Treatment of acute cholecystitis.
New England J. Med. 254:200-205.

Scannell, J. G., Brewster, W. R., Jr., and Bland, E. F.
Successful removal of a myxoma from the left atrium.
New England J. Med. 254:601-604.

Sweet, R. H.
The esophagus.
In Christopher's textbook of Surgery, Lloyd Davis, M.D., Editor, Philadelphia, W. B. Saunders Company, 6th edition, pp. 577-589.

Sweet, R. H.
Surgical treatment of achalasia of the esophagus.
New England J. Med. 254:87-95.

Laboratory Research

Barlow, J. S., and Brown, R. M.
An analog correlator system for brain potentials — Technical report 300.
Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Neurology, Neurosurgery, and Psychiatry

Matarazzo, J. D.
The role of the psychologist in medical education and practice: A challenge posed by comprehensive medicine.
Human Organization 14, no. 2:9-14.

Matarazzo, R. G., and Matarazzo, J. D.
Anxiety level and pursuitmeter performance.
J. Consult. Psychol. 20:70.

Saslow, G., Goodrich, D. W., and Stein, M.
Study of therapist behavior in diagnostic interviews by means of the interaction chronograph.
J. Clin. Psychol. 12:133-139.

Ophthalmology

Johnson, C. C.
Operations for epicanthus and blepharophimosis: An evaluation and a method for shortening the medial canthal ligament.
Am. J. Ophth. 41:71-79.

Orthopedic Surgery

Aufranc, O. E.
Hip arthroplasty with vitallium mold.
In Campbell's operative orthopaedics, J. S. Speed, M.D., and R. A. Knight, M.D., Editors, St. Louis, C. V. Mosby, 3d edition, pp. 1385-1418.

Lowell, J. D.
Immobilization with resin-impregnated plaster bandages.
J. Bone & Joint Surg. 38-A, no. 2, 427-431.

Pediatrics

Brazelton, T. B.
Sucking in infancy.
Pediat. 17:400-404.

Radiology

Wang, C. C., and Robbins, L. L.
Roentgenologic diagnosis of ruptured spleen.
New England J. Med. 254:445-449.

Surgery—Reconstructive

Webster, R. C., and Coffey, R. J.
Surgeons' view — A.O.R.N. Conference rated outstanding.
Hosp. Topics 34:109.

Feby 23, 1827

MASSACHUSETTS EYE & EAR INFIRMARY

THE OLD AND THE NEW LUCIEN HOWE LIBRARY

The new quarters of the Lucien Howe Library are very attractive indeed. The basic color for the area is light brown with complementary shades of coral, green, and yellow. A sand-colored rug covers the floor of the main reading section. The tables and chairs for reading are of teak and oak, and the easy-chairs are leather covered. The walls and windows are hung with natural-toned linen draperies. The bookstacks are of steel construction. Behind the stack area are individual study carrels. A separate room houses the Ear, Nose, and Throat collection. There is an office-workroom for the librarian, and a small room for conferences and meetings. A total of 25 readers and 9,000 volumes can be accommodated. The entire area is air-conditioned, the ceilings are sound-proof, the lights fluorescent. A final esthetic touch is provided by the presence of two large potted plants. (It is hoped they will survive the rigors of life in a medical library.) Time, thought, and money have been expended wisely and well.

But a medical library is more than an area decorated in a striking manner and filled with comfortable furniture. It is a place of books and people; the storehouse of old ideas and the birthplace of new ones. It is a place where questions are asked and answers provided. It is as essential to a modern hospital as an operating room. When a hospital commits itself to extensive teaching and research programs, as the Infirmary has done in recent years, the importance of the library increases tremendously, for adequate and readily accessible literature is the backbone of both of these activities.

The Infirmary is fortunate in that the foundations of the present library were laid by men who were able to see beyond the needs of their own generation and thus gave to present-day readers a legacy of literature that is not equalled in any other special hospital devoted to eye, ear, nose, and throat.

In 1889 the surgeons of the Infirmary —Hasket Derby, B. Joy Jeffries, Gustavus Hay, and Clarence Blake — initiated an Ophthalmic-Aural Library. The Board of Managers voted the sum of $200 for the project — a large sum indeed for those days. One of the externs was named librarian. He received no salary and his name is not known because it does not appear on any of the records. During the years that followed, the number of journals and books devoted to the twin specialties was not large. This accounts in part for the fact that almost 40 years later there were only about 600 volumes in the library, yet this collection was remarkably complete and contained the majority of the journals, society transactions, and textbooks that are classics today.

In 1926, after a long career as an ophthalmologist, Dr. Lucien Howe of Buffalo, N. Y., gave a large part of his fortune to Harvard University, to be used to endow a laboratory for ophthalmic research. Knowing that research could not be done without literature, he also gave his large personal library and asked that a library of ophthalmology be established as part of the laboratory. Two years later, an agreement was reached between Harvard Medical School and the Massachusetts Eye and Ear Infirmary:

the laboratory and library were to be housed in the Infirmary, the book holdings of the Infirmary and the book gifts of Dr. Howe were to be combined, and the costs of the new library were to be met by the Infirmary and from the Howe endowments. This original agreement proved to be mutually satisfactory and the library still operates under that arrangement. Thus, the Lucien Howe Library of Ophthalmology is a joint project with two sponsors — the Massachusetts Eye and Ear Infirmary and Harvard Medical School. Its holdings are jointly owned, and both institutions formulate its policies.

Two rooms on the first floor of the Infirmary were assigned to the Howe Library. Shelves for 3,000 volumes were provided; furniture was purchased; a librarian, Mrs. Ada Messenger, was appointed; the Lucien Howe Library was ready for business.

It soon became apparent that the Howe Library was not to be solely a research library. In the first weeks of the library's life a pattern was set and that pattern has not changed in almost 28 years. Research workers, practising ophthalmologists, residents, nurses, medical students, hospital personnel, and outsiders all competed for the use of the library's material. A liberal policy was adopted by the Library Committee: anyone with a real interest in the literature could use the library; loans of books were restricted to those who held Infirmary and Harvard Medical School appointments.

As time passed, the holdings of the library first doubled, then tripled, and then threatened to quadruple. There is something inexorable about the way a library grows. The number of visitors increased until there were times when there were not enough chairs to accommodate them. At this point the situation was made still more critical by the assigning of a too-small section of the library in which to shelve the Ear, Nose, and Throat collection. Books were piled to the very ceiling, and it took a combination athlete and Sherlock Holmes to locate them. The old leather chairs began to burst at the seams. The great chandelier became dingier and dingier and gave, it seemed, less illumination with each passing year. The dust from Charles Street put layer after layer of grime on the books. Yet it was a happy, informal place. A generation of Eye and Ear men will always remember it.

In 1954, the Infirmary announced plans for its new Research Center. A solution to the space problem of the Howe Library was offered. It was decided to place the library in the same area as the laboratories. This is as it should be. Recent years have seen an extraordinary growth in medical research at the Infirmary. When the Howe Library was first planned, there was one man in the Boston area doing eye research; today there are about 30 whole- and part-time workers in this field. These investigators have written well over 300 papers on research. Much of the essential literature for these papers came from the Howe Library, and many of the bibliographies were prepared by the librarians. The future will see no lessening of this function; rather, the centralization of research activities and the subsequent increase in laboratory personnel will place a greater burden on the library. Wisdom dictated that the library should be near this important group of patrons.

The new quarters are quiet, clean, and striking in appearance. The readers are relaxed, and they enjoy working in the new atmosphere. The Infirmary management takes pride in the Howe Library, and no guided tour of the Infirmary is complete without a visit to the library.

An idea that began with a $200 donation 67 years ago is now a beautiful reality, and a vote of thanks is due the managers and surgeons of that earlier generation. A simple phrase from the Latin might be used to describe what has taken place since 1889—"Hoc opus, hic labor est". To which might be added in way of response—Well done.

Charles Snyder,
Librarian

At a meeting of the Executive Committee of the Massachusetts Eye and Ear Infirmary, held March 19, the following appointments were made:

Dr. Sidney R. Wilker—Assistant in Otolaryngology;

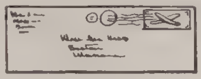
Dr. Richard J. Coffey—Graduate Assistant in Otolaryngology.

BIOGLETS

Dr. Howard S. Cameron, Assistant Resident in Orthopedics — born in Sarnia, Ontario, Canada, April 2, 1921; Lieutenant in the Royal Canadian Artillery, with service in northwestern Europe, 1939-45; M.D., University of Western Ontario, 1950; Intern, Ottawa Civic Hospital, Ottawa, Canada, 1950-51; Senior in Surgery, Victoria Hospital, London, Canada, 1951-52; Fellow in Pathology, University of Western Ontario, 1952-53; Chief Resident in Surgery, Westminster Hospital, London, Canada, 1953-54; Chief Resident in Surgery, Victoria Hospital, London, Canada, 1954-55; Fellow of the Royal College of Surgeons (Canada), 1955; married; one daughter; home: London, Ontario, Canada.

Dr. W. Pierce Smith, Resident in Medicine — born in Canajoharie, N. Y., March 31, 1923; Yale University, 1940-42; Pilot in the U.S. Army Air Force, with service in the 15th AAF in Italy, 1943-45; B.S., Yale University, 1947; salesman, 1947-49; M.D., Columbia University College of Physicians and Surgeons, 1953; Intern and Assistant Resident in Medicine, Presbyterian Hospital, New York, N. Y., 1953-55; married; one daughter.

Dr. Louis L. Weiss, Assistant Resident in Anesthesia — born in Passaic, New Jersey, February 23, 1912; A.B., Western Reserve University, Cleveland, Ohio, 1932; M.D., Western Reserve, 1936; Intern, Mercy Hospital, Canton, Ohio, 1936-37; Resident in Medicine, Mercy Hospital, 1937-38; medical practice, 1938-42; Captain in the Medical Corps, U.S. Army, with service in Hawaii, Guam, and Okinawa, 1942-46; medical practice, 1946-54; Resident in Anesthesia, Mercy Hospital, 1954-55; editor of the Western Reserve student publication, *The Tribune,* 1931-32, and of the Stark County (Ohio) Medical Society *Bulletin,* 1946-50.



Brief bits:—

Dr. Bradford Cannon recently returned from the Marshall Islands, where he went as a member of a medical survey team to examine a group of Marshallese who were exposed to radioactive fall-out in the spring of 1954. This unique experience proved fruitful, both professionally and personally. One of the members of the group was Dr. Charles E. Huggins (*S.* 1953), who will return to the M.G.H. as a surgical resident in a few months.

Dr. Benjamin Castleman was the guest speaker at the Annual Meeting of the St. Louis Pathological Society on February 24. His subject was "The pathology of the parathyroid gland". While in St. Louis he also gave a lecture on "Pulmonary embolism" to the second year class in pathology at Washington University. On March 1 he spoke on "The clinicopathological aspect of hyperparathyroidism" before the faculty and students of the University College of the West Indies, in Jamaica. On March 14 he conducted a clinicopathological conference at the Annual Meeting of the New Jersey Heart Association in Newark.

Dr. Oliver Cope addressed the staff of the Memorial Hospital in Worcester on March 1. His topic was "Diseases of the thyroid".

Dr. Shepard C. Ginandes announces the removal of his office for the practice of Psychiatry to 270 Commonwealth Ave., Boston, Mass.

Dr. Edward Hamlin, Jr. went to England on April 21 and will return on May 19. He will speak at the Postgraduate School of London University, King's College, and in Manchester.

Dr. Erich Lindemann addressed the International Association of Psychosomatic Medicine in Amsterdam, Holland, on April 18.

Dr. Laurence L. Robbins was a guest speaker at the Dallas Southern Clinical Society's 25th Annual Spring Clinical Conference in March. He spoke on "Roentgenologic manifestations of malignant lymphoma" and "The use and abuse of fluoroscopy". Dr. Robbins was in Atlanta, Georgia, in March, as an examiner for the American Board of Radiology.

Dr. George Saslow was one of the panel speakers on the subject "Care of mental patients in general hospitals" at the Thirty-third Annual Meeting of the New England Hospital Assembly, held in Boston in March.

Dr. Richard H. Sweet spent the week of March 12 in Rochester, N. Y., serving as Visiting Professor of Surgery at the University of Rochester School of Medicine.

We were glad to receive this letter from Lt. Charles E. Huggins, MC, USNR (*S.* 1953):

Dr. Edwin L. Carter (*S.* 1954) and I are working at the Naval Medical Research Institute in Bethesda. We have a very nice operating room for dog surgery and a laboratory for other work. We have been investigating a number of problems in the field of cardiovascular surgery. Most recently we have been concentrating on the problem of using differential hypothermia to assist in resections of the liver.

Dr. Carter has recently been promoted to Lieutenant, Medical Corps, USNR, and I was made Head of the Surgery Branch of the Naval Medical Research Institute six months ago.

We are having a wonderful time, but miss all at M.G.H. and hope to get back soon.

Nancy and I enjoy receiving THE NEWS very much.

No. 59 in a series of Staff photographs
Dr. Alfred H. Stanton, Psychiatrist in Chief, McLean Hospital

This letter from Dr. F. Dennette Adams will be of special interest to every MGH-er:

I have just returned from a tour of the Army Medical Installations in the European Command. During the course of my travels, the following members of the MGH family were encountered:

Captain Roy L. Byrnes (a.r.p. *Path.* 1954), at the Army Hospital in Munich.

Lieutenant Gerald M. Edelman (*M.* 1955), at the Army Hospital in Paris.

Captain Anne M. Jones, R.N., formerly a nurse in Baker Memorial and currently assigned to the Fourteenth Field Hospital, which is stationed at Bad Kreuznach, Germany.

Captain Reginald D. Kernan (*Path.* 1945), at the Army Hospital in Paris.

Colonel Frank Y. Leaver (clin. fel. *R.* 1948) is currently Commanding Officer of the U.S. Army Hospital in Nürnberg, Germany.

They all expressed the wish that I would extend greetings to their various friends at Massachusetts General Hospital.

In response to an appeal for news concerning his activities — professional and otherwise — Dr. Leslie C. Dodson (r.s. *P.H.* 1932), our "singleton" in Owensboro, Kentucky, has sent us the following data:

I came to Owensboro in 1933 and became associated with Drs. Hoover and Hoover, surgeons. Remained here until 1942, when I entered military service. Was located in the States and overseas until 1945, when I was discharged with the rank of Colonel. Returned to the private practice of general surgery in Owensboro. In 1947 I became associated with Dr. Howell J. Davis, surgeon.

Professional affiliations: Daviess County Medical Society; member of the staff of Owensboro Daviess County Hospital; Chief of Staff, Our Lady of Mercy Hospital; F.A.C.S.; member of the Southeastern Surgical Society, the Kentucky Medical Society, the Association of Military Surgeons, and the Southern Surgical Society.

Outside interests: Farming. I own two farms in Daviess County and raise Black Angus cattle and sheep.

Hobbies: Tennessee walking horses, hunting, and fishing.

Here is a letter from Dr. William McK. Jefferies (*E.M.* 1942) which makes very interesting reading:

I am still associated with the Department of Medicine at Western Reserve University, where we are having a fascinating experience with the new medical school curriculum. Much time and effort have gone into the planning of the changes, many of which might be classified as radical, but so far the results are promising.

One of the innovations has been the teaching by subject committees instead of by departments, and one of my duties has been the chairmanship of the Subject Committee on Endocrines and Metabolism for Phase 2B (third year). Another interesting innovation has been the use of a unit laboratory for each class instead of having separate student laboratories for each department, and I had the privilege of serving on the committee which designed these facilities. It was a challenging task to plan a laboratory in which students could perform experiments in anatomy, biochemistry, physiology, microbiology, and pharmacology at the same desk, but the results have been gratifying. Our first class of students to be exposed to the new curriculum is graduating this year, and it will be interesting to see how they compare with graduates of other schools on their internships.

We do not feel that we have achieved the ideal medical curriculum, but we think that most of the changes have been definite improvements and we are trying to better our teaching program each year, so it makes for an interesting experiment in medical education.

* * *

We want everyone to know what Dr. Robert S. Shaw has done for our Archives. In order that you may fully appreciate his contribution, we need to tell you a story.

A few years ago, when the door from the Moseley Rotunda into the Archives Room used to stand open, the glass which covered the face of our banjo clock in the Archives Room mysteriously disappeared. There were no traces of its having been broken and surreptitiously removed. The mystery remained unsolved until Mr. Piper, the well-known clock man on Charles Street, offered a possible solution when he told us that at that time there was a rash of thieving of parts of Willard banjo clocks—a pendulum from one, hands from another, a face or part of the works from another —until a complete clock could be assembled which would defy detection as being other than a perfect original. The loss of the glass from this particular clock was especially serious, in that this clock had been chosen by experts from all the available Willards and was shown in the Early Boston Exhibition given here in town a few years ago, as the most perfect example of Willard's best work. As soon as Dr. Barney learned about our loss, he and Mr. Piper set out to try to find a piece of old glass which could be cut, if necessary, to fit our clock. After months of unsuccessful search, Dr. Barney did the next best thing. He procured for us a piece of modern glass which at least has served to keep the dust from sifting into the works. However, a discerning person would notice at once that the glass was not of the Willard era, and every time we have looked at the clock we have missed the flecks, the particular color and quality, and other identifying features always present in old glass.

And now Dr. Shaw steps into the picture. He happened to come into the Archives Room not long ago. As he was looking about we noticed a puzzled expression on his face when his attention became fixed upon our Willard and we thought we knew what was bothering him. As soon as we told him the story of the disappearance of the glass, he said he had noticed at once that there had been a substitution. Then, to our delight, he said that tinkering with old clocks was his special hobby, that he had some old glass of his own, and that he would cut a piece to fit our clock and install it for us. Within a day or two the project was finished, and our precious old Willard was restored to its rightful dignity.

We feel sure that everyone affiliated with the Hospital will join us in our expression of appreciation for this very special contribution of time and talent—to say nothing of material — from Dr. Shaw.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 157 Boston, Mass. June 1956

DEDICATION OF THE JOE V. MEIGS CONFERENCE ROOM

The dedication of the Joe Vincent Meigs Conference Room by Mr. Louis Curtis, Chairman of the Board of Trustees of the Vincent Memorial Hospital, and the unveiling of Dr. Meigs's portrait by Dr. Langdon Parsons, Professor of Gynecology at Boston University, Obstetrician-Gynecologist-in-Chief at Massachusetts Memorial Hospitals, and a member of the Board of Consultation at Massachusetts General Hospital, took place on April 23.

Dr. Meigs's portrait, painted by Alfred Jonniaux, former Belgian Court Painter, was given to the Vincent Memorial Hospital by a group of Dr. Meigs's former assistants. In addition to Dr. Parsons, they include Dr. Somers H. Sturgis, Chief of the Gynecology Service at Peter Bent Brigham Hospital, Dr. John McLean Morris, Associate Professor of Gynecology at Yale University, and Dr. Howard Ulfelder, present Chief of Staff of the Vincent Memorial Hospital, and other members of the Vincent Memorial family.

Dr. Meigs graduated from Princeton University in 1915 and from Harvard Medical School in 1919. He joined the staff of Vincent Memorial Hospital in 1921, and, in 1930, was the first man to be appointed Chief of Staff. He became the first Chief of the Gynecology Service at Massachusetts General Hospital in 1941. He retired from these two posts on June 30, 1955, while continuing his teaching as Clinical Professor of Gynecology at Harvard Medical School. He is Consulting Visiting Gynecologist at Vincent Memorial Hospital and Consulting Visiting Surgeon at Massachusetts General Hospital.

Dr. Meigs has many foreign honorary fellowships, including one from the Royal College of Surgeons in Edinburgh. He is on the Board of Governors of the American College of Surgeons, and is a Diplomate of the American Board of Surgery and the American Board of Obstetrics and Gynecology. He has written several books and many medical papers.

Dr. Meigs is further honored by the fact that funds are now being raised to endow a chair at the Harvard Medical School in his name. The holder of the Joe Vincent Meigs Professorship in the field of gynecology will also hold the position of Chief of Staff of the Vincent Memorial Hospital and Chief of the Gynecology Service at the Massachusetts General Hospital.

PHILLIPS BROOKS HOUSE GENERAL HOSPITALS PROGRAM

The number of volunteers for hospital work declined somewhat at the end of World War II. The drop was quite understandable, in the case of women particularly, for untold numbers of women had sacrificed family pleasures and had even reduced household duties to a minimum in order to be of help during the emergency situation caused by the war. With the coming of peace, many volunteers gave up these outside duties and resumed their more normal ways of life. Many other faithfuls continued to contribute their time, however, and are still doing so.

By the 1954-55 college year, the need for more volunteers in hospitals had become increasingly apparent, and interest in Hospital Volunteer Services was revived when students at Harvard and Radcliffe decided to reorganize and revitalize the program. In September of 1955, Dr. Clark and Miss Wolf attended the opening rally for the Phillips Brooks House—General Hospitals Program. Approximately 300 students were present. Leaders representing various hospitals in this area spoke to the group, explaining the role of the volunteer in a hospital setting. As a result of this meeting, registration of students for active volunteer hospital service jumped from 30 to 124. Of these, 61% were premedical students, ranging from freshmen to seniors, and their remarkable record in the quality of their volunteer work can be largely attributed to their serious interest in medicine. Also, the contribution made by these Phillips Brooks House workers in five Greater Boston hospitals where they have been assigned presents to the public at large a new and potential significance of a college in any community.

We at Massachusetts General Hospital have had 40 of these volunteers assigned to us this past year. They have been working in the Blood Bank, in the Occupational Therapy Department, in the White Building, in Bulfinch, and in the Burnham Memorial. To date, many have qualified to receive the 100-hour American Hospital Association Volunteer Pin, having served the 100 hours during their college year. The majority of these volunteers are assigned for evening duties, serving from 6 to 10 o'clock.

We look forward to continued interest in the Phillips Brooks House—General Hospitals Program and to assistance from its members in our volunteer program for next year.

PHYSICS RESEARCH LABORATORY

The Physics Research Laboratory of the Massachusetts General Hospital was established in the summer of 1951, following the completion of the Research Building and allocation of space on the fifth floor for this purpose. The establishment of the laboratory was a result of a decision made in 1950 by Dr. James Howard Means and the Thyroid Laboratory that a physicist was needed to assist in the work of that laboratory. It was fortunate (for the author) that Dr. Means approached Professor Robley D. Evans of the Physics Department of the Massachusetts Institute of Technology for a suitable applicant for this position. This was a logical step, as the Thyroid Laboratory and M.I.T. had worked closely on numerous physical problems dating from the suggestion of President Compton of M.I.T. that radioiodine might be a useful aid to thyroid study. During the late 1930's and early 1940's, radioiodine was prepared in the MIT cyclotron and standardized by members of the Radioactivity Center under Professor Evans; and even after the availability of radioiodine from the nuclear reactor, M.I.T. cooperated on many problems of radiation measurement.

The Physics Research Laboratory was organized within the Department of Medicine, which at that time was under the able direction of Dr. Means, and subsequently of Dr. Walter Bauer. The primary purpose of the laboratory was to provide assistance in physical problems to other groups in the Hospital, and any success that the laboratory has had can be attributed to the stimulation and active cooperation of others in these joint efforts. Before delving into the various activities of the Physics Lab, it might be well worth while to comment on this aspect of collaborative work. There are few places in the country where such cooperative efforts would be possible. The enthusiasm with which many at the M.G.H. have accepted the Physics Lab has been nothing short of amazing, and in a sense it reflects the avid interest in basic research and clinical investigation which pervades the Hospital.

One reason for the ready acceptance of the Physics Laboratory in the M.G.H. has been the tremendous potential of recent physical developments for the fields of biology and medicine. It should be stressed that aid with physical problems in the Hospital had been received from many quarters long before the establishment of the Physics Lab, and even now collaboration with other laboratories on physical problems is increasing. Even within the Hospital the influence of physical scientists has increased outside the Physics Research Laboratory. Two notable examples of this trend have been the appointments of Dr. Ted Webster as a physicist in the Department of Radiology and Dr. Theodor Hueter as a physicist in the Department of Neurosurgery. The end of this trend does not appear to be in sight, and one might hope that the exploitation of physical sciences in medicine is only now commencing.

One of the first tasks that was undertaken in cooperation with the Thyroid Lab was the design and construction of apparatus for measurement of thyroid uptakes and thyroid function. To this end, a four-scintillation counter array was designed during 1951 and put into operation. This set-up, with certain modifications, has been in operation since then and has served as a prototype for many similar counting arrangements at other hospitals in this area. Shortly afterward, a directional counter was designed and constructed for measurement of activity within small areas of the thyroid gland. This counter has similarly been used routinely for a number of years. At the time these devices were constructed, canned sodium iodide crystals were not available, and a design for canning crystals was used which has proved perfectly satisfactory. Since that time, a number of other pieces of apparatus have been designed and constructed, including an automatic scanning machine for measuring the activity of chromatographic strips and various well counter arrangements for measuring samples of I^{131}.

Although the design and construction of apparatus for thyroid measurement has introduced many interesting and stimulating physical problems, an equally important facet of collaboration with the Thyroid Laboratory has been the study of the thyroid gland itself. Early in the use of I^{131} for the study of thyroid iodine metabolism, it became apparent that specific activity curves could readily be obtained which could not as readily be explained. Mathematical approaches using simple model theories were set up to assist in the explanation of these specific activity curves. As an outgrowth of this and other tracer problems, an analogue computer was designed and built in the Physics Research Laboratory for analysis of specific activity curves. This computer has proved to be of considerable value in the qualitative understanding of biological data and has stimulated the construction of a more complex unit which is under design at the present time. One of the high points in the collaboration with the Thyroid Laboratory was the study of endemic goiter in Mendoza, Argentina, which was carried out during the summer of 1951. This study used apparatus which was designed here, and model theory was used extensively in the analysis of the resulting data.

More recently, the Physics Research Lab has collaborated with studies of calcium metabolism performed by Dr. John Stanbury and Dr. Stephen Krane of the Thyroid Laboratory. These studies have used some of the same techniques as in the iodine studies, but have introduced new and in certain cases more difficult problems.

Cooperation with the Neurosurgical Service of the Department of Surgery, and particularly with Dr. William Sweet, has been of tremendous value to the Physics Research Laboratory. One of the first projects carried out in collaboration with Dr. Sweet was an attempt to localize brain tumors by means of a preoperative isotope test. Prior to this, Drs. Selverstone, Sweet, Solomon, and Robinson had shown that P^{32} concentrated in brain tumors and could successfully be used as a diagnostic technique at the time of operation with the aid of a small probe counter. It was desired to extend this isotope technique, but to use a detection system which would allow measurements to be made external to the head. Isotopes which emit positrons were investigated in order to make use of the unique property of positrons to annihilate and to send two annihilation quanta in exactly opposite directions. The use of such isotopes in a successful diagnostic technique has now proved to be possible, and instrumentation and techniques have been developed which have fulfilled this desire. Over the past three years, approximately a thousand patients have been scanned with this positron technique, the scanning being under the able direction of Miss Pauline Montgomery. Reports have been presented to Neurosurgical Societies, the A.M.A., and at the Geneva Conference on Peaceful Uses of Atomic Energy in July of 1955.

Although the technique is considered to be a routine clinical diagnostic technique, numerous possibilities exist for its improvement. During 1953 Dr. Saul Aronow came to the laboratory from the Department of Applied Science at Harvard and assisted in the design and construction of an improved model of the positron scanner. This device is now completed and uses many of the latest electronic techniques. Although it is still being used on an experimental basis, results to date give promise of considerable improvement over the original model. In addition, numerous isotopes other than the As^{74} now being used are currently being tested. Among these are Rb^{84}, Mg^{52}, Cu^{64}, and Zr^{82}. Many of these appear particularly applicable to specialized types of disease.

A second collaborative effort with Dr. Sweet shows promise of greater usefulness in the near future. Dr. Sweet has devised and carried out a procedure for therapy with boron^{10} and subsequent irradiation with thermal neutrons. The boron is itself inert and the thermal neutrons have a minimal biological effect. However, the capture of a thermal neutron by boron^{10} causes the release of large amounts of ionizing energy. Studies show that B^{10} concentrates in brain tumors in sufficient quantity so that an appreciable radiation dosage could be given to the tumor in relation to the surrounding normal tissue. Two series of patients have been irradiated at the reactor at Brookhaven. The Physics Research Laboratory has assisted in calculating the radiation dosage received in this technique and have attempted to devise instruments to be used in measuring the actual irradiation dose during the irradiation. At the present time M.I.T. is letting contracts for the construction of a reactor to be built near the MIT campus which will include a medical facility for this purpose. We are looking forward to the possibility of collaborating even more closely on the numerous instrumental problems that will arise in the use of a reactor in this vicinity for this therapeutic technique. This reactor, when completed, should stimulate even greater interest in the field of radiation biophysics, both from the use of short-lived isotope and in the availability of a high-level irradiation source for biological media.

Dr. Aronow has further put his electrical engineering talents to work in designing a high-frequency lesion maker for neurosurgical procedure which has proved to be of considerable practical value. Perhaps the most important application has been in connection with the efforts toward pain relief by Dr. James C. White.

There have been numerous collaborative efforts with others in the M.G.H., although generally of a smaller nature. One such project has been the development of a device for automatically recording blood pressure. This device was suggested by Dr. James H. Currens and the development carried out with his cooperation. The recorder has been successfully used and, in addition, has led to a study of the source and meaning of Korotkov sounds.

The second role of the Physics Research Laboratory has been to provide certain service functions for the M.G.H. One of the first of these has been the mass spectrometer which is available for routine analysis of stable isotope concentrations. These measurements are useful in determining water volumes by use of D_2O or in carrying out tracer experiments with stable isotopes such as those of nitrogen, oxygen, and carbon. Both deuterium and nitrogen samples have been analyzed on a routine basis, and it is planned to extend this service to carbon and oxygen. In addition, it is planned to investigate the possibilities of other mass spectrometer measurements in medical research. The Physics Research Laboratory has maintained numerous instruments such as scintillation well counters and standardization devices for use of others in the Hospital. The Hot Lab in the basement of the Research Building has been equipped to provide for handling of radioactive materials in medium-level quantities. In addition, aid has been given through the Isotope Committee in the solution of many problems in the handling, storing, and disposing of radioactivity within the Hospital.

The third category of activities in the Physics Research Laboratory has been in independent research. In many cases, it is difficult to separate these projects from the collaborative efforts. For instance, successful scanning and localization of brain tumors has led to an attempt to visualize other areas of the body, such as liver and pancreas. At the present time, a scanning device specifically for this purpose is being constructed and various isotopes such as those of zinc and copper are being explored for their possible use in the visualization of internal organs.

Dr. Walter S. Michel, a physicist from the Canadian National Research Council, came to this laboratory in 1954 and has performed a rather basic and thorough study of the application of plastic scintillators to the detection of beta rays. An automatic recording spectrometer was set up for this study and it has been used widely for this and many other studies since then. As a result of this study, a plastic well scintillation counter has been developed for the detection of energetic beta rays. This counter has been applied to double tracer experiments. By using two detectors selective for two isotopes, simultaneous measurement of the two tracers may be performed in the same sample. This technique has been particularly useful in simultaneous sodium and potassium determinations, but many other isotope pairs have been analyzed.

Basic studies have also been performed on various aspects of radiation detection, such as the use of focussing elements. In addition, preliminary studies have been carried out on the effect of low temperatures on biological materials, and on the biologic effects of ionizing radiation.

In an academic community such as Boston, teaching must play an important role in any scientific laboratory. Working with students and with academic institutions has the very real advantage of introducing new ideas and new approaches to problems in the laboratory as well as aiding in the task of keeping up with the recent developments in the field. The author has aided in the teaching of elementary physics courses at M.I.T. as well as in an advanced course in nuclear physics. During the past year, a course on biological effects of radiation and physical dosimetry was given in the Department of Nuclear Engineering at M.I.T., and the nuclear physics portion of a nuclear engineering course was undertaken. Dr. Aronow is currently teaching a course in electronic techniques at Northeastern University.

A number of MIT students have performed their work here for B.S. theses in the Physics Department of M.I.T., and two students have carried out work for their Masters degrees here. Two students working under Northeastern University's industrial cooperation plan will be at the laboratory for the coming school year. This type of association is particularly valuable both from the assistance the student can give to the laboratory and from the fact that it allows the student to see the type of physical work performed in a hospital. The demand for physicists and engineers with medical or biological inclinations is already evident, and if the present trend continues a marked shortage of such personnel will soon exist. By far the best method of attracting students into the field is to allow them to actually see the work being performed.

Gordon L. Brownell, Ph.D.,
Associate Physicist

The Board of Trustees, at their meetings on April 13 and 27, voted:

To grant the full-time Chiefs of the Orthopedic, Medical, and Surgical Clinics permission to see a limited number of private patients in their Clinic offices.

To appoint:

Dr. Jacqueline Gauthier as Assistant Resident in Psychiatry, beginning July 1;

Dr. Robert H. Hansen as Assistant Resident in Anesthesia, to become effective as of October 1, 1956 rather than October 1, 1955, as originally appointed;

Dr. Robert E. Key as Assistant Resident in Orthopedic Surgery for one year, beginning November 23;

Dr. Richard C. Packert as First Assistant Resident in Radiology, beginning approximately October 1;

Dr. Alfred L. Weber as Second Assistant Resident in Radiology, beginning July 1;

Dr. Masao Yatsuhashi as Clinical Associate in Surgery, effective as of April 1.

At their meetings during April, the General Executive Committee voted:

To accept the resignation of Dr. John J. D'Urso from the position of Clinical Assistant in Dermatology, effective March 30.

To promote:

Billy Baggett, Ph.D. from the position of Assistant in Biochemical Research to that of Assistant Biochemist (Medicine), effective September 1;

Dr. Richard A. Mayo from the position of Assistant Resident to that of Senior Resident in Orthopedic Surgery, for the period July 1 through December 31;

Dr. Edward C. Parkhurst to the position of Senior Assistant Resident on the Urology Service for one year, beginning July 1;

Dr. Hermann K. Schueler from the position of Assistant Resident to that of Resident on the Urology Service for one year, beginning July 1.

To reappoint:

Elizabeth B. Keller, Ph.D. as Assistant Biochemist (Medicine), effective July 1;

Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine), effective July 1.

To appoint:

Dr. Hugo del Bosque as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert C. Detwiler as Clinical Fellow in Orthopedic Surgery, for the period July 1 through December 31;

Dr. Herbert R. Karp as Clinical Fellow in Neurology for one year, beginning July 1;

Harry D. Peck, Jr., Ph.D. as Research Fellow in Biochemistry, beginning September 1;

Dr. William Sharpe, Jr. as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Taeko Sumi as Clinical Fellow in Psychiatry, effective as of March 1;

Dr. Frederick S. Tomchik as Clinical Assistant in Radiology, effective as of April 12.

New addresses:—

Dr. Boris Senior (*C.M.* 1950), 904 Medical Centre, Jeppe St., Johannesburg, South Africa

Col. Milton S. Thompson, MC, USA (*Or.* 1934), Walter Reed Army Hospital, Washington 12, D. C.

Dr. Lionelle D. Wells (clin. assoc. *Psychiat.*), 270 Commonwealth Ave., Boston, Mass.

Capt. Frederick E. Whiskin, MC, USAF (r.p. *Psychiat.* 1954), 6407th USAF Hospital, APO 323, c/o Postmaster, San Francisco, Calif.

Brief bits:—

At the annual meeting of the American Surgical Association, held at White Sulphur Springs, West Virginia, on April 13, the following MGH graduates were elected to active membership: Dr. Allen M. Boyden (*W.S.* 1934) of Portland, Oregon, and Dr. John W. Raker (*E.S.* 1942) of Philadelphia. The following papers were presented by members of the MGH staff: "Bleeding esophageal varices—A study of the cause of the associated 'hepatic coma' ", by Dr. William V. McDermott, Jr., et al., and "Anterolateral cordotomy (high thoracic): Postmortem correlation of extent of lesion with relief of pain and possible complications", by Dr. James C. White and Dr. William H. Sweet.

Dr. Otto E. Aufranc has given the following lectures during the past few months: "Mold arthroplasty of the hip: Surgical technique, indications, and results", at the meeting of the American Academy of Orthopedic Surgeons, held in Chicago on January 31; "Indications for and results of mold arthroplasty of the hip", before the American College of Surgeons, in Philadelphia, on February 14; "Orthopedic management of rheumatoid arthritis: Types of surgical procedures that are available", at Lemuel Shattuck Hospital, on February 29; and "Indications for and results of mold arthroplasty of the hip", at the meeting of the Olean Medical Society, in Olean, N. Y., on April 12.

Dr. Joseph S. Barr delivered a lecture on "Radiation as it affects the orthopedic surgeon", at the Military Medical-Dental Symposium on Atomic Warfare, held in Boston on March 22.

Dr. Oliver Cope is the Visiting Professor of Surgery at the University of Cincinnati, College of Medicine, from June 4 through 9. He delivered the address to the graduating senior class and the alumni on Thursday, June 7. The title of his address was "The conflict between facts and wisdom in medicine".

Miss Frances M. Hernan, Director of our Credit and Collections Unit, was elected the first woman president of the Retail Credit Grantors of New England and Eastern Canada, at their 35th annual conference, held recently in Springfield, Massachusetts.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THE CLASSIFICATION. THREE AUTHORS FAILED TO INCLUDE THAT INFORMATION THIS MONTH. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Blank, I. H.
Allergic hypersensitivity to an antiseptic soap.
J.A.M.A. 160:1225-1226.

Endoscopy

Atkins, L., and Benedict, E. B.
Correlation of gross gastroscopic findings with gastroscopic biopsy in gastritis.
New England J. Med. 254:641-644.

General Surgery

Churchill, E. D.
The operation to be undertaken.
In Cancer of the lung: An evaluation of the problem — Proceedings of the Scientific session, Annual Meeting, American Cancer Society, Inc., Nov. 3-4, 1953, New York, N.Y., American Cancer Society, Inc., pp. 231-237, 1956.
Churchill, E. D.
Primary cancer of the lung.
In Cancer — A manual for practitioners, Boston, American Cancer Society (Massachusetts Division), Inc., 3rd edition, pp. 170-179.
Churchill, E. D.
Tumors of the lungs and bronchi.
In Christopher's textbook of Surgery, Lloyd Davis, M.D., Editor, Philadelphia, W. B. Saunders Company, 6th edition, pp. 430-436.
Hamlin, E., Jr., and Vickery, A. L.
Needle biopsy of the thyroid gland.
New England J. Med. 254:742-746.
Waddell, W. R.
The physiologic significance of retained antral tissue after partial gastrectomy.
Ann. Surg. 143:520-530.

Laboratory Science

Geyer, G., Herbst, F. S. M., Thaler, H., and Lever, W. F.
The permeability of capillaries to serum cholesterol.
J. Clin. Investigation 35:281-284.
Matoltsy, A. G., and Odland, G. F.
Observations on the orientation of keratin in thickened cornified epithelium of the human skin.
J. Invest. Dermat. 26:121-126.
Schmid, K., Rosa, E. C., and MacNair, M. B.
Fractionation of the proteins of human synovial fluid and plasma.
J. Biol. Chem. 219:769-780.

Neurology, Neurosurgery, and Psychiatry

Brown, M. R.
Medical progress: Diseases of muscle.
New England J. Med. 254:321-326.
Farnsworth, D. L.
Pain and the individual.
New England J. Med. 254:559-562.
Farnsworth, D. L.
Some observations on the attitudes and motivations of the Harvard Medical School student.
Harvard Med. Alum. Bull., January, 33-35.
Lindemann, E. (Editor)
Brief psychotherapy of a patient with headache and endometriosis.
Am. J. Med. 20:286-291.
Sifneos, P. E., Gore, C., and Sifneos, A. C.
A preliminary psychiatric study of attempted suicide as seen in a general hospital.
Am. J. Psychiat. 112:883-888.
Talland, G. A.
Cultural differences in serial reproduction.
J. Social Psychol. 43:75-81.

Otolaryngology

Kelemen, G.
Erythroblastosis fetalis: Pathologic report on the hearing organs of a newborn infant.
A.M.A. Arch. Otolaryng. 63:392-398.

Books

Churchill, E. D.
The surgeon and the university.
Kingston, Canada, Queen's University at Kingston [privately printed].

When the request came for a contribution to the columns of the MGH News, the most arresting argument as to why I should respond was "since you are one of the two oldest house staff members in terms of time of service. . . ." After initially wincing at being so fixed in time, two thoughts came to mind: (1) Thank God for Paul Russell; (2) certain avuncular reflections on the content of the years which brought me the dubious honor of such seniority.

In 1950, after two intense years of Bulfinch battering, Laurens White, Craig Lichtenwalner, Mackensie Walser, and I flew to Europe in earnest pursuit of "la vie en rose". There followed three brimming months of The Grand Tour plebeian-style. In the beginning, sightseeing was approached with the obsessive thoroughness of morning work rounds, but with a pleasant lapse into languor as the weeks rolled by. But even as we drifted in awe amid the history, art, and biology, the news of the Korean war began to fill the papers. Our flight back to the U.S.A. was also one into the military service.

After being inducted into the Army and receiving basic training in Texas for five days (i.e., how to salute and fill out pay forms), I received a fortunate assignment to the Army Medical Service Graduate School at Walter Reed Hospital. Also round Washington in uniform at that time were Bill Christenson (*M.* 1949), Don McCann (*M.* 1949), and Bob Fishman (r.p. *N.* 1950). For almost a year my duties were basically those of helping to care for the great number of patients with hepatitis who were filtering back from the Far East. There was some additional time, however, for a few forays into certain problems of clinical research.

In 1951, I was assigned to the so-called Surgical Research Team and flew to Korea with a broad mandate to study "whatever problems may seem important to improve the care of the wounded". Here began a most valuable series of experiences. It would be fruitless to attempt here any picture of the Korean war at that time. Many letters and articles have appeared in the MGH News from MGH-ers who were much more intimately and much longer involved in the police action than was I. It soon became apparent that although the main military medical problems were triage and good, early, surgical care, posttraumatic renal insufficiency was a major cause of death in the severely wounded. We therefore established an Anuria Center at an evacuation hospital within helicopter range of the front lines, and were soon delighted to have a fairly complete laboratory (even with a flame-photometer) functioning in this former rice paddy. At this point I telephoned from Pusan to Washington to say that we needed an artificial kidney and to ask permission to return to get it and certain other specialized research supplies. Clearly hearing a 10,000-mile affirmative, I gladly left my colleagues huddled in their cold tent and hurried back to the U.S.A., with the usual judicious dragging of one's feet in Japan for tourist purposes. In Washington, about ten days later, I walked into the colonel's office to announce, "I've come for the kidney." Said he testily, "We sent it last week!" Needless to say I was shortly back in scenic Wonju, having overtaken the kidney in Tokyo. It was successfully put into use with a large series of patients and seemed to contribute to a significant lowering of the mortality rate in acute renal failure. The only MGH-er I saw in Korea was Roger Wilcox (*S.* 1949), who turned in an excellent job as a surgeon at one of the forward hospitals. As a measure of his fierce independence, however, he disdained khaki and wore a scarlet, long-billed baseball hat, looking for all the world like a 38th parallel Casey Stengel. Visiting his tent sometime after his hospital had been strafed, I was greatly impressed with a yawning chasm in the earth next to his bunk—a "bug-out hole", into which he could wriggle at will while still in his sleeping bag. "Another foot," he said, "and they would have me for desertion!" In the summer of 1952, I returned from the Far East—after a brief detour to Formosa, Hong Kong, Siam, and the Philippines—and managed to extricate myself from the military service.

At this time I took up residence in Cambridge as a member of an unusual aggregate known as the Harvard Society of Fellows. In a pragmatic, workaday world, no fellowship could seem more effete, for one's sole duty is to appear each Monday evening in a special panelled dining room in Eliot House and linger over a four- to five-course dinner, wetted down with at least four varieties of vintage wine from the Society's own imported stock. During this gastronomic rite one may, if so inclined, engage in desultory or polemical conversation with a score of mathematicians, physicists, historians, economists, biologists, and other nonmedical esoterica, among whom are the president and dean of the University. For performing this arduous task one is given quarters, a salary, and freedom to roam the University. The leap from Wonju to Eliot House within two months was incalculable. Between Monday night duties I grubbed away in synthetic chemistry.

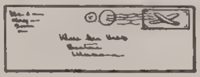
After some weeks in the isotope course at Oak Ridge in the summer of 1953, I joined Dr. DeWitt Stellen, Jr. at the Public Health Research Institute of New York City, still under the sponsorship of the Harvard Society of Fellows, who waived any local duties. This year was ostensibly given over to the investigation of certain aspects of purine and pyrimidine metabolism, but looms more important in my personal annals as the year in which I was married.

In the summer of 1954, we flew to England, *en route* to spend a year at the Karolinska Institute in Stockholm. The route to Stockholm sagged pleasantly southward via the Riviera, Italy, Austria, and Germany.

Stockholm is a beautiful city on islands between Lake Mälaren and the sea—sparkling, clean, and polished. The work carried out in Professor Einar Hammarsten's laboratory was related to certain aspects of citrulline and pyrimidine metabolism. My most successful synthesis, however, became evident at the birth of Virginia Constance Smith via midwife, as is the Swedish custom. By coincidence, Don and Barbara McCann were also in Stockholm for the same academic year, where Don was engaged in excellent experimental neurophysiology relating to the so-called thirst center. Bill Peete (*S.* 1948) spent several weeks in Sweden on one lap of his peripatetic Moseley Fellowship. There is a saying in Europe to the effect that most Swedes are born two drinks under par. There was a somewhat formidable formality on casual encounter, but during our months there we made a number of good friends in the small academic community in which we lived. It is difficult to describe the oppressiveness of the long dark winter, during which a full moon could sometimes be seen at 3:30 P.M. A high point during this season was the Nobel Prize ceremony and attending State banquet-dance in the famous City Hall. We were particularly glad to be witnesses of Dr. John Enders's reception of the award. Some time before this I had a chance to meet the King of Sweden, Gustaf VI, who expressed great interest in the fact that I was from Harvard, we being fellow graduates by virtue of his honorary degree of about twenty years ago!

In the late spring of 1955, we left Sweden with considerable reluctance and returned to the U.S.A. after a pleasant trip through northern Europe to England. In New York City began a six-months' period of duty on the medical house staff of the Presbyterian Hospital —a return to clinical medicine after a five-year interlude of Army and chemistry, marriage and family. All in all, it was a pleasant and valuable diverticulum from the main stream of clinical training. In retrospect and analysis, I think I would enter it again.

Lloyd H. Smith, Jr., M.D.,
Chief Resident in Medicine



This brief but cordial note has come from Dr. E. H. Trowbridge, Jr. (a.r.p. *N.* 1940):

> I cannot let this issue go by without telling you how much I enjoy keeping up with the times by reading THE NEWS.
>
> Massachusetts General Hospital is certainly to be congratulated on receiving the large donation from the Ford Foundation.
>
> Since returning from the Service, I have been located at 1405 Bryant Building, 1102 Grand Avenue, Kansas City, Missouri, and last March I associated myself with Dr. John D. DeMott in the practice of Psychiatry, Neurology, and Electroencephalography.

Dr. Herschel D. Collins (*M.* 1953) sent, by dictaphone belts, a detailed description of conditions in Alaska to Dr. Mitchell T. Rabkin, one of our Interns in Medicine. Dr. Bauer has very kindly sent us a transcription of the communication. It reads, in part:

> I hope you will excuse this method of writing a letter. There is a lot to say about Alaska, and if I were to write it all in longhand it would be far less than I would like to say about it.
>
> First of all — Anchorage. This is a rather new city. It was started in 1905 but, until 1940, the population was about 4,000. Then, with the establishment of the Elmendorf Air Force Base here, it grew very rapidly and decidedly shows this. It is a fairly rough city, with lots of bars, saloons, night clubs, and houses of prostitution. There are a fair number of robberies and murders, but not to an alarming degree.
>
> The downtown section has a fair number of good stores, which all charge very high prices. You should stock up well on clothing of all types, especially heavy clothing for winter, before you come. Food is also high, with steak going at $1.50 a pound, milk at 45 cents a quart, and bread at 45 [?] cents a loaf. However, the use of the commissary at the Elmendorf Air Force Base eliminates the problems of high food costs as far as Public Health Service personnel is concerned. We manage to get along on $120 a month for food. For two people, it would be considerably less — probably about $80 a month. Around the outskirts of the town there are several housing projects in which there are usually a few houses for rent. We are renting a house in one of these projects at $120 a month. It is a two-bedroom house with living room, bathroom, kitchen, and attached garage. It is a rather cheaply built house, with a concrete slab floor, and in Boston would run at about $10,000 or $11,000 to buy. Here they want $16,900 for this house. Some rather poor financing has been done in the past, and thus a lot of the houses are in receivership because the original builder went bankrupt. Utilities for this house cost us $50 a month, and, in addition, there is a $50 deposit made in case we leave the place damaged. The installation of the utilities costs the exorbitant fee of $75, which is returned when we move out. Approximately the same situation exists with most of the apartments or houses that you might rent should you come here. There are two large apartment buildings in town, fairly close to the hospital, which charge from $120 to $150 a month. Most of these apartments come already heated, so you would save the $20 to $30 a month that we have to pay for oil. They are fairly readily available except during the peak construction months during the summer. The apartment and housing situation will be in a big turmoil this spring or summer, because the 71st Division, which is stationed at Fort Richardson, will be moved *en masse* to Fort Lewis, Washington, with a shift in the Division that is there to Fort Richardson.
>
> Anchorage has its nice features and bad features. The nice features are a beautiful view of the Chugach range of mountains behind the town, and the Alaska range which can frequently be seen across the inlet. Also, from the hospital we can often see Mt. McKinley, as if it were only about 20 miles away. On the other hand, Anchorage has its bad points. The roads in town are just being paved in many areas. Most of the back streets are unpaved, and are extremely bumpy, and muddy or dusty, depending on the season. The place is loaded with junk yards, and there is a decided lack of lawns and trees in most of the residential areas. For entertainment and recreation, there are a couple of theatres in town which are quite expensive and some on the Base which are cheap. There is a choral group which gives infrequent concerts and also a home-town symphony orchestra which gives infrequent concerts. The only plays are those given by a little theatre group. They have given one play since I have been here. The number of scientific and medical meetings is small. The 5005th Hospital at the Elmendorf Base has a monthly medical meeting which is mediocre. Entertainment, thus, is directed mostly to outdoor activities. Boating on the inlet is practically nil. The tides are tremendous — 25 to 28 feet, with rapid currents of water. Very few people have boats on the inlet. In addition, the fishing on the inlet is not very good. Fishing close to town is also fairly scarce. However, down on the Kenai Peninsula, which is 120 to 180 miles away by car, one can enjoy the sport of catching salmon as they run up the stream during the summertime.
>
> The skiing here is excellent, with a very nice hill about 15 miles from town. There is a joint project by the Anchorage Ski Club and the Fort Richardson recreation set-up. They have rope tows, and for military personnel (which we are considered) it costs only 25 cents to ride them all day.
>
> The weather is fairly cold in the summer for swimming in the local pond, and there is only one indoor pool that is open to the public — or, rather, open to members of the Club. You have to pay about $100 a year to belong to the Club.
>
> The hospital here, as you know, is a new and excellent structure. The laboratory is adequate for ordinary procedures, and we are able to send out such things as protein-bound iodines. We will be getting a flame photometer some time in the near future. Bacteriology is good. The x-ray department is being run by me, as is the laboratory, and obviously is fairly poor quality. We, however, do do pyelograms, bronchograms, g-i series, barium enemas, and, depending upon whom we have for technicians, can get accurate films. The equipment is good.
>
> The second floor of the hospital has about 106 beds. One wing of this floor is obstetrics and has had a rather low patient population. Two wings are tuberculosis — one pediatric tuberculosis, where there is quite a bit of miliary tuberculosis and some bone and joint tuberculosis, the other is adolescent boys, mostly with pulmonary tuberculosis. Another wing, with about 36 beds, is pediatrics. The pediatric problems are very interesting. There are a lot of acute pneumonias, otitis, and hepatitis. A number of patients are sent in for evaluation and chronic disease program, with orthopedic

THE UNVEILING OF THE PORTRAIT OF DR. JOE V. MEIGS
Left to right: DR. MEIGS, DR. LANGDON PARSONS, WHO UNVEILED THE PAINTING, AND MR. LOUIS CURTIS, CHAIRMAN OF THE BOARD OF TRUSTEES OF VINCENT MEMORIAL HOSPITAL, WHO DEDICATED THE JOE VINCENT MEIGS CONFERENCE ROOM

difficulties, and we have had such rare birds as methemoglobinemia. As I was saying, they have some rare diseases in pediatrics. This department, fortunately, has been left pretty much up to Dr. Wheeler. He is a very fine fellow and tries to take good care of his patients. He has the help of a consultant, who is a private practitioner in the community, named Towers. This fellow was a friend of Hardy Hendren's when he went to Dartmouth. They also have the pediatrician at the Base Hospital, who comes in about once a week.

The third floor is all female tuberculosis patients — about 106. These people, as patients, are extremely nice. Most of them are Eskimos. They are placid and quiet, clean and good-natured, and are extremely appreciative of what you do for them. I found them a pleasure to take care of, and wished I had been able to keep them as my patients. In general, they are fairly young — many of them in their twenties, and they have all degrees of tuberculosis. There is some renal tuberculosis, and one case of tuberculous meningitis on the ward. There are only a couple of hypertensives among this whole group and very few other complicating medical diseases except dental caries and eye diseases.

The fourth floor of the hospital again has about the same capacity. One wing, approximately 36 patients, is devoted to surgery. Acute surgical cases are hospitalized there, as well as postoperative thoracic surgery cases who are now convalescing, and orthopedic and ENT patients. Another wing, again with about 36 patients, is devoted to acute medical problems. These are much as we would have in Boston. There are a few carcinomas of the lung, esophagus, stomach, ovary, etc. There is a rare case of rheumatic heart disease with congestive failure. There is not much in the way of coronary heart disease that comes in here. Evidently, they all die off in the villages. We occasionally have an employee with coronary heart disease. Ulcers, renal disease, and psychosomatic disease make up most of the rest of the cases on the fourth floor.

The fifth floor is devoted to male tuberculosis patients, again about 106.

When the hospital is full, we have a total bed capacity of round 400. We have been running about 330 patients. Currently, it is slightly below because the funds for transporting the patients back and forth from the hospital are low. We see approximately 600 out-patients in a 20-day period. True, many of these come for trivial complaints—colds, sore throats, and minor sprains among the employees — but there are also a number of interesting pediatric problems, some dermatology, and cases for our specialty clinics.

We drove up here — about 5,700 miles from Caribou, Maine. It was quite an ordeal, with two children, and I think that probably a person would be wise not to try it under those conditions. However, a couple could do it much more easily, and I think you would prefer to drive than to come by plane. You would need to have a fairly good car, because the road is rough all the way from Edmonton, British Columbia, until you get to the paved road in Alaska. There are an adequate number of places where you can get repairs along the way, and truck-drivers and other travelers are good about stopping to help you should you have any trouble. The government will pay you as if you drove to Seattle and then flew up here, and they do not pay you for what it would cost to have your car sent up. You should have four new, nylon, four-ply tires on your car, and a good spare. Nylon tires are advantageous because they don't blow out on the gravel roads. I suppose that six-ply rayon tires would also be all right. In addition, you should put some rubber tubing over your gas tank so that you won't get a hole in it from flying rocks. This is good advice, since I didn't do it and I got a hole in my gas tank. If you decide to send a car up, it costs about $250 to send it from Seattle to Anchorage, and the government doesn't pay you for this, as I said before. The only other way is to get the car shipped up on the Department of Health ship, *North Star*, which leaves Seattle three or four times a year. Its last trip out of Seattle is usually some time in July, and you would have to contact Mr. Farrow there to find out if you could send your car to Anchorage via the *North Star*. This costs only about $50. If you were going to buy a car here, you would find that they are quite overpriced, especially the new models. Older models are fairly reasonable.

To sum it up, I would say that the Public Health Service has certain advantages. 1. You can get in on the date when you want to get in and you know when you will be getting out. 2. You are highly likely to stay in one place during the entire two years. 3. There is not a great deal of regimentation. Also, you do not have to wear a uniform. If you come into the Indian Service you should not even buy one. It has disadvantages in that you don't get the same type of life insurance as you get in the Army and you don't have what veterans' benefits there may be, according to the time you are in. Above all, I think you should come into this situation with a bit more of an open mind than I had about what you are getting into. I expected entirely too much, evidently, and was disappointed.

Dr. Means has very kindly passed on to us this interesting letter he received from Dr. Guillermo C. Sanchez (*M.* 1950), written from Korea:

It was a delightful surprise to receive the long and kind letter from you a couple of days ago, and I was very pleased to get news of Ike Taylor and his activities down in Antarctica. I shall certainly write him in June, as you suggest.

My experiences here, though so much less unique than his, have also been fascinating, and were it not for the rather long and painful separation from my family, I would consider it one of the more exciting periods of my life.

If one has to come to Korea, everyone is agreed that Pusan is the ideal spot. The climate is mild—something like that of Georgia or South Carolina—with the advantage of the ocean breezes to temper the summer. The city itself is crowded, filthy, and unattractive, but the countryside is quite lovely; and the further you go from the main highways, the more beautiful the mountains, cleaner and neater the villages, and friendlier the people. There is no doubt that contact with large bodies of troops, whether conquerors or "liberators", is a very demoralizing force on the local population.

Our quarters are by far the best in Korea, since they were built before the war for the families of members of the U.S. military mission here. The only thing we lack is water, which runs for only an hour or two morning and evening.

Medically, the place is a museum, not only because of the prevalence of common and exotic parasites, but also for other rare conditions, such as Buergher's disease in young, non-smoking males. And almost as interesting are the various accepted forms of therapy. For ascaris, for instance, santonin is still the drug of choice amongst the more enlightened clinicians, but others put a Levin tube in the stomach and inject two liters of oxygen—no more, no less. (I don't know whether it is the resultant gurgling or the patient's moans that makes the worm lose its grip.) And lay people prefer to treat them with a tumbler of gasoline, taken neat. There are also many Chinese herbal preparations, as complicated and aromatic as they are toxic, and Chinese "treatments" which consist of needling the site of pain, with all the foreseeable complications.

Military medicine, on the other hand, especially at the dispensary level, is usually rather dull, given the basic good health and age of the troops and the unfortunately enormous secondary gains they derive from minor illnesses, since it is the only generally acceptable way of avoiding onerous duties. Fortunately, we also have a 50-bed ward at the Swedish Red Cross Hospital, where we can place our richer patients, and rounds there and the handling of some of the more troublesome emotional problems add considerable interest to the daily routine.

Pusan is lucky in having several excellent hospitals run by foreigners (mostly missionaries, plus Red Cross people) and I have availed myself of these opportunities by working in two of them and making weekly rounds in a third. I am very fortunate in having a very bright North Korean medical student as interpreter, assistant, and traveling companion, and, as you can imagine, his presence opens up any number of vistas that would otherwise not be accessible to me.

Please remember me to any of my friends you might see.

THE NEWS

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ORTHOPEDIC SERVICE

The invitation of the Editor of THE NEWS to write an article on the activities of the Orthopedic Service is always welcomed, for it gives us the opportunity of utilizing that marvelous research instrument, the scanning retrospectoscope. Our last reported analysis appeared in THE NEWS in March 1955. We have examined several service serum samples withdrawn at intervals since that date. Analysis of these samples indicates that there is almost no fat in our blood stream. This result, of course, is not unexpected, for our financial diet is definitely on the lean side. There are occasional traces of sugar (compliments and kudos). We would be unhappy if these quick-burning fuels were not present. When treated with the insulin of modesty and nonchalance, they seem to add to our energy output.

These notes, however, concern themselves primarily with the protein fraction and the hemoglobin which carries oxygen to our tissues. Within the limits of a short article we can comment on only a few of these interesting fractions.

The Poliomyelitis Story (Chapter 2)

The emergency aspects of this story were told in the November issue of THE NEWS. The acute phase of the epidemic is now over and the survivors are in the convalescent phase. These patients may be classified in three main groups—nonparalytic, paralytic not requiring respiratory assistance, and paralytic requiring respiratory assistance. The first group are the fortunate ones. They have had the acute disease and have recovered with so little residual weakness that their motor functions are essentially normal. These patients bear no permanent scars. The adult patients in this group have been discharged. The children will require annual check-up examinations during their growing period to make certain that minor muscle weakness does not produce skeletal deformities during their growing phase. Foot deformity, knock-knee, scoliosis may occur several years after a child has apparently completely recovered from an attack of poliomyelitis. The second group of polio patients—those with muscle involvement, but who do not require respiratory assistance (about 180 in number)—have been discharged to their homes and are returning at regular intervals to the Polio Clinic. The Clinic is held all day on Thursdays and is attended by four members of the Orthopedic Visiting Staff (Drs. Reidy, Broderick, Lowell, and DeLorme). The team includes a social service worker, physical therapist, occupational therapist, brace maker, and secretary, all of whom play an essential role in helping the patient toward the goal of complete rehabilitation. Paralytic polio is a subtractive disease and motor cells once killed cannot function again, but through hypertrophy of functioning muscle units and by substitution of functioning units for nonfunctioning ones, disabilities may be overcome to a surprising degree. It will not be long before some of these patients will be ready for operative assistance in the form of muscle transplants, joint stabilizations, etc. The Orthopedic Workshop under the capable direction of Bill Murphy, is working at top speed, turning out apparatus of all types which act as external assistance for weakened trunks and extremities. Each polio patient who returns to the Clinic is assigned to one of the Visiting men as his patient. Thus, there is assured the continuity of care and the certainty of personal interest which makes for good patient care.

At the present time there remain on White 9 twenty-four patients who have had severe involvement of the muscles of respiration and who still require assistance in the vital function of breathing. Some of these patients are out of the respirator except for one or two hours per day and, as strength slowly returns to their weak respiratory muscles, their vital capacity increases to the point where the respirator is no longer needed. The struggle toward the goal of freedom from breathing assistance is a slow and difficult one. It requires skilled care in enormous amounts but there is an air of cheerfulness, courage, and optimism on this ward which is scarcely equalled elsewhere in the Hospital. When it became obvious that the facilities outside of the Massachusetts General Hospital were inadequate to care for our respiratory patients, the Hospital administration decided to keep the respirator ward open so long as there is need for it. The decision is in harmony with the traditions of the M.G.H.

In our last article in THE NEWS we mentioned the opening of the Rehabilitation Ward on White 8 for the care of paraplegics, amputees, and others needing prolonged and specialized rehabilitation services. During the polio epidemic this ward was used exclusively for severely paralyzed polio patients not requiring respirator care. As these patients are being discharged to their homes, the ward is resuming its original function and is now admitting paraplegic patients, amputees, etc., in addition to polio patients.

It is a pleasure to announce that the chapter manuscripts and illustrations for the new edition of the *M.G.H. Fracture Book* are in their final form and will within the next few weeks be on their way to the publisher. Dr. Cave has proved himself to be an able and tireless editor who knows how to keep the pressure on dilatory co-authors.

A new and interesting development which will undoubtedly affect the Orthopedic Service, as it will all clinical services at the M.G.H., has taken place during the past year. The outer shell of the new building on Charles Street is complete and occupancy is expected by the end of the year. Five floors of this building will be used temporarily for private offices of the Visiting Staff of the M.G.H. Eventually, we hope to have a new building for doctors' offices, and these floors will then be available for patients. Our Visiting Staff has indicated its desire to have their offices located on one floor of the new building and we hope that on this same floor there can be provided x-ray diagnostic facilities, a plaster room, and such other equipment and facilities as will make for efficient care of the ambulatory orthopedic patient. We also hope that these offices will be immediately adjacent to the Orthopedic floor in Baker. With the operating rooms, the Orthopedic Ward, and the Ambulatory Clinic only a short distance away, the efficiency of our Service should be raised appreciably and the time lost bucking traffic between the Hospital and an up-town office will, we hope, be eliminated.

Research

The American Foundation has recently published a most interesting two-volume book, *Medical research: A mid-century survey,* in which it is pointed out that fundamental medical research uses the tools, techniques, and knowledge of chemistry, physics (atomic energy), and mathematics. Fundamental research in orthopedics is no exception to this rule. Fortunately, research in the field of chemistry (metabolism) of the skeletal system at the M.G.H. has gone forward for many years under the brilliant leadership of Drs. Fuller Albright and Walter Bauer. It would be wasteful duplication of effort for the Orthopedic Service to set up laboratory facilities in this field, but the problems of the locomotor system are to a large extent biomechanical and involve fundamental knowledge in physics and mathematics. With M.I.T. just across the river, there are available intellectual and physical resources of the first order which can and should be brought to bear on the solution of orthopedic problems. Professor Hansen of the Department of Structural Engineering at M.I.T. has worked with us for the past several years on a voluntary and informal basis. Supported by a grant from the Donner Foundation, a graduate student in his department, Mr. Yorra, has been working with Dr. Thornton Brown in a study of that complex mechanism, the lumbosacral spine. A report of their investigations which will soon be forthcoming contains original observations of fundamental importance. One of Professor Hansen's students, Mr. Rothstein, has written his senior thesis on biomechanics of the foot and ankle. This work was done under the supervision of Drs. Joplin, Brown, and Glimcher. Dr. Glimcher, who completed his senior residency on the Orthopedic Service July 1, is spending the coming year with Professor Francis O. Schmitt as a research associate in the Department of Biology at M.I.T. If Dr. Glimcher survives this year's intensive work and rarified atmosphere, he expects to return to the M.G.H. to begin an investigative career aimed at intensive study of our old friend, Wolff's law, as it relates to the form and function of the locomotor system, at gross and (ultra) microscopic levels.

The load of clinical patients, ambulatory and in the house, continues to increase slowly but steadily. There has, in particular, been a marked increase in numbers of fracture patients. This increase is very welcome. It is contributed to by the fact that the Emergency Ward is fully staffed 24 hours a day and, in addition, the Boston Police Department is bringing victims of accidents in our neighborhood to the M.G.H. instead of taking them across the city to the Boston City Hospital as was the custom in previous years.

Teaching of Harvard Medical School students, residents, and graduate students continues at its usual active level with unabated enthusiasm. During the past year we have had graduate students from Indonesia, Nationalist China (Taiwan), Mexico, Korea, Cuba, South America, Iraq, as well as the United States.

These rambling notes will assure the reader that many changes are occurring on the Orthopedic Service at the M.G.H. but, fortunately, the more it changes the more it remains the same.

Joseph S. Barr, M.D.,
Chief of Orthopedic Service

* * *

Dr. Edward F. Bland has been elected President of the Massachusetts Heart Association.

Dr. Mary A. B. Brazier has been elected a Fellow of the American Academy of Arts and Sciences.

At the Annual Meeting of the American Association of Plastic Surgeons held in Toronto in May, Dr. Bradford Cannon was elected Vice-President of the Association. He has completed a term of 8 years as a member of the American Board of Plastic Surgery and during that term was Secretary-Treasurer of the Board from 1950 to 1955.

Dr. Dean A. Clark was named President-elect of the Massachusetts Hospital Association at its annual meeting in Boston on May 10.

In addition to other honors, Dr. Stanley Cobb has received three medals during the past year: the Hamilton Award of the American Psychopathological Association "for distinguished contribution to Psychopathology", in June 1955; the Albert Einstein Commemorative Award from Yeshiva University in behalf of the Albert Einstein College of Medicine "for achievement in Medicine", in April 1956; and the Kober Medal of the Association of American Physicians "for research in Scientific Medicine", in May 1956.

The honor of being the George Winslow Holmes Lecturer this year was awarded to Dr. Laurence L. Robbins. This lectureship was established in 1945 by the New England Roentgen Ray Society in honor of Dr. George Winslow Holmes—he being the first lecturer. This year the Society selected as lecturer one of his students, Dr. Robbins, who also succeeded Dr. Holmes as Chief of the Department of Radiology at Massachusetts General Hospital.

Dr. Robbins is the twelfth person to be honored with this lectureship. The title of his address was "The radiologist faces automation". It was given on May 18 at the Annual Meeting of the New England Roentgen Ray Society. A sterling silver Paul Revere pitcher was presented to Dr. Robbins.

Dr. LeRoy A. Schall, Chief of the Otolaryngology Service at Massachusetts Eye and Ear Infirmary, has been elected President of the American Laryngological Association.

The Board of Trustees, at their meeting on May 11, voted to appoint:

Dr. Egbert Mueller as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Ernst Navratil of Graz, Austria, as Visiting Surgeon pro tempore, assigned to Gynecology, for one week in June.

At their meetings on March 28, during May, and on June 6, the General Executive Committee voted:

To promote:

Dr. Mitchell T. Rabkin from the position of Intern to that of Assistant Resident in Medicine, beginning July 1.

To reappoint:

Dr. Mahlon B. Hoagland as Associate Biochemist (Medicine) for three years, beginning September 1;
Dr. Robert B. Loftfield as Associate Biochemist (Medicine) for three years, beginning June 1.

To extend the appointment of:

Dr. Carol Meyers as Graduate Student Assistant in Orthopedic Surgery from May 12 through June 12.

To appoint:

Dr. Alan C. Aisenberg as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. John F. Bertles as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Alan S. Cohen as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Nicholas J. Fiumara as Clinical Assistant in Dermatology, effective as of May 1;
Dr. Soren Jorgensen as Senior Fellow in Anesthesia, for the period of six months, beginning on or about July 1;
Dr. Richard A. Joske as Clinical and Research Fellow in Medicine, beginning September 1;
Dr. Edmund Klein as Clinical and Research Fellow in Dermatology for one year, beginning July 1;
Dr. Bernhard Laukenmann as Clinical Fellow in Anesthesia for one year, beginning September 1;
Dr. Franz J. Lucas as Fellow in Anesthesia for one year, beginning July 1;
Dr. Josip Matovinovic as Clinical and Research Fellow in Medicine, to become effective at the time of his arrival in this country;
William S. Quigley, B.S. as Research Fellow in Physics (Medicine), effective as of April 30;
Dr. Francoise J. Robert as Research Fellow in Neuropathology for one year, beginning July 1;
Dr. Fernando Rosas-Peña as Research Fellow in Neurology, for the period May 21 through September 21;
Commander Robert W. Spicher, M.D. as Clinical Fellow in Radiology for one year, beginning July 1, 1957;
Samuel B. Weiss, Ph.D. as Research Fellow in Biochemistry, beginning September 1.

About two hundred fifty friends from McLean Hospital, the Massachusetts General, and the Board of Trustees gathered at McLean Hospital on June 8 at an informal buffet to honor Dr. W. Franklin Wood who retired as Director of McLean on June 30. Mr. Ralph Lowell, Chairman of the McLean Committee, presented Dr. and Mrs. Wood with gifts and gave a brief but impressive talk on Dr. Wood's accomplishments while he was Director at McLean. Dr. Wood responded in his usual unique and pleasing manner, thanking the McLean family for their support and help during his twenty-four years of service. He, of course, attributed the success he has had to the loyalty and friendship of the employees of the Hospital.

Dr. Wood has been Director at McLean during a period of great changes in hospital methods. Under his supervision, patient care has been improved to a high level; there are now double the number of admissions and many more acute cases. With modern treatment methods many patients get well in less time. The departmental organization of the Hospital has been much strengthened in recent years. The Nurses Training School has been improved through better organization and teaching methods. There have been advances in the training of residents in psychiatry, and in research. In addition, the Hospital has done better financially for the patient than most hospitals have been able to do. There has almost always been a balanced budget, despite relatively low increases in patients' rates. This has been achieved without much outside financial support.

Dr. Wood has greatly strengthened the friendly relationship between the citizens of the Town of Belmont and the Hospital. He was always alert to the Hospital's place in the community. He believes that the Hospital is a part of the Town, that the Town benefits by its being there and by the extension of its Community Service. He has accomplished all this through hundreds of personal contacts and associations. Dr. Wood will be remembered at McLean and by the people whom the Hospital has served not only for the excellent standards and efficiency of his administration, but also for the high degree of personal interest which went into all of his contacts. He believes that in the care of nervous illness the Hospital should contribute in a very personal way and that its administrator should be primarily a physician.

Dr. Wood was a member of Base Hospital 44 and served abroad in World War I. Before coming to McLean he had been Assistant Director of the Massachusetts General Hospital, Assistant Superintendent and Acting Superintendent at Danvers State Hospital, Assistant to the Commissioner in the Massachusetts Department of Mental Health, Chief Executive Officer of the Boston Psychopathic Hospital, Assistant Superintendent of Monson State Hospital, and Assistant Superintendent of the Massachusetts Memorial Hospitals. He is a graduate of New York Medical College and Flower Hospital, and Tufts University Medical School.

In addition to his position as Director of McLean Hospital, Dr. Wood has been President and Secretary of the Massachusetts Hospital Association, President and Secretary of the New England Hospital Assembly, Regent of the American College of Hospital Administrators, and President of the New England Superintendents Club. He also is a member of the American Medical Association, the New England Psychiatric Association, the Massachusetts Medical Society, the Massachusetts Psychiatric Association, and a Diplomate of the American Board of Psychiatry and Neurology. He is Past-President of the Boston Rotary Club, a member of the Belmont Medical Society, Director of the Waverley Cooperative Bank, a Trustee of the Belmont Savings Bank, and has served for many years on the Warrant Committee of the Town.

Dr. Wood is now Psychiatric Consultant at the Massachusetts Department of Mental Health, where he interviews patients and their relatives. He has been appointed School Physician of the Belmont Schools, and is a Psychiatric Consultant at the Leslie Junior College in Cambridge. He has bought a little house in Belmont, at 396 Marsh Street, and will continue his interest in professional and civic activities of the Town.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Gravenstein, J. S., Smith, G. M., Sphire, R. D., Isaacs, J. P., and Beecher, H. K.
Dihydrocodeine: Further development in measurement of analgesic power and appraisal of psychologic side effects of analgesic agents.
New England J. Med. 254:877-885.

Knapp, M. R., and Beecher, H. K.
Postanesthetic nausea, vomiting, and retching: Evaluation of the antiemetic drugs dimenhydrinate (Dramamine), chlorpromazine, and pentobarbital sodium.
J.A.M.A. 160:376-385.

General Surgery

Dexter, C. J.
Benign enlargement of the male breast.
New England J. Med. 254:996-997.

Laboratory Science

Herbst, F. S. M., Lever, W. F., and Waddell, W. R.
Effects of intravenously administered fat on the serum lipoproteins.
Science 123:843-844.

Jeanloz, R. W.
The chemistry of mucopolysaccharides.
In Proceedings of the Third International Congress of Biochemistry, Brussels, 1955, C. Liébecq, Editor, New York, N. Y., Academic Press Inc., pp. 65-72, 1956.

Jeanloz, R. W., and Trémège, M.
Color reaction of N-acetylamino sugar derivatives with p-dimethylaminobenzaldehyde.
Federation Proc. 15:282.

Neurophysiology

Brazier, M. A. B., and Barlow, J. S.
Some applications of correlation analysis to clinical problems in electroencephalography.
EEG & Clin. Neurophysiol. 8:325-331.

Physical Medicine

Watkins, A. L.
Current trends in Physical Medicine and Rehabilitation.
Arch. Phys. Med. & Rehabil. 37:221-224.

Radiology

Wang, C. C., and Robbins, L. L.
Amyloid disease: Its roentgen manifestations.
Radiology 66:489-501.

Miscellaneous

Garland, J.
Clarity in medical writing.
Mississippi Valley M. J. 78:38-43.

Garland, J.
Development of editorial material.
Northwest Med. 55:403-405.

Garland, J.
Some accessory factors in medical education.
Harvard Med. Alum. Bull., April: 7-9.

Books

Rackemann, F. M.
The inquisitive physician: The life and times of George Richards Minot, M.D.
Cambridge, Massachusetts, Harvard University Press.

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PULMONARY CLINIC

In 1949 THE NEWS published a write-up of the Pulmonary Clinic, then in its twenty-fourth year. I joined the staff of the clinic in 1931, six years after it had been established, and feel accordingly that I have some perspective with which to appraise its activities. It seems to me that we have been through two periods or phases of emphasis thus far and that a third period is upon us. These phases might be called: the time of the perfection of thoracic surgery, the antibiotic era, and the physiologic or pulmonary function period. These broad generalizations require amplification and qualification. Throughout the years our patients have presented problems in four main areas: tuberculosis, nonspecific infections such as bronchiectasis and lung abscess, fibrosis and emphysema, and lung cancer. Obviously, no one pattern of therapy is applicable to all these processes.

The years preceding the introduction of antibiotics were those in which vast progress was made in thoracic surgery. In tuberculosis, collapse therapy — either medical collapse by artificial pneumothorax, or surgical by means of phrenic nerve interruption and thoracoplasty—constituted great advances in management of the disease. Lobectomy, with or without sinus surgery, prolonged the useful life of the victims of bronchiectasis. External drainage of putrid lung abscesses was a messy business, involving, as it did, draining chest wall wounds, but until lobectomy for chronic abscess became possible, it served its purpose.

With the introduction of antibiotics the pattern of chronic infection changed. For the first time there was an effective therapeutic tool for tuberculosis. Bronchial obstruction and persistent atelectasis —the sequellae of whooping cough and pneumonias — could be attacked by the bronchoscope and by medical agents, sinusitis did not progress to suppuration, and we saw less and less new bronchiectasis. By the use of the same tools lung abscess has become a medical disease and a rare one at that. Not only have we seen a marked decline in the incidence of new cases of chronic suppurative disease but, also, with control of infection playing at least a part, we have an ever-increasing population of older people with the degenerative diseases of age. These individuals with chronic fibrosis and emphysema are particularly vulnerable to intercurrent respiratory infections. By means of winter-long prophylactic use of sulfonamides or antibiotics the incidence of disabling infections and pneumonia has been sharply cut in this population. The advances in control of tuberculosis throughout the country and in management of acute respiratory infections has been reflected in the patients coming to the clinic. We see less and less tuberculosis, bronchiectasis, and abscess, and more and more fibrosis, emphysema, and neoplasm.

Before leaving the subject of infection, however, we should mention here the recent discovery of lack of gamma globulin in certain persons with uncontrollable propensity to infection. For the last two years we have been conducting a survey of our patients for this defect and find that, despite the increasing number of reported cases, it is a rare condition in adults.

This brings us to a consideration of the future of the clinic. The main emphasis of the pulmonary physiologists has been on measurements of lung function. In recent years a voluminous literature on this subject has appeared. There has been serious difference of opinion as to whether utilization of these techniques was making a real contribution to the understanding and, consequently, to the management of lung disease or not. There has been increasing demand, particularly among the younger members of the Hospital staff, to have facilities for such measurements of function available. It now seems probable that within a couple of years such a laboratory will be set up. We hope that it will prove as valuable as the techniques of cardiac catheterization have proved to be in their field.

I have omitted consideration of the field of cancer thus far. This disease continues to be seen with great frequency. We are grateful to the radiologists, endoscopists, and cytologists for their parts in clarification of diagnosis. The treatment remains all too often unsatisfactory. Direct surgical attack on small peripheral lesions disclosed by x-ray is establishing the diagnosis earlier in some cases. This is in line with the trend to lung biopsy in instances of various conditions of obscure nature. The freer use of the direct approach for purposes of diagnosis is a reflection of the high degree of safety of thoracic surgery in the hands of our staff.

The work of the out-patient clinic and of the weekly Tuesday morning rounds, which concern themselves chiefly with in-patients, cannot be entirely separated. Both are conducted jointly by the medical and surgical staff. At our rounds we can count also on the participation of a radiologist to discuss the x-rays and to give advice, particularly when radiation therapy is under consideration, and of a pathologist to demonstrate the tissues removed at operation. In the out-patient clinic a new schedule was instituted this year. We now meet on the second and fourth Wednesdays, only. Although the number of patients with neoplasm has increased to a point where many of them are seen in the tumor clinic quarters on White 2, adjacent to x-ray therapy, the reduction in numbers of persons coming with tuberculosis and other infections has continued to a point which has made it possible to give adequate patient care with reduced clinic sessions.

Helen S. Pittman, M.D.,
Associate Physician

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On March 24, *Saturday Review* inaugurated its new monthly "Science & Humanity" section. John Lear, *SR*'s Science Editor, wrote a piece on blood fractionation for that issue, entitled "Human drug factories", in which he outlined the amazing work being done by Dr. Joseph Smolens and one of our alumni—Dr. Joseph Stokes, Jr. (*W.M.* 1921). The article reads, in part:

> Drs. Smolens and Stokes began with the knowledge that, during convalescence the blood of a contagious disease victim carries a high concentration of antibodies, or gamma globulins. That's why the patient is getting well—because the antibodies are in there, in large numbers, fighting the invasion. And this convalescent phenomenon can be produced artificially by injecting a vaccine. So the Philadelphia experiment was done with twenty-three men, four of them naturally hyperimmune to whooping cough and nineteen vaccinated against whooping cough and mumps. There wasn't too much danger in the deliberate vaccinations, for the men were husky members of the Philadelphia Park Police, between twenty-six and thirty-five years old.
>
> Once every two weeks each of the twenty-three subjects of the experiment gave blood. Into the splitting machine it went, and out came two major blood fractions: (1) the plasma, of which the gamma globulins are part, and (2) the red cells, white cells and other formed elements of the blood. Since the two doctors wanted only the gamma globulins, they promptly poured the rest of the blood back into the veins of the twenty-three men.
>
> At the time this work was formally reported, at a Protein Foundation symposium in January 1956, none of the experimental human drug factories had shown any ill effects after giving seventeen successive batches of gamma globulin. Their blood pressures, pulse rates, red and white cell counts, and other customary indices of sound health remained undisturbed. The average time for a gamma globulin runoff was twenty-two minutes, including nine minutes to draw the blood and ten minutes to pour the unwanted fractions back again.
>
> The significance of this Philadelphia experiment could be enormous. For example, after more experience has been gained with polio vaccine . . . it may be possible to hyperimmunize a relative handful of people and from them obtain protection for thousands. It has been estimated by Dr. Stokes that only 2,000 regular donors would be required to fill immunization needs of various kinds now supplied by 4,000,000 conventional once-a-year blood transfusions.

Of course, we immediately wrote to Dr. Stokes, asking him for a more detailed write-up on his work for THE NEWS. Dr. Stokes replied: "In many ways . . . the *Saturday Review* article has created excitement in other quarters, and *Life* of April 23 has a two-page 'spread' on the same work. . . . Perhaps this is enough publicity on the matter for the time being."

Undauntedly, we persisted, and finally succeeded in getting the following from Dr. Stokes:

> Plasmapheresis is the process in which whole blood, obtained from a donor, is separated into plasma and red blood cells, the red blood cells being returned to the donor and only the plasma retained.
>
> An ADL Cohn Blood Fractionator has been utilized at the Children's Hospital of Philadelphia for biweekly plasmaphereses of 23 donors. With this equipment the blood is continuously separated into red blood cells and plasma, and the red blood cells are returned immediately to the donor. The phlebotomy consists of 1 pint of blood with about 200 ml. of plasma retained, the remaining 300 ml. volume being returned to the donor. Twenty-six plasmaphereses have been carried out on each of the individuals over a period of 52 weeks.
>
> The following tests were run at each plasmapheresis: red blood cell, white blood cell differential and platelet counts, hemoglobin, hematocrit, sedimentation rate and prothrombin time. Paper electrophoretic pattern and nitrogen contents were determined for each plasma sample. Pertussis, mumps, and streptolysin antibodies were titrated in each plasma, since some of the donors were immunized versus either mumps or pertussis antigens. A non-immunized control group was also included.
>
> The results of the first year's study showed that the various components of the blood remained normal. This means that this technique is safe. The time required for the entire procedure was about 20 minutes, which means that this technique is practicable. The antibodies resulting from the administration of antigens have remained at peak levels throughout the course of this study, i.e., 40 weeks following the final injection of antigen, even though almost two times the original plasma volume was removed from each donor (5200 ml. plasma). If the normal cellular turnover is taken into consideration, it is obvious that the technique of repeated plasmapheresis of the same donors stimulates the formation of antibodies.

* * *

ALLERGY IN EUROPE

February 1956

Ever since the European Congress of Allergy, held in France in 1950, and the organization meeting of the International Association of Allergology in Zurich in 1951, I had wanted to see again those friendly gentlemen who had been so very cordial to me. As time passed and correspondence increased, it was clear that I would be welcome in Europe, and it seemed likely that I would learn about the problems of hay fever, asthma, and eczema if I went over. When an enthusiastic letter from Dr. Willem Quarles van Ufford in Utrecht included a schedule of daily clinic conferences and meetings in various parts of Holland, I bought my tickets without further procrastination.

Sailing on the *Queen Elizabeth* is a luxurious vacation, especially in February when the ship has only about one-half of its complement of passengers.

In London there is one allergy clinic which compares with ours. At St. Mary's Hospital, where Dr. Louis Noon and his successor, Dr. John Freeman, started in 1911 to treat hay fever by injections of pollen extract, the allergy clinic is run now by Dr. A. W. Frankland. To see great numbers of patients (over a hundred on most days) and four doctors struggling with them was a familiar view. It is not surprising that it was hard to find out, "What is the real matter with this patient, anyway?"

Upstairs in the laboratory, the impression was much better. Here was Dr. Ruth Augustin, a pleasant, intelligent lady who could immunize rabbits against pollen by giving multiple injections into skin, muscle, and peritoneum, and who could demonstrate the antibody by the agar diffusion techniques of Oudin and of Ouchterlony. Some of her pollen extracts produced a single peak in the Tiselius apparatus.

Other doctors in London are interested in asthma, but their work is private—in their offices on a consultation basis quite separate from the general plan of socialized medicine. Their approach was much more fundamental. I was delighted to have talks with Drs. Bruce Pearson, David Harley, and C. J. C. Britton.

Dr. R. J. S. MacDowall, Professor of Physiology at King's College, who was in America last fall, is still working on the effect of the sodium concentration on the reaction of smooth muscle to histamine and to the specific antigen. Intracellular sodium may be important in asthma. Incidentally, he showed me the room in which Pasteur, Koch, and Lister came together about 1870 to see Koch's agar plate cultures of bacteria.

Four weeks later, before the *Queen Mary* sailed on March 7, I had an extra day in England, and I spent it with Dr. David E. Williams in Cardiff, Wales. To study pollen and molds he has a fancy gadget which draws air through a metal slit, so that the dust in it impinges on a greased slide which moves by clockwork past the slit. He can show that pollen is produced more in the morning, mold spores in the afternoon. Charts show the incidence of asthma in Britain from month to month as well as from year to year. Unfortunately, he does not distinguish those cases whose asthma begins before age 30 and depends upon allergy ("extrinsic") from those others who begin after age 40 because of some disturbance which they carry within themselves ("intrinsic"). He and the pathologist at the Welch National Institute of Medicine, Professor Jethroe Gough, showed me some remarkable preparations of coal miner's lung with large black areas of solid coal imbedded in the pulmonary tissue. No wonder the patients had wheezed.

It takes only one and a half hours to fly from England to Holland. Dr. Willem Quarles van Ufford met me at the airport in Amsterdam and drove me to Utrecht, about twenty-five miles away. In my hotel room I found flowers, a bottle of Holland gin, a pretty little porcelain jar filled with cordial, and a collection of the Doctor's reprints. What a warm, friendly greeting! During a busy week, "Dr. Quarles" drove me in his Volkswagen from Utrecht all over Holland—to Rotterdam, Gouda, Delft, The Hague, and Leiden—none of them much over twenty-five miles from Utrecht. I took part in five meetings, discussing the problems of allergy and asthma. The arrangement of these meetings and the business of transporting me to and fro were appreciated greatly. It was cold in Holland in February—about 15° F. on most mornings. Everybody, except us, was skating on the canals until a fall of snow spoiled the fun.

There is much interest in fungi (molds) in Holland. A part of this stems from Professor Johanna Westerdijk, a charming, elderly lady who has developed the Centraalbureau voor Schimmelcultures. In the little country town of Baarn, not far from Utrecht, she has taken over a good-sized house and converted it into an extensive laboratory. Molds come to her for identification from all over the world—even from Harvard. Here are thousands, maybe hundreds of thousands, of mold cultures. "They are my children," she says, "and, like children, they are apt to be fussy about their food." She has ninety-five different media for the molds to grow on. The conventional Sabouraud's medium is good, but slices of potato or carrot on the leaves or stems from many different trees and shrubs are usually better—all depending on the natural habitat of the particular mold. "Sunlight? Why not?" she says. "Don't molds grow outdoors on leaves in the sun?" I asked about contaminations in the laboratory. "We have no trouble," she replied. "Every morning and night we wash the desks and floors and spray the shelves with formalin six percent in water. The fumes pass off in a few minutes when we open the windows." Her enthusiasm was high—it was a privilege to meet her.

In treating asthma, attention is paid to the type of mold predominant in the patient's environment, a principle which sounds obvious but is not simple in practice since mold cultures show a mixed growth—often very mixed.

It is easy to talk about the diseases of allergy—the diagnosis and treatment of the exciting causes and the theories about the basic mechanism—to try to explain "How did the patient get that way?" In contrast, the application of the talk is not easy. When several patients were brought into the conference room, with little if any work-up and with the request to "Please tell us how you would treat this patient", it was necessary to explain that a satisfactory study starting from scratch would require about two hours of time.

In Leiden, Professor J. Mulder studies eosinophils in sputum by immersing a washed portion in a watery solution of eosin and formalin and then looking at the wet preparation. Professor Andries Querido had studied at the M.G.H. under Dr. Means. It was good to see him again. He heads a group which is working on hormones and finds, among other things, that the 17-ketosteroids in the blood rise and fall with great rapidity within a few minutes in response to stress of different kinds—a response which may not be reflected in the twenty-four- or even in the twelve-hour urine.

In Utrecht, Professor A. A. J. Van Egmond, Chief of the Nose and Throat Department, was interested in the vestibular apparatus. He had a closed octagonal box, or cage, about six feet in diameter, which could be revolved at varying speeds. To sit still in the revolving cage caused no sensation, but if the sitter tipped his head even a little, he felt a pang of acute dizziness. The Professor had other gadgets, too, but they were less impressive. In Paris, the high spot was the laboratory of Professor Bernard L. Halpern at the Hôpital Broussais. Most of his work is done in a big room, with desks under the windows on both sides. Here was his chief assistant, Dr. J. P. Duesberg. There were also four girl technicians, all very competent, and two men helpers. Dr. Halpern was one of the first to synthesize an antihistamine drug. Now he is working on "histamine liberators"—a group of substances with large molecular weight which can produce the symptom of histamine shock. He demonstrated severe generalized itching, with swelling of the eyes and nose, in a dog following an intravenous injection. To see three different technicians working with three different muscle preparations, determining the concentration of histamine in many, was impressive. At another table, Dr. Duesberg was taking moving pictures through a bronchoscope, to make a graphic record of the changes produced by vagus stimulation or by the injection of a histamine liberator. His technique was easy and simple.

My attempt to read a paper "en Français" to La Société Française d'Allergie was not good. My pronunciation was atrocious, and Professor Pasteur Vallery-Radot said to me, "When you talk to the students tomorrow, you had better talk in English." When — I — talked — very — slowly — they — seemed — to — understand — and — gave — me — a — hand.

The house in which Pasteur lived during his later years was built for him as a part of l'Institute Pasteur. It is an impressive place, full of interesting reminders of the work and the life of an extraordinary man. Dr. Grabar, the medical director, seemed to be pleased to show it to me. In this modern day, l'Institute Pasteur prepares serum and vaccines for all of France and studies their activities in new modern laboratories.

To go from Paris to Copenhagen takes nearly twenty-four hours by train and ferry, but less than two hours by airplane. In Copenhagen, another devoted friend, Dr. Egon Bruun, and his charming wife took charge of me and showed me everything of interest during my week's stay.

At lunches and dinners I met many distinguished people and enjoyed the visit immensely.

Copenhagen has two large general hospitals—the Bispebjaerg, or Bishops Hospital, supported by the City, and the Rigshospital, the University hospital, supported by the State. Professor Einar Meulengracht is Chief of Medicine in the former, Professor Eggert Moeller is Chief of Medicine in the latter. Both have students in good laboratories in modern buildings.

Dr. Bruun's clinic for the study of allergy at the University hospital was well organized. Dr. Bruun and his assistants are working on the problems of house-dust allergy in asthma and of drug allergy in angio-edema. Dr. Wilkin-Jenson takes special care of the children. The doctors and nurses were trying to work effectively, but they had too many patients. All clinical allergy is like that!

On another day I met Dr. Kaj Linderstrom-Lang in the Carlsberg Laboratories. Back in 1876, a Mr. Jacobsen had made his pile from the Carlsberg Brewery and set up a Foundation Trust, the interest to be applied to the study of the malt fermentation process. But very fortunately he added a clause that the income could also be used for researches in general physiology. Dr. Linderstrom-Lang is working on the structure of proteins. In the Director's Room of the laboratory is a handsome portrait of Kjeldahl. The flask on his desk has a purple color because he used permanganate to oxidize the nitrogen-containing material. Another portrait was of Sorensen, who first conceived of pH. The Carlsberg Foundation is an important asset to Denmark.

I wanted to see Professor August Krogh's old laboratory because so many friends had worked there. Francis W. Peabody, Cecil K. Drinker and his wife, James Howard Means, and Eugene M. Landis had all been stimulated by the master of capillary physiology. I was delighted to see the photographs of my friends on the wall. The old building is now the Institute for Zoophysiology, also known as the Rockefeller Institute because of its American support. Professor Brandt Rehberg is in charge. His assistant, Dr. Zeuthen, is working on respiration—on the metabolism of hibernating frogs. Both gentlemen received me cordially.

As in Holland, so in Denmark. I saw the men and learned something of their work. Whereas a week's stay in one place is long enough to obtain an over-all impression, it is not long enough to grasp the details of many complex problems. To "keep one's friendships in repair" is always important, and my trip did that very well.

I had a wonderful experience, but I was glad to have five days of peace and quiet on the *Queen Mary* coming home. Do we in America devote ourselves to the instruction and entertainment of doctors from Europe as my friends over there devoted themselves to me? The question disturbs me a good deal.

Francis M. Rackemann, M.D.,
Member of Board of Consultation

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CLINICAL RESEARCH AT THE RETINA FOUNDATION

While a general description of the Retina Foundation's activities appeared in THE NEWS of March 1955, a somewhat more detailed and up-to-date report on its clinical research activities may be of interest at the present time.

The current program of clinical research received its impetus from the development by our Clinical Unit of a method of ophthalmoscopy for the examination of the extreme fundus periphery. This method consists of using an indirect stereoscopic ophthalmoscope which is equipped with a powerful illumination system and mounted on a headband. The peripheral areas of the fundus oculi are brought into view by indenting the globe with a small instrument called a scleral depressor.

This method of ophthalmoscopy has made possible considerable improvement in the diagnosis of conditions predominantly localized in the anterior portion of the fundus, such as cases of retinal detachment, peripheral uveitis, retrolental fibroplasia, and certain cases of intraocular tumors, vascular conditions of the retina, contusions of the globe, and intraocular foreign bodies. The method was tested extensively at the Retina Service of the Massachusetts Eye and Ear Infirmary, which is a special clinic established for the examination and treatment of patients affected with retinal detachment. Its usefulness perhaps may be measured by the fact that the number of new patients, both private and clinical, seen by the staff of this Service, has increased from 366 in 1948 to 1,044 in 1955. Indirect ophthalmoscopy with scleral indentation has become indispensable for the detection of retinal breaks in cases of detachment of the retina. Because of this fact, improvement in the diagnosis and treatment of retinal detachment is an essential part of our clinical research program. In this area, also, comparative figures are of interest. The Retina Service staff either performed or directed 165 operations for retinal detachment in 1948, and 719 operations in 1955.

In 1952, extensive research was begun in order to improve surgical methods used for retinal detachment. Several types of scleral buckling were developed which have almost completely replaced the method of simple diathermy. The essential advantage of scleral buckling is that the portion of the choroid, first treated with diathermy, is brought into contact with the detached retina at the time of surgery. This is accomplished by indenting the sclera with a piece of polyethylene tubing. The tubing is placed under mattress sutures, and buckles the sclera when the sutures are tied. The height of the buckle may be varied according to the particular case; when a very high and permanent buckle is desired, a tube of polyethylene is placed all around the globe, both ends being attached to each other like a belt around one's waist. As a result of these changes in surgical technique, the pre- and post-operative routine was altered as follows:

	1947	1955
STAY IN BED		
Before operation	7 days	None
After operation	14-20 days	2-4 days
PINHOLE GLASSES	28 days	None
OUT OF WORK	3-6 months	6 weeks

The most important advantage of scleral buckling is that it has permitted operations on many cases which were previously considered hopeless. The polyethylene tubing and black silk sutures appear, so far, to be well tolerated by the orbital tissues, and most of the complications observed have been minor. Future investigation in this area will be directed toward replacement of polyethylene tubing by even better-suited foreign bodies such as, perhaps, a slowly absorbable material.

Another aspect of this research is the statistical analysis of all available data. Between 1947 and 1956, over 4,500 patients suspected of having diseased conditions in the extreme fundus periphery of the eye were examined, and over 3,000 operations for retinal detachment were performed. Pertinent data are being recorded on special sheets, transferred to I.B.M. punched cards, and analyzed by machine. This work is far from being completed, but catalogs of symptoms already have proved invaluable.

It is well known that in most cases of uveitis, no etiological factor is found. Several authors incriminate sensitivity to certain bacteria, particularly streptococcus. When the eyes of patients affected by rheumatic fever are examined by the ordinary method of ophthalmoscopy, generally no uveitis is found. However, Dr. Brockhurst examined 71 patients with active rheumatic fever at the Good Samaritan Hospital, using the indirect ophthalmoscope and scleral pressure, and 20 of these patients showed either active or healed peripheral uveitis. A study of the eyes of nonaffected siblings is now in process.

Peripheral uveitis is not a rare condition; it is generally insidious and may remain asymptomatic for many years. Dr. Brockhurst found evidence that it may cause glaucoma by gradual closure of the filtration angle. It was also observed that it causes lens opacities and degeneration of the vitreous, the latter condition sometimes leading to retinal detachment.

With the aid of the new method of ophthalmoscopy, Dr. Okamura has discovered another clinical entity consisting of a peripheral choroidal detachment associated with retinal detachment; no breaks are found in the retina. There is evidence that this condition, which is often bilateral, is caused by a choroiditis, with formation of exudative fluid on both sides of the choroid. Shrinkage of the vitreous body is the cause of many retinal conditions, particularly retinal detachment. The shrinkage process may be observed clinically with a slit lamp and low-power microscope. The present apparatus, however, is inadequate and efforts are being made to improve the illumination, the definition of the image, and the versatility of the instrument.

A considerable portion of the activities of our Clinical Unit is devoted to the improvement of instrumentation used for examining and operating on the eye. For instance, pilot models of three new types of stereoscopic indirect ophthalmoscopes are now being studied. The first is an improved version of the present headband instrument; the second is an operating room model; and the third is a large model with greater magnification. Efforts are also being made to improve the equipment used for application of surgical diathermy to the eye. Pilot models of two different machines are now being tried. These models are lighter, more compact, and more efficient than the commercial apparatus currently available. Such work in instrumentation could not be performed without collaboration of our consultant in mechanical engineering, Mr. C. Mahlmann, and the Foundation's instrument maker, Mr. R. Thompson.

The importance of teaching in our Clinical Unit is emphasized by the fact that the Retina Foundation presently supports two Fellows, Dr. A. Rodriguez, from Bogotá (Colombia), and Dr. J. Contreras from Puebla (Mexico). Teaching also requires a good iconography relative to conditions of the vitreous and of the retina. Dr. I. Okamura is building up a collection of unusual fundus conditions. As the anterior portion of the fundus cannot at present be photographed, Mr. W. Stenstrom, our medical artist, is making fundus paintings of significant aspects of the fundus periphery. The teaching function of our Unit is also discharged by its participation in postgraduate courses, and individual staff members frequently lecture in other cities. Recently the Unit was asked to organize a symposium at the New York Academy of Medicine in order to give a complete picture of our work.

The interest and assistance of Dr. E. B. Dunphy, Chief of Ophthalmology, have made possible the growth and efficiency of the Clinical Unit of the Retina Foundation. Close association of this Unit with the units performing basic eye research at the Retina Foundation has been of incalculable benefit. Since the future of medicine depends largely on satisfactory integration of basic and clinical research, it is comforting to observe that this integration is proving so stimulating in the field of ophthalmology.

Charles L. Schepens, M.D.,
Director of the Retina Foundation
30 Chambers Street
Boston 14, Massachusetts

VOLUNTEER GROUPS

MGH STAFF WIVES HOSPITAL COMMITTEE

The Annual Meeting of the Staff Wives was held on May 1 in Bartlett Hall. The meeting was preceded by a coffee hour, at which time old friends met and exchanged greetings and new friends were made. Following this, the meeting was called to order by Mrs. Oliver Cope, who delivered a most inspiring talk on what the Staff Wives have accomplished in their short span of Hospital activity, and what they hope to accomplish in the future.

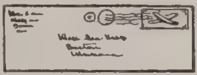
Elections were then held. The new Executive Committee is as follows:

President: Mrs. Charles B. Burbank
Vice-President: Mrs. Alfred Kranes
Secretary: Mrs. Joseph S. Barr
Treasurer: Mrs. Francis G. Barnum, Jr.
Chairman of Special Projects: Mrs. Marshall K. Bartlett
  Flowers: Mrs. Fred A. Simmons
  Furniture: Mrs. Morris H. Adler
  Housing: Mrs. Grant V. Rodkey
    Mrs. Benjamin Castleman
  Music: Mrs. John D. Crawford
  Publicity: Mrs. Morris H. Adler
  Reception Center: Mrs. Claude E. Welch
    Mrs. Avery D. Weisman
  Teas: Mrs. Daniel S. Ellis
    Mrs. Robert R. Linton

Mrs. Alfred Kranes, Vice-President, serves as liaison between the Community Chairmen and the Executive Committee.

The Community Chairmen are:

Belmont: Mrs. Warren Point
Boston, Chelsea, West Roxbury, Roslindale: Mrs. Wyland F. Leadbetter, Mrs. Richard H. Sweet
Brookline: Mrs. H. Dunster Howe
Cambridge: Mrs. William D. Sohier, Jr.
Chestnut Hill: Mrs. Carter R. Rowe
Dedham, Needham, Milton, Braintree, Quincy: Mrs. Frederic Tudor
Lexington: Mrs. Lovick C. Miller, Jr.
Lincoln, Concord, Wayland, Waltham, Watertown, Weston: Mrs. Robert S. Shaw
Newtons, Auburndale, Waban: Mrs. E. Wayne Wilkins, Jr.
Winchester, Melrose, Malden, Arlington, Stoneham, Wakefield: Mrs. Robert L. Berg
Wellesley, Natick, Cochituate: Mrs. Jackson M. Thomas
North Shore: Mrs. Joseph Stokes, III



We are most grateful to Dr. Paul D. White for sending us this letter:

> I am sending you the enclosed item for THE NEWS. This is the result of my recent travels. I thought it might be of interest to their friends in the Massachusetts General Hospital and among the alumni who live elsewhere to have recent news about the following who have been associated with us in the past:
>
> Dr. Chiu-an Wang of Hong Kong, H.M.S., MGH surgical resident, 1946
> Dr. Hsi-Chin Tsai of Taipeh, Formosa, member of the cardiac graduate class of 1953-54
> Dr. Ang Giok San of Manila, member of the cardiac graduate class of 1953-54
> Dr. Mariano Alimurung of Manila, associated with the cardiac group at the House of the Good Samaritan and at the M.G.H., 1948
> Dr. R. B. F. Khambatta of Karachi, Pakistan, member of the cardiac graduate class of 1951-52
> Dr. S. Padmavati of New Delhi, India, who has been on several occasions a visitor in the cardiac group at M.G.H.
>
> Dr. Wang is in active surgical practice in Hong Kong, doing an excellent job, though quite homesick for the M.G.H. In April, Mrs. White and I had a very pleasant reunion with him and his family and friends in Hong Kong. He is one of the few Harvard graduates in that part of the world. He sent his very best wishes to all his old associates and friends.
>
> Dr. Tsai is Professor of Medicine on Taiwan (Formosa), and I had the pleasure of meeting him briefly and seeing a patient with him on Sunday morning, April 15, in a hospital clinic in Taipeh. He, likewise, sent his best wishes.
>
> Drs. Ang and Alimurung I met at the annual meetings of the Philippine Medical and Heart Associations and at the inauguration of the new Asian-Pacific Society of Cardiology at its first Congress in Manila. (The next Congress will be held in Australia in 1960.) Drs. Khambatta and Padmavati were also present at this first Asian-Pacific Congress of Cardiology which was held on April 18 in Manila. I should have added that Dr. Maddox of Sydney, Australia, Professor Maekawa of Kyoto, Japan, and Professor Wollheim of Germany (three members of the International Council of Cardiology) were present at the inauguration of the Asian-Pacific Society of Cardiology in Manila. They were present in Washington and Boston at the time of the Second World Congress of Cardiology in September 1954.
>
> While in Japan in April, Mrs. White and I had the pleasure of following in the footsteps of Dr. and Mrs. Means in a visit to St. Luke's Hospital in Tokyo, one of the most up-and-coming institutions in the Far East, where we met Professors Hashimoto and Hinohara, old friends of many American physicians. And, finally, we had a brief reunion in Tokyo with Dr. G. C. Sanchez, MGH resident in Medicine, 1951, and cardiac fellow in 1954, who had come over for a few days from his present post in our Army Hospital at Pusan, Korea.

New addresses:—

Dr. John W. Bell (*E.S.* 1946), Veterans Administration Hospital, Sunmount, N. Y.
Dr. Jimmie Brockman Holland (r.p. *Psychiat.* 1955), 302 Crosby Blvd., Eggertsville, N. Y.
Dr. Dean K. Crystal (*W.S.* 1942), 1110 Harvard Ave., Seattle, Wash.
Dr. Gerald G. Garcelon (clin. assoc. *S.*), 701 Washington St., Newtonville, Mass.
Dr. Henry B. Garrigues (*W.S.* 1939), 1116 Summit Ave., Seattle, Wash.
Dr. Albert P. Heusner (*E.S.* 1939), University of North Carolina School of Medicine, Chapel Hill, N. C.
Dr. Stephen M. Krane (*M.* 1952), Dept. of Biochemistry, Washington University School of Medicine, St. Louis, Mo.
Dr. William K. Livingston (*W.S.* 1922), Dept. of Surgery, University of Oregon Medical School, Portland, Oreg.
Dr. William S. McCune (*W.S.* 1937), 1150 Connecticut Ave., Washington 6, D.C.
Dr. S. Harvey Mudd (*M.* 1954), Laboratory of Cellular Pharmacy, National Institute of Mental Health, National Institutes of Health, Bethesda, Md.
Dr. John D. States (a.r.s. *Or.* 1955), 221 Farmington Rd., Rochester, N. Y.
Dr. Clifford J. Straehley, Jr. (*W.S.* 1947), Medical Arts Bldg., Syracuse, N. Y.
Dr. Wirjo K. Subiakto (gr. stud. a. *Or.* 1956), Dept. of Surgery, University of Indonesia, Djakarta, Indonesia

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Brief bits:—

Dr. Edward B. Benedict has been appointed to the Editorial Board of *Gastroenterology*.
Dr. Edward F. Bland presented two papers at the First International Symposium on Rheumatic Fever at the National Institute of Cardiology in Mexico City, April 30 - May 3.

No. 60 in a series of Staff photographs
Dr. Helen S. Pittman, Associate Physician

Later he addressed the National Institute of Medicine on "The later consequences of rheumatic fever".

Dr. Mary A. B. Brazier spoke over the radio on May 12, on the WBZ program sponsored by the Massachusetts Health Council.

Dr. Bradford Cannon spoke on the topic "Are we doing better in the care of burns?" at the Annual Postgraduate Day at Roger Williams General Hospital in Providence, R. I. On June 13, Dr. Cannon addressed the Staff of Mount Auburn Hospital at Combined Staff Rounds. His topic was "South Pacific adventure".

Dr. Edwin F. Cave spoke before the Quebec Society of Orthopedic Surgery and Traumatology at Montreal on April 20. His subject was "Fracture problems: The management of non-union of long bones and technique of the treatment of fractures".

On May 16, at the invitation of Marquette University, Milwaukee, Wisconsin, Dr. Edward D. Churchill presented the Convocation Address at the Honors Day program of Marquette University School of Medicine, on the occasion of the 75th anniversary of the University.

Dr. John H. Gibbon, Jr. of Philadelphia, who was a Research Fellow in Surgery at M.G.H. in 1930-31 and a Dalton Scholar in 1935, has been appointed Samuel D. Gross Professor of Surgery at Jefferson Medical College. While at Massachusetts General, Dr. Gibbon started his research work on a pump designed to maintain the circulation of oxygenated blood to the brain while cardiac action is halted. This device and its many modifications are now important adjuncts to the performance of intracardiac surgery.

Dr. Henry C. Marble has been awarded the honorary degree of Doctor of Science by Clark University.

Drs. Laurence L. Robbins and Stanley M. Wyman attended a Postgraduate Seminar on Diseases of the Heart at Walter Reed Army Medical Center, Washington, D.C., May 14-17. This seminar was given by the Armed Forces Institute of Pathology and co-sponsored by the American Heart Association, Inc.

Drs. J. Gordon Scannell and William R. Waddell attended the meeting of the American Association for Thoracic Surgery, held at Miami Beach, Florida, in May.

Dr. Charles L. Schepens was the recipient of an honorary degree at the 165th Commencement of Middlebury College. Dr. Schepens was cited for "significant and enduring contributions to man's knowledge of the causes and cures of impairment to his sight".

Dr. Arthur L. Watkins was guest speaker at the May 22 meeting of the Rhode Island Medical Society, held in Providence. His subject was "Medical rehabilitation in a general hospital setting: Dynamic medical rehabilitation".

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The Reverend James H. Burns, Protestant Chaplain to the Massachusetts General Hospital since 1946, has been named to head the Departments of Social Relations and Pastoral Services of the Massachusetts Council of Churches. He will assume the duties of his new position in September, succeeding the Reverend Doctor Judson Howard who has been associated with the Council program for four years.

Mr. Burns did his undergraduate work in Business Administration at the University of Missouri. He received his Bachelor of Divinity degree from Andover Newton Theological School and Master of Sacred Theology degree from Boston University School of Theology. He also studied at Bates College, the University of Edinburgh, and Mansfield College at Oxford, and is now completing his dissertation for the Doctorate degree at Boston University School of Theology. He received clinical training and experience at the Rhode Island State Mental Hospital, the Boston Dispensary, and the Counseling Center at St. Paul's Cathedral and Emmanuel Church, Boston.

His professional experience includes chaplaincies at Western Maine Tuberculosis Sanatorium, Hebron Academy, Metropolitan Life Insurance Company Sanatorium, Gould Farm, and the Norfolk Prison Colony. He was ordained for the Baptist Ministry in 1937 and has held pastorates in Maine and Massachusetts.

Currently Mr. Burns is instructor in the Department of Psychology and Pastoral Counseling at Boston University School of Theology, teaching Religion and Health, and supervising students in Clinical Pastoral Training and serving as staff counselor of the Pastoral Counseling Service. At the Massachusetts General Hospital he directs the Summer School of Pastoral Care and is Chaplain of the McLean Hospital. He is Treasurer of the Institute of Pastoral Care; an accredited chaplain with the American Protestant Hospital Association and former Chairman of its Board of Accreditation; a member of the National Council of Churches' Department of Pastoral Services; and a member of the Personnel Committee of the Department of Pastoral Services of the Massachusetts Council of Churches. Mr. Burns also serves as a member of the Corporation of the New England Baptist Hospital and as a member of the Council of the Protestant Guild for the Blind.

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The Doctors' Dining Room was filled to overflowing on the afternoon of June 1. The occasion was the good-bye party given in honor of Miss Mathilda M. Wagner who was that day ending her 34 years of service in the Purchasing Department of Massachusetts General Hospital. Besides the well-wishes of scores of friends and expressions of appreciation for the years of outstanding service Miss Wagner has given to the Hospital, she was presented with a lovely wrist watch and a wallet containing a handsome sum of money.

Miss Wagner left the Hospital to become associated with Dr. Paul D. White at his Beacon Street office.

THE NEWS

No. 159 Boston, Mass. September 1956

A VISIT TO BART'S

Saint Bartholomew's Hospital, London, is the oldest hospital in Britain. It was founded by the monk Rahere in the year 1123, in the reign of King Henry I, and ever since it has been in use for the care of the sick on the site of its original foundation. Despite its antiquity it is today a modern teaching hospital of the first rank. When, therefore, through the kindly offices of my friend, Dr. E. F. Scowen, I received an invitation to spend the month of May there as "Temporary Director of the Medical Professorial Unit", I accepted with alacrity. Dr. Scowen is the permanent Director, and when I expressed some doubts as to my present competence to discharge the duties suggested by so exalted a title, he at once dispelled them by telling me that I could do anything I liked and the registrar would keep me out of mischief. Such was my briefing and, so far as I am concerned, the arrangement worked out to perfection.

I arrived in London directly from Boston by PAA on the morning of May 2, and having established myself at the English Speaking Union's delightful Dartmouth House, where I was to live, I proceeded directly to Bart's.

The hospital stands just outside the old Roman wall but within the area of that strange political entity known as the City of London, which lies like a fetal rest deep within the body of the great modern metropolis. The main entrance is through the Henry VIII Gateway facing Smithfield Market, the place where Queen Mary burned the heretics, including an ancestor of Dr. Joseph Garland (*E.M.* 1921)! I was not altogether a stranger to it, for in 1924 I had, on a number of occasions, made ward rounds with Professor Francis Fraser, then head of the same full-time medical unit on which I was now to serve. Hardly had I traversed the arched gateway when my host, Dr. Scowen, came striding to meet me. We quickly crossed the great square of Bart's with the famous fountain in the middle and massive stone blocks, three ward and one administrative, which compose its four sides. Following a bypass, something like the old MGH isthmus, and called facetiously "the colostomy", we entered the King George V Building which houses all the wards of general medicine and surgery — approximately 500 beds altogether. With special services the hospital now has about 800 beds, which is all that is permitted by the Ministry of Health. This building is new since I had previously been to Bart's, but is so much in the original style that I would not have realized this.

There are five services, as we call them. The British call them firms, in both medicine and surgery. A medical and corresponding surgical firm occupy each of five floors in the King George V Building, each with an open ward for men and one for women. There are no private pavilions, wards, or rooms at Bart's. The open wards have a few single rooms attached to be used solely for medical need. No one can hire such a room or have it because he wants it. All patients are treated alike in this great hospital. Anyone may be admitted, and his financial status has no bearing on his eligibility for admission. The hospital is budgeted by the National Health Service for the care of its full quota of patients. Four firms each in medicine and surgery are on the part-time basis. Their physicians and surgeons are also Harley Street consultants in private practice. One surgical and one medical firm have full-time staffs and are known as the Professorial Units. As I have said, Dr. Scowen is head of the medical, and his opposite number in the surgical unit is Sir James Paterson Ross. The units are on the top floor of the George V Building, with doctors' offices and research laboratories. Senior students — ward clerks (pronounced "clarks") — are taught, as with us, on all ten of the firms. Of course, the British invented the ward clerk system. We got it from them. Introduced by Osler to Baltimore, it was later brought to Boston by Christian, Edsall, and Cushing.

Arrived then in Scowen's office, my duties were determined — two rounds a week with house physician and registrar (corresponding to intern and resident), and two teaching rounds with clerks, also one grand round and a number of research conferences. I was to give one formal lecture to medical students, and per request, believe it or not, it was on the thyroid — treated, however, in a new manner. You can read it later, if you wish, for it will be in the *St. Bartholomew's Hospital Journal*. Otherwise, I was to do as I pleased. As it turned out, most of my time was spent at Bart's, but I did have some other activities which will be mentioned later.

It was a great delight for me to walk the spacious, really beautiful open wards of Bart's. There is dignity and order in them which I like. The nursing is superb. The head nurse, always called Sister, is a career woman, with extraordinary competence and keen knowledge of all her patients. My house staff was tops, and the clerks as keen as ours and very easy to get on with. About the only difference from ours is that they have somewhat more formal manners. I like that, also.

The disease spectrum is much like that in MGH medical wards. Perhaps there is a somewhat higher concentration of chronic bronchitis and emphysema, due no doubt to London's smoggy atmosphere. Because Scowen had two special research interests — ankylosing spondylitis and congenital oxaluria— there were a number of patients with each of those maladies. I found a sufficient number and variety of thyroid cases to give material for some of the teaching rounds, and enough cases of ulcerative colitis and peptic ulcer to hold forth on the psychosomatic angle.

Once a year a time-honored ceremony is gone through at Bart's — View Day —and as it comes in May, I was in on it. Promptly at 2 P.M. a reviewing party consisting of the treasurer and steward of the hospital, both in morning coats, and matron, began a visit to every ward in the hospital seriatim. In each ward the doctors and Sister and her nurses were lined up to receive them. Although there was a fair sprinkling of morning coats among doctors, this was not completely obligatory, which let me out for I had none with me. On arrival, the treasurer seated himself at a table and everyone else stood up. The steward, in a loud voice, read the roster of patients in the ward. When he had finished, the treasurer asked the patients if there were any complaints. There were none. Then he asked Scowen if he was satisfied with the nursing—yes—and Sister if she was satisfied with everything in her bailiwick—yes—and so the reviewing party proceeded to the next ward, and so on. The whole process lasted about two hours, and all during this time the Square below was filling up with a great throng of people—alumni, alumnae, friends of the hospital, etc., etc. As soon as the visitation was over, all these people poured into the wards where the Sisters were ready for them with great tables of sweets and gallons of tea. It was old home week in the wards for fair, and the patients all seemed to enjoy it also.

When I arrived at Bart's, to my great pleasure I found I had an opposite American number on the surgical unit—no other than Western Reserve's Professor of Surgery, F. A. Simeone (*W.S.*

1936). Shortly after my arrival, the Dean of the Medical College, Mr. E. G. Tuckwell, M.Ch., F.R.C.S., gave a charming little dinner for Simeone and me, at which we were both enrolled as "Perpetual Students of the Medical College of St. Bartholomew's Hospital". This is the greatest honor that can be given a teacher, because it implies that he is still capable of learning!

A word must be said of the medical college. It started in a rather imperceptible manner. It is believed that as early as the middle ages students came to the hospital as apprentices. In the sixteenth and seventeenth centuries they came in increasing numbers to observe the medical and surgical practice at the hospital. Gradually the hospital provided facilities for them, formal lectures by members of the staff, notably Abernethy, and in 1843 a residential college, museums, libraries, and dissecting rooms. Thus a medical school slowly grew within the womb of the hospital, which, after a long gestation, was only in the present century to obtain corporate independence under its own royal charter. Its name became "The Medical College of St. Bartholomew's Hospital in the City of London".

This is the developmental pattern of most or all of the medical schools of London. In each case they were the creatures of pre-existing teaching hospitals. Finally, together with various schools and colleges in other fields of learning, they have been gathered together and tied in one large university package, through the instrumentality of a superstructure — the relatively modern University of London. This happened to the Medical College of St. Bartholomew's Hospital in 1901, and the current calendar of the University of London shows no less than twelve undergraduate medical schools in the same relationship. Each is entered as a "School of the University in the Faculty of Medicine". Fancy that — one university with twelve medical schools! However, they are united in one university faculty of medicine, and their teachers of professorial, and some other ranks, are appointees of the University. This arrangement has special significance in the case of the "professorial units" in the clinical subjects which have been set up in several of the teaching hospitals.

At Bart's, the clinical departments of the school are, of course, in the hospital. The preclinical, and indeed what we would call premedical collegiate subjects, are housed in a new campus a quarter of a mile from the hospital, beside the ancient Charterhouse. The college was installed on this site by 1935, but in the last war its buildings were largely destroyed. The present lot are chiefly post World War II erections, and very fine ones they are indeed. A new and attractive residential college—their Vanderbilt Hall, so to speak—and fine new buildings with very modern laboratories and lecture rooms are in use and more are under construction. Dr. Scowen had very much to do with the planning and building of these facilities. In addition to being Director of the Medical Unit at the hospital, he holds the office of Warden of the Medical College and resides in the Warden's House at its gate, beside the old Charterhouse Church, where on two occasions I had the pleasure of dining with him.

Many people were kind to me at Bart's, particularly the staffs of the full-time units. I saw a couple of friends from 1924 days, also — Sir Francis Fraser and Dr. George Graham, both now retired from Bart's but busy elsewhere, Fraser as Director of the British Post-graduate Medical Federation, also an activity of the University of London, and Graham as a member of one of the Regional Hospital Boards of the National Health Service. Another old friend, now head of one of the medical firms, Dr. A. W. Spence, I had known when he worked in the United States with David Marine. Finally, my thanks are due to my registrar, Dr. David Mendel, who constantly saw to my every need, and to my House Physician, Dr. Margaret Staley, and to the Sisters of Garrod and Stanmore Wards, all of whom were most assiduous in making me feel at home in my new surroundings.

Extracurricular activities also gave me many contacts. Mr. Selwyn Taylor, who spent the academic year 1948-49 at the M.G.H. in surgery, was especially kind to me. On his invitation I lectured to students at King's College Hospital Medical School, another of the University of London's flock, and Taylor's own school. I chose the title "The span of the doctor's responsibility". I also had a delightful Sunday luncheon with the Taylors at Roehampton, and that same day supped with Mrs. Eric Bywaters and her children next door at Barnes. Bywaters was in Boston when I was at Barnes.

Two week-end jaunts, one to Birmingham to visit Walter (*M.* 1950) and Anne St. Goar (*M.* 1949), the other to Bowness on Lake Windemere to visit my old friend, Dr. John Hay, were both happy occasions. At Birmingham I saw the fine medical center—school and hospital, where Walter St. Goar was just finishing a year in the clinic of Professor W. M. Arnott. They are anticipating with pleasure at Birmingham having in their midst, come this autumn, one Walter Bauer, who will take on certain distinguished functions there, and in similar mood they recall a recent visit from E. D. Churchill.

Returning to London, the St. Goars drove me as far as Oxford where we all foregathered with the Alec Leafs (*M.* 1944). Alec is working in the Cell Metabolism Research Unit of Professor Krebs on a basic problem of sodium transport.

At Windemere I had delightful conversations with Dr. Hay, formerly Professor of Medicine at Liverpool, whom I have known for years. He is retired now to a lovely cottage and gardens with a view of the lake. We talked of many things running from the National Health Service to flying saucers, one of which had been sighted in his neighborhood!

Other activities included a visit to Mill Hill and Hampstead with Sir Charles Harington and Mrs. Rosalind Pitt-Rivers, both well known at the M.G.H. We talked, believe it or not, chiefly about thyroid hormones. Another day I went to Hampstead again with Dr. Raymond Greene, where, at New End Hospital, I saw the excellent thyroid clinic which he is putting on with his surgical colleague, Mr. Piercy. They have a wealth of patient material there and are making studies by various modern methods. Still another delightful diversion in Hampstead consisted of dinner with the Donald Hunters, both of whom, it will be recalled, worked with Aub early in the history of the M.G.H.'s Ward 4. Hunter has become the most outstanding physician in industrial medicine in Britain.

Speaking of old MGH-ers, I may say also that Professor Querido of Leiden, about whom Stanbury has recently written in THE NEWS, came over to London and we had a pleasant dinner and evening together — the thyroid also being present. One morning, too, G. Watson James, III (*M.* 1944) of the Medical College of Virginia turned up for breakfast. He was *en route* to a high-powered vitamin B12 conference in Hamburg. It is thrilling to meet so many of one's former house staff members, all doing important things in medicine.

The Thyroid Club of London had a dinner while I was there, and practically everybody engaged in thyroid research was present — Harington, Pitt-Rivers, Greene, Pochin, Russell Fraser, Spence, and many others. Sir Geoffrey Keynes of Bart's, he of thymectomy for myasthenia gravis fame, presided. It was announced that the next International Goiter Conference will be held in London in 1960. We must send a strong delegation.

The final salient feature of my month in London was the meeting of the Association of Physicians of Great Britain and Ireland, which Osler founded after the pattern of the Association of American Physicians. I attended as official representative of the American Association and was most cordially welcomed. The program was good, and I met a lot of old friends and made new ones. The attendance was excellent. The grand finale was the Association's Annual Dinner. Being its jubilee, the affair was held at the Mansion House with all the ceremony the British love. The Lord Mayor was host; the Lord Chancellor and other bigwigs were present. It was a delightful occasion, but there was more ceremony than cerebration, and the former interfered somewhat with that friendly intercourse so characteristic of the American Association's dinner parties.

I left England full of gratitude to

many people, and with the feeling that I had been a fortunate person to have had such an experience. The objectives were so thoroughly medical that I did almost no sightseeing — a trip to Greenwich by river with some of the members of the Association of Physicians was all. I particularly tried to get up to date on the British National Health Service, medical education in Britain, and thyroid research.

Finally, there was one experience, nonmedical but nonetheless connected with the M.G.H. — tea with the Archbishop of Canterbury at Lambeth Palace! Needless to say, this was arranged for me by the Right Reverend Henry Knox Sherrill, D.D., for long Chairman of the Board of Trustees of the Massachusetts General Hospital. His Grace told me many interesting things about Cyprus, Africa, and other parts of the world. It was a rewarding occasion.

James Howard Means, M.D.,
Honorary Physician

* * *

On June 1, the Medical Faculty of the University of Zurich conferred upon Dr. Kurt H. Thoma, Professor Emeritus of Oral Surgery and Oral Pathology at Harvard Medical School and past Chief of our Dentistry Department, the Doctor of Medical Dentistry *honoris causa* "in recognition of his distinguished services in the advancement of the pathology and surgery of the oral organs by investigation and instruction".

Dr. Thoma was not only honored as an outstanding man in his profession, but also as a native of Switzerland. The degree was awarded at the opening of the Seventieth Swiss Odontologic Kongress, before which Dr. Thoma read two papers—one on "The progress of Oral Surgery", the other on "Graduate dental training in the United States". He also lectured before the medical and dental students at the University.

The honorary doctorate was awarded by the Dean of the Medical Faculty, in the presence of the Rector and other officials of the University. The last honorary degree was awarded in 1927.

* * *

Dr. John P. Bunker has been elected President of the Massachusetts Society of Anesthesiologists.

* * *

Professor Ernst Navratil of Graz, Austria, was Chief of the Gynecology Service, pro tempore, from June 26 through July 5. During his stay he delivered the Edward Peirson Richardson Lecture. His subject was "The indication for the vaginal radical operation by Schauta-Amreich and its results".

The Board of Trustees, at their meetings on April 13, May 25, and June 8 and 22, voted:

To grant Dr. A. Gedeon Matoltsy, Associate Biologist in Dermatology, leave of absence for one year, beginning October 1;

To reappoint Drs. Barr and Kranes as Members-at-Large on the General Executive Committee for one year, beginning July 1;

To change the beginning date of Dr. John A. Mills's appointment as Assistant Resident in Medicine from July 1 to October 1;

To change the beginning date of Dr. Katharine E. Spreng's appointment as Assistant Resident in Medicine from September 1 to October 1.

To appoint:

Dr. Leonard Atkins as Assistant in Pathology for one year, beginning July 1;

Dr. William J. Brown, Jr. as Assistant Radiologist, beginning July 1;

Dr. Mignon C. Chasen as Assistant in Psychiatry at McLean Hospital;

Dr. Edward M. Daniels as Psychiatrist at McLean Hospital, beginning April 16;

Dr. Kurt J. Isselbacher as Assistant in Medicine, beginning July 1;

Dr. Richard B. Kearsley as Assistant to the Children's Medical Service, beginning July 1;

Dr. John Mealey, Jr. as Second Assistant Resident in Neurosurgery, for six months, beginning July 1;

Dr. Richard G. O'Brien as Assistant in Radiology, beginning July 1;

Dr. John S. Robey as Assistant to the Children's Medical Service, beginning July 1;

Dr. Stephen L. Washburn as Resident in Psychiatry at McLean Hospital, beginning July 1.

At their meetings on March 14, and during June and July, the General Executive Committee voted:

To promote:

Dr. William G. Austen from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. Arthur E. Baue from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;

Dr. David L. Collins, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;

Dr. Walter C. Cotter to the position of Resident in Neurosurgery, for six months, beginning July 1;

Dr. Richard R. Curtin from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;

Dr. Oscar S. DePriest, III, from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, effective when he returns from service in the Armed Forces;

Dr. A. Erik Gundersen from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. John M. Head from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;

Dr. Stephen E. Hedberg from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. Gilbert Hermann from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;

Dr. Benjamin B. Jackson from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;

Dr. Raymond N. Kjellberg to the position of First Assistant Resident in Neurosurgery, for six months, beginning July 1;

Dr. Walter E. Klingensmith from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, effective when he returns from service in the Armed Forces;

Dr. Charles F. McKhann, III, from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. John A. Malcolm from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;

Dr. Ronald A. Malt from the position of Intern to that of Third Assistant Resident in Surgery, effective when he returns from service in the Armed Forces;

Dr. Eugene R. Nobles, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;

Dr. Donald P. Pederson from the position of Assistant Resident to that of Chief Resident in Anesthesia, beginning August 1;

Dr. Majic S. Potsaid to the position of Resident in Radiology, beginning July 1;

Dr. Stuart E. Price, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, effective when he returns from service in the Armed Forces;

Dr. Robert S. Richards to the position of First Assistant Resident in Radiology, effective as of July 1;

Dr. Farrokh Saidi from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;

Dr. Quentin R. Stiles from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. Harold C. Urschel from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;

Dr. C. Gene Wheeler from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1.

To reappoint:

James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;

Saul Aronow, Ph.D. as Research Fellow in Physics (Medicine), beginning July 20;

Dr. John S. Barlow as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine, effective September 1;

Dr. William R. Brewster, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning July 1;

Dr. Rafael M. Casas as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. John L. Decker as Research Fellow in Medicine, beginning July 1;

Dr. Harry B. Ditmore, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Dr. Elias C. Dow as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Joachim S. Gravenstein as Clinical and Research Fellow in Anesthesia, effective August 16;

Dr. Frederick S. McAlpine as Assistant Resident in Anesthesia for one year, beginning July 15;

Dr. Roger A. Melick as Clinical and Research Fellow in Medicine, effective September 15 through December 31;

Dr. George B. Murphy, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery, beginning July 1;

Dr. Geraldine M. Peiffer as Assistant Resident in Anesthesia for one year, beginning August 1;

Dr. Sholem Postel as Clinical and Research Fellow in Medicine, beginning July 15;

Dr. Claude E. Raynaud as Clinical and Research Fellow on the Children's Medical Service for one year, beginning September 1;

Dr. Edward S. Rendall as Clinical Assistant in Medicine, beginning August 1;

Dr. Jens G. Rosenkrantz as Second Assistant Resident in Surgery, beginning July 1;

Dr. Richard L. Rovit as First Assistant Resi-

dent in Neurosurgery, assigned to the Neuropathology Laboratory, for six months, beginning August 1;
Dr. John A. Scholl as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;
Dr. Mary L. Scholl as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Sabino J. Sinesi as Clinical and Research Fellow in Dermatology for one year, beginning July 1;
Dr. Ernest A. Sneddon as Clinical Associate in Anesthesia, effective March 4;
Pierre J. J. Stoffyn, Ph.D. as Research Fellow in Medicine, effective September 1;
Dr. Alexander B. Timm, Jr. as Resident in Dermatology for one year, beginning July 1;
Dr. Giles D. Toll as Second Assistant Resident in Surgery, beginning July 1;
Dr. Thorkild Waino-Andersen as Clinical Fellow in Anesthesia, effective May 18;
Dr. John R. Ward as Clinical and Research Fellow in Medicine, beginning July 1.

To extend the appointments of:

Dr. Edward Dunn as First Assistant Resident in Surgery, through August 31;
Dr. John D. Pitts as First Assistant Resident in Surgery, through August 31.

To appoint:

Dr. Ramon Alcerro-Castro as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. John Anderson as Clinical and Research Fellow in Medicine for one year, beginning October 1;
Dr. Dirk Baier as Clinical Fellow in Anesthesia, beginning August 1;
Dr. Charles H. Belcher as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Norman R. Bernstein as Clinical Assistant in Psychiatry for one year, beginning July 1;
Dr. E. Ruth Breitwieser as Clinical and Research Fellow in Medicine, for the period June 15 through September 30;
Dr. Curtland C. Brown, Jr. as Clinical and Research Fellow in Medicine for one year, beginning August 15;
Dr. Herbert S. Cline as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. William P. Corvese as Clinical and Research Fellow in Surgery for one year, beginning July 1;
Dr. John C. Dalton as Clinical Assistant in Medicine, effective as of July 1;
Dr. Leslie J. DeGroot as Clinical and Research Fellow in Medicine, for the period July 1 through December 31;
Dr. Alexander N. Drescher as Clinical and Research Fellow on the Children's Medical Service, beginning July 1;
Dr. Ellis Dresner as Clinical Assistant in Medicine, beginning July 1;
McIver W. Edwards, Jr., B.S. as Research Fellow in Biochemistry, beginning July 2;
Dr. Martin E. Etchart as Graduate Student Assistant in Pathology for one year, beginning September 15, 1955, retroactively, and to reappoint him for one year, beginning September 15;
Golda J. Eversmeyer, Ph.D. as Research Fellow in Psychology for one year, beginning August 1;
John H. Fessler, B.A., B.Sc., M.A. as Research Fellow in Medicine, effective September 1;
Dr. Felix G. Freund as Clinical Fellow in Anesthesia, beginning July 17;
Dr. Melvin J. Glimcher as Clinical and Research Fellow in Orthopedic Surgery, beginning July 1;
Dr. Leonard E. Glynn as Clinical and Research Fellow in Medicine, beginning some time this fall;
Dr. Sen-itiro Hakomori as Research Fellow in Medicine, effective September 1;
Dr. Timothy S. Harrison as Clinical and Research Fellow in Surgery, effective as of July 1;
Dr. Erik H. C. Heidensleben as Research Fellow in Neurosurgery, beginning September 1;
Dr. Lee Jackson as Clinical and Research Fellow in Psychiatry, beginning July 1;
Dr. Mervyn Jeffries as Clinical Fellow in Anesthesia for one year, beginning October 1;
Dr. Rudolph J. Junda as Clinical Fellow in Surgery, assigned to the Tumor Clinic, for one year, beginning July 1;
Wallace A. Kennedy, M.A. as Research Fellow in Psychology for one year, beginning August 1;
Dr. Stephen M. Krane as Chief Resident in Medicine, effective January 1, 1957;
Dr. Philip E. Kubzansky as Research Fellow in Psychology for one year, beginning August 1;
Gloria F. Leiderman, Ph.D. as Research Fellow in Psychology for one year, beginning August 1;
Dr. Charles I. Levene as Research Fellow in Medicine, effective September 1;
Dr. Robert J. Lifton as Clinical Assistant in Psychiatry, beginning July 1;
Dr. Donald B. Martin as Clinical Fellow in Medicine, effective October 1;
Dr. Carol Meyers as Clinical Fellow in Orthopedic Surgery, effective as of June 13;
Dr. Yee P. Moon as Graduate Student Assistant in Orthopedic Surgery, for the period April 6 through October 31;
Dr. Yoshitsugu Nose as Research Fellow in Biochemistry, effective September 1;
Dr. Lot B. Page as Clinical and Research Fellow in Medicine, effective October 1;
Dr. James A. Petersen as Clinical Assistant in Radiology, beginning July 1;
Dr. Herbert A. Ravin as Research Fellow in Neurology for one year, beginning July 1;
Dr. Joseph D. Sabella as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Germán Sánchez-Checa as Clinical Fellow in Radiology, beginning September 15;
Dr. Charles M. Shugg as Clinical Fellow in Medicine, effective as of June 15;
Dr. Myron L. Stein as Clinical and Research Fellow in Psychiatry, beginning October 15;
Mary L. Stephenson, Ph.D. as Research Fellow in Medicine, beginning July 1;
Dr. Claire M. Stiles as Clinical and Research Fellow in Anesthesia, beginning June 4;
Zofia Tarasiejska, Ph.D. as Research Fellow in Medicine, effective September 1;
Dr. Richard J. Taylor as Clinical Fellow in Pathology, for six months, beginning July 1;
Dr. Charles V. Treat as Clinical Fellow in Medicine, effective July 15;
Dr. Stanley Wallach as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. George T. Watts as Clinical and Research Fellow in Surgery, effective as of September 15;
Dr. Charles H. Weed as Clinical Assistant in Medicine for one year, beginning July 1.

To change the titles of:

Dr. H. Arto Aprahamian from Assistant Resident in Anesthesia to that of Clinical Fellow in Anesthesia;
Dr. John R. Bumgarner from Graduate Student Assistant to that of Clinical Fellow in Medicine, and that he be reappointed for the period June 1 through September 30;
Dr. Chung H. Cho from Assistant Resident to that of Clinical Fellow in Anesthesia;
Dr. Salomon Hakim from Clinical and Research Fellow in Neurology to that of Research Fellow in Neurology for one year, beginning July 1;
Dr. Hunter Heath from Graduate Student Assistant to that of Clinical Fellow in Medicine, and that he be reappointed for the period June 1 through September 30;
Dr. Jack H. Mendelson from Assistant Resident to that of Clinical and Research Fellow in Psychiatry, effective July 1;
Dr. Herbert deN. Tucker from Graduate Student Assistant to that of Clinical Fellow in Medicine, and that he be reappointed for the period June 1 through September 30.

The General Executive Committee also approved of the transfer of Drs. Alfred J. Luessenhop and Dagoberto Sosa to the Veterans Administration Hospital, for a period of six months, beginning July 1.

* * *

PSYCHIATRY DEPARTMENT

Dr. Erich Lindemann has been invited to serve for the next five years as a member of the World Health Organization Expert Advisory Panel on Mental Health.

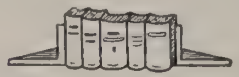
Dr. George Saslow and Dr. Joseph Matarazzo presented papers on their research work concerning Human Interaction at the national meetings of the American Psychological Association in Chicago at the end of August.

The psychiatry group will be strengthened by the arrival of Dr. Robert J. Lifton in September. Dr. Lifton has done considerable work on the so-called brain washing techniques which have been used in Communist China for the "reformation" of westerners and anti-communist Chinese.

On September 1, Dr. George Saslow took over the leadership of the Alcohol Clinic. Dr. Alfred Ludwig, who supervised an active program in service and research in the Clinic, is leaving us to join a research group at the Peter Bent Brigham Hospital.

Brief bits:—

Dr. Edward B. Benedict attended the meeting of the American Gastroscopic Society in Chicago, June 10 and 11. On June 10 he discussed a paper by Dr. John Tomenius of Stockholm, Sweden, on "Gastroscopic biopsy with Tomenius biopsy gastroscope". On June 11, at the Cook County Hospital, he demonstrated the technique of gastroscopic biopsy with the Benedict operating gastroscope.
Dr. Carter R. Rowe attended the meetings of the American Medical Association in Chicago and presented a paper on "Fractures in the aged" to the Orthopedic Section of the Convention on June 14.
Dr. Frederick G. Shaffer (*S.* 1952) has opened an office for the practice of Urology at 221 Fairmont Avenue, Fairmont, West Virginia.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and

Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Butterworth, J. S., and Sprague, H. B.
Prevention of 'cardiac crippling'.
M. News, pp. 1 & 7 (Mar. 26).

McGregor, M., Rappaport, M. B., Sprague, H. B., and Friedlich, A. L.
The calibration of heart sound intensity.
Circulation 13:252-256.

Pattavina, V., and Currens, J. H.
Mitral stenosis at age ninety-two.
Am. Pract. & Digest Treat. 7:944-945.

Sprague, H. B.
The art of auscultation of the heart.
Practitioner 176:241-249.

Sprague, H. B., and Ongley, P. A.
The clinical value of phonocardiography.
Cincinnati J. Med. 37:1-8.

General Medicine

Burrage, W. S., Greene, J. E., Burgin, L. B., Itkin, I. H., Novey, H. S., Engler, J., and Irwin, J. W.
Medical progress: Allergy.
New England J. Med. 255:79-85; 128-134.

Itkin, I. H., Burrage, W. S., and Irwin, J. W.
Alpha [(alpha-methyl-3,4-methylenedioxyphenylethylamino) methyl] - protocatechuyl alcohol hydrochloride in bronchial asthma.
J. Allergy 27:359-368.

General Surgery

Nardi, G. L.
Prevention of foaming in suction bottles following pulmonary resection.
J. Thoracic Surg. 31:737-738.

Storey, C. F., Nardi, G. L., and Sewell, W. H.
Traumatic aneurysms of the thoracic aorta: Report of two cases, one successfully treated by resection and graft replacement with the aid of a shunt.
Ann. Surg. 144:69-78.

Welch, C. E.
The care of the patient with advanced cancer.
In Cancer: A manual for practitioners, Boston, American Cancer Society (Massachusetts Division), Inc., 3rd edition, pp. 251-263.

Welch, C. E.
Choledochotomy.
Surg., Gynec. & Obst. 102:495-496.

Welch, C. E.
The colon.
In Christopher's textbook of Surgery, Lloyd Davis, M.D., Editor, Philadelphia, W. B. Saunders Company, 6th edition, pp. 654-669.

Welch, C. E.
Management of upper gastrointestinal hemorrhage.
California Med. 84:85-88.

Welch, C. E., and Rodkey, G. V.
Methods of therapy in diverticulitis.
Surgery 39:712-723.

Gynecology and Obstetrics

Graham, J. B.
Treatment of choice in cancer of the uterine corpus.
New England J. Med. 254:1112-1119.

Graham, J. B., and Graham, R. M.
The sensitization response in the vaginal smear.
Ann. New York Acad. Sciences 63:1458-1462.

Graham, J. B., Graham, R. M., Neri, L., and Wright, K. A.
Enhanced production of antibodies by local irradiation. I. Measurement of circulating antibodies.
J. Immunol. 76:103-109.

Graham, J. B., and Leskowitz, S.
Enhanced production of antibodies by local irradiation. II. Measurement of local antibodies.
J. Immunol. 76:110-111.

Graham, R. M., and Huse, L. W.
The cytologic grading of squamous carcinoma of the cervix.
Am. J. Obst. & Gynec. 71:1307-1311.

Immunology

Malt, R. A., and Cope, O.
Antibody production after certain forms of trauma.
Surgery 39:959-969.

Laboratory Science

Matoltsy, A. G., and Herbst, F. S. M.
A study of human epidermal proteins.
J. Invest. Dermat. 26:339-342.

Nardi, G. L.
Selective localization of alkaloids in pancreatic tissue.
Surg. Forum, 41st Clin. Congress, A.C.S. 1955, American College of Surgeons 6:381 (1956).

Schmid, K., and MacNair, M. B.
Characterization of the proteins of human synovial fluid in certain disease states.
J. Clin. Investigation 35:814-824.

Neurology, Neurosurgery, and Psychiatry

Hirsch, O.
Pituitary tumors: A borderland between cranial and trans-sphenoidal surgery.
New England J. Med. 254:937-939.

White, J. C.
The autonomic nervous system: The neurosurgical relief of pain.
In Christopher's textbook of Surgery, Lloyd Davis, M.D., Editor, Philadelphia, W. B. Saunders Company, 6th edition, pp. 1415-1431.

Otolaryngology

Kelemen, G.
Mecanismo de la sordera congenita.
Rev. cubana de oto-rino-laring. 5:59-64.

Surgery — Urological

Kerr, W. S., Jr.
Effects of complete ureteral obstruction in dogs on kidney function.
Am. J. Physiol. 184:521-526.

BIOGLETS

Dr. Paul H. Black, Intern in Medicine—born in Boston, Massachusetts, March 11, 1930; English High School, Boston, Class of 1947; A.B., Dartmouth College, 1952; M.D., Medical School, College of Physicians and Surgeons, Columbia University, 1956.

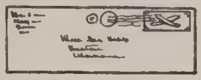
Dr. Dorothy B. Villee, Intern in Children's Medicine—born in Charleston, South Carolina, November 25, 1927; George Washington University, Washington, D. C., 1946-48; B.A. in Chemistry, Barnard College, Columbia University, 1950; Johns Hopkins University Medical School, 1951-52; M.D., Harvard Medical School, 1955; married; home in Boston, Massachusetts.

Alas, the Sir Cuthbert Wallace Cup has been lost to our tennis rival, the Peter Bent Brigham Hospital. On the Harvard University courts in late July, the venerable trophy was yielded, four matches to two, in a contest that was closer than the score indicates.

The Brigham quickly took a 1-0 lead. Dr. Sheldon Horsley set down Dr. Charles Keevil with steady ground stroking and some superb volleying, 6-3, 6-2. In the second match Dr. George Cahill of the Brigham finally solved "old Dad" Dr. John Knowles's spinning southpaw service and went on to win at 6-2, 6-4. Dr. Paul Veazey of the M.G.H. then made the score 2-1 as he overpowered Dr. Harvey Gonick 6-2, 6-2. Dr. Steve Washburn of M.G.H. put up a magnificent battle against Dr. Rudy Froesch before losing 10-8 in the third set. This match had many exciting prolonged rallies and was clearly the best of the day.

The doubles provided another close contest as Drs. Horsley and Cahill of the Brigham defeated Drs. Knowles and Keevil at 6-3, 4-6, 6-3. Dr. Horsley's remarkable net game provided the winning margin. Dr. Veazey then teamed with Dr. Washburn, and they succeeded in salvaging a second point for the M.G.H. as they took the measure of Drs. Froesch and Gonick by a score of 6-2, 7-5.

And so, for at least one year, "the cup" will not grace our Archives Room. Let's hope that this most enjoyable competition can be renewed next year.



New addresses:—

Dr. Joseph Albert (a.r.p. *D.* 1956), 165 Columbia Rd., Dorchester, Mass.
Dr. Norman W. Andrew (r.p. *An.* 1956), Massachusetts Memorial Hospitals, 750 Harrison Ave., Boston, Mass.
Dr. Norman R. Bernstein (a.r.p. *Psychiat.* 1954), 270 Commonwealth Ave., Boston, Mass.
Dr. Thornton Brown (r.s. *Or.* 1949), Massachusetts General Hospital, Boston, Mass.
Dr. Benjamin D. Canlas, Jr. (r.p. *Path.* 1956), College of Medicine, University of the Philippines, Manila, P. I.
Dr. Clarke T. Case (*W.S.* 1943), 1424 Genesee St., Utica 2, N. Y.
Dr. Stephen P. Clement, Jr. (*M.* 1956), 1266 4th St., Sarasota, Fla.
Dr. Martin R. Coles (a.r.p. *Psychiat.* 1956), McLean Hospital, Waverley, Mass.
Dr. Oscar S. DePriest, III (*S.* 1955), 440 Buckeye St., Urbana, Ohio
Dr. Roman W. DeSanctis (*M.* 1956), 219 E. 2nd St., Tucson, Ariz.
Dr. Robert C. Detwiler (a.r.s. *Or.* 1956), 264 Beacon St., Boston, Mass.
Dr. Wilma Canada Diner (a.r.p. *Path.* 1951 & r.p. *R.* 1954), 6104 Brentwood Rd., Little Rock, Ark.
Capt. Harry B. Ditmore, Jr., MC, USAR (*S.* 1954), Army Medical Service School, Fort Sam Houston, Tex.
Dr. Leonard J. Friedman (*M.* 1956), Boston Psychopathic Hospital, 74 Fenwood Rd., Boston, Mass.
Dr. Ruth C. Haynes (a.r.p. *An.* 1955), 96 N. Gould Rd., Columbus, Ohio
Dr. Walter M. Haynes, Jr. (*S.* 1952), 96 N. Gould Rd., Columbus, Ohio
Dr. Daniel J. Holland, Jr. (*Dn.* 1938), 1146 Beacon St., Brookline, Mass.
Dr. Daniel J. Joly (clin. & res. fel. *S.* 1951), 860 Fifth Ave., New York 21, N. Y.
Dr. Raymond A. Justi (r.p. *Path.* 1956), Veterans Administration Hospital, 150 S. Huntington Ave., Jamaica Plain, Mass.
Dr. Richard B. Kearsley (*C.M.* 1954), 122

DR. OLIVER COPE, DR. JOSEPH C. AUB, AND DR. EDWARD D. CHURCHILL TALKING TOGETHER AT DR. AUB'S AFTERNOON PARTY ON JUNE 22

Front St., Scituate, Mass.
Dr. Arthur S. Keats (a.r.p. *An.* 1951), Baylor University College of Medicine, Houston, Tex.
Dr. Kazuo K. Kimura (*C.M.* 1955), Iowa Methodist Hospital, 1200 Pleasant St., Des Moines 14, Iowa
Dr. Richard N. Kleaveland (*S.* 1952), 1681 Paulsen Bldg., Spokane, Wash.
Dr. Jan Koch-Weser (*M.* 1955), 138 Sunset Lane, Tenafly, N. J.
Dr. William E. Lassiter (*M.* 1955), 133 Hamilton Rd., Chapel Hill, N. C.
Dr. Thomas C. Leinbach (a.r.s. *Or.* 1956), 19 D Brookline Manor Apartments, Reading, Pa.
Dr. Vasilios G. Letsou (a.r.p. *D.* 1956), U S. Naval Hospital, Chelsea, Mass.
Dr. Craig S. Lichtenwalner (*M.* 1950), Div. of International Health, Public Health Service, Washington 25, D. C.
Dr. Kenneth E. Liffmann (*Dn.* 1956), 160 Longwood Ave., Boston 15, Mass.
Dr. Herbert B. Locksley (*S.* 1950), 55 Stratford Ave., Pittsfield, Mass.
Dr. John E. Mack (*M.* 1956), Boston Psychopathic Hospital, 74 Fenwood Rd., Boston, Mass.
Dr. John E. McKeigue (assoc. s. *Otolar.*), 274 Commonwealth Ave., Boston, Mass.
Lt. Ronald A. Malt, MC, USNR (*S.* 1956), U. S. Naval School of Aviation Medicine, U. S. Naval Air Station, Pensacola, Fla.
Dr. Harold L. May (*S.* 1954), South Street Rd., Auburn, N. Y.
Dr. John T. Monroe, Jr. (*M.* 1956), Gravely Sanitarium, Chapel Hill, N. C.
Dr. Dean LaR. Moyer (a.r.p. *Path.* 1955), Dept. of Pathology, University of California School of Medicine at Los Angeles, 405 Hilgard Ave., Los Angeles 24, Calif.
Dr. Barbara M. Orski (*C.M.* 1955), Kaiser Foundation Hospital, MacArthur Blvd., Oakland 11, Calif.
Dr. Demetrios A. Papadopoulos (r.s. *U.* 1956), 4 Dragoumi St., Thessalonica, Greece
Dr. James A. Petersen (r.p. *R.* 1956), 81 College Ave., Somerville 44, Mass.
Dr. John D. Pitts (*S.* 1950), 68 Brown St., Providence, R. I.
Dr. Leonard H. Plotkin (*C.M.* 1955), Children's Medical Center, Boston, Mass.
Dr. Russell E. Randall, Jr. (a.r.p. 1956), 320 James St., Teaneck, N. J.
Dr. John S. Robey (*C.M.* 1953), 51 Brattle St., Cambridge, Mass.
Dr. Ellis L. Rolett (*M.* 1956), Presbyterian Hospital, W. 168th St., New York, N. Y.
Dr. Albert L. Rosenthal (a.r.p. *D.* 1956), c/o Dr. Charles R. Rein, 580 Fifth Ave., New York 19, N. Y.
Dr. Richard L. Sidman (a.r.p. *N.* 1956), Laboratory of Neuroanatomical Sciences, National Institutes of Health, Bethesda 14, Md.
Dr. Jack Spencer (r.p. *R.* 1934), 10 Grayhurst Park, Portland, Maine
Dr. Oscar E. Starobin (*M.* 1955), Veterans Administration Hospital, 150 S. Huntington Ave., Jamaica Plain, Mass.
Dr. John D. States (a.r.s. *Or.* 1955), 35 Chestnut St., Rochester 4, N. Y.
Dr. Joseph M. Stolman (*Dn.* 1956), 11 Pinecrest Rd., West Hartford, Conn.
Dr. Eji Suyama (*S.* 1951), Eastern Memorial Hospital, Ellsworth, Maine
Dr. William M. Tait (clin. fel. *R.* 1955), 3191 Granville St., Vancouver, British Columbia, Canada
Dr. Robert L. Thomas (*N.S.* 1933 & *E.S.* 1936), 400 29th St., Oakland 9, Calif.
Dr. William A. Tisdale (*M.* 1952), 610 Whalley Ave., New Haven, Conn.
Dr. Pindaros R. Vagelos (*M.* 1955), National Institutes of Health, Bethesda, Md.
Dr. Thomas A. Waldmann (*M.* 1956), National Institutes of Health, Bethesda, Md.
Dr. Alexander M. Waldron (*E.M.* 1938), 309 N. Ingalls, Ann Arbor, Mich.
Dr. James T. Wheeler (*M.* 1956), U. S. Naval Hospital, Chelsea, Mass.
Dr. LeMoyne White (*E.M.* 1942), 205 Beacon St., Boston, Mass.
Dr. Benjamin S. Wood (*E.S.* 1933), Nantucket, Mass.

* * *

June 22, 1956 will be recalled as Dr. Joseph C. Aub Day in the annals of Massachusetts General Hospital, it having been the day on which Dr. Aub was honored by his staff and many friends for his outstanding work in the field of cancer research.

About five hundred of Dr. Aub's friends attended a party in the afternoon, given in the lobby of the new building by the members of the Huntington Memorial staff and the Hospital. Light refreshments and punch were served, while background music was furnished by Mondello's Concert Band — a group which has often played at functions given by the American Cancer Society

Following the social hour, Dr. Clark assumed the role of chairman for the rest of the program and introduced Mr. Phillips Ketchum, President of our Corporation, as the first of a series of three-minute speakers. Mr. Ketchum paid high tribute to Dr. Aub's work and ended his remarks by presenting to Mr. Francis C. Gray, Vice-President of our Corporation and Chairman of our Board of Trustees, a portrait of Dr. Aub done by the well-known painter Pietro Pezzati. Mr. Gray accepted the portrait in the name of the Trustees, and added his own words of appreciation of Dr. Aub's significant contributions to the field of medical research. Dr. Clark then introduced Dr. George Packer Berry, Dean of Harvard Medical School, who spoke particularly of Dr. Aub's inestimable work at the Medical School. Dr. Clark then introduced Dr. James Howard Means, who reviewed briefly and with sometimes a touch of humor his own early experiences with Dr. Aub, including those at Base Hospital 6 during World War I. Dr. Means also spoke of Dr. Aub's association with the renowned Dr. Walter B. Cannon. Throughout each of these talks ran the central theme of affection for Dr. Aub as a man as well as admiration for his work in the professional field. Dr. Aub responded to all this with words of deep-felt appreciation.

On the evening of the 22d, a cocktail party and buffet dinner were given for Dr. Aub at the Museum of Science by the Huntington staff. Many friends came from considerable distances to pay homage to the guest of honor. Among these were Dr. David Karnofsky and Dr. Rulon W. Rawson, from Memorial Hospital, New York City; Dr. and Mrs. Louis H. Hempelmann, from the University of Rochester Medical School; Dr. Jytte Muus, from Mount Holyoke College; Dr. Hugh Tatlock, from Northampton; and Dr. Rolf Lium, from Portsmouth, New Hampshire. All of these doctors had worked with Dr. Aub at one time or another. Other "notables" present were Dr. and Mrs. Dean A. Clark, Dr. and Mrs. Walter Bauer, Dr. and Mrs. Edward D. Churchill, Mr. and Mrs. Phillips Ketchum, and Dr. and Mrs. Francis O. Schmitt.

After the dinner, Dr. Charles C. Lund acted as toastmaster, and short speeches honoring Dr. Aub were given by Drs. Bauer, Means, and Shields Warren.

Dr. Aub was presented with a plaque bearing the names of the donors to the Joseph C. Aub Lectureship Fund — a fund set up by the members, past and present, of the Huntington Memorial Laboratories. In addition, a fund was presented to Dr. Aub for the support of a young investigator in cancer research. This fund was started by a large donation for the above purpose by one of Dr. William H. Baker's grateful patients.

On June 30, Dr. Aub retired as Head of the Huntington Memorial Hospital. He has been appointed a member of our Board of Consultation, and will carry on his work in office quarters to be provided for him in the new building.

THE NEWS

No. 160 Boston, Mass. October 1956

THE COBALT BOMB

AN APPLICATION OF ATOMIC ENERGY TO RADIATION THERAPY

In July of this year, a "cobalt bomb" was installed at the Massachusetts General Hospital for radiation therapy. It is the first of this particular design to be installed in the United States, and the first unit of any type in Massachusetts. It is thought that some of the background of this new machine may be of interest to readers of The News.

A "cobalt bomb" is, in essence, a new kind of X-ray machine. The source of the radiation is a small intensely radioactive piece of cobalt metal. It is surrounded by a massive protective lead shield, in which is a single opening of adjustable size, through which a useful beam of radiation emerges. This opening may be closed completely by a heavy shutter, so that the radiation is then "turned off". The size of the emergent beam may be adjusted by thick metal diaphragms at the sides of the opening to match the size of the malignancy under treatment.

RADIOACTIVE COBALT

It has been possible to make materials artificially radioactive ever since 1934, when this was first achieved in France by physicists Frederic Joliot and his wife; but the production of large amounts of radioactivity became feasible only with the development of the nuclear reactor during World War II. In the reactor, materials bombarded continuously by neutrons, penetrating subatomic particles, may become intensely radioactive. The idea quickly arose of producing highly concentrated radioactive materials emitting penetrating radiation which could be substituted for therapeutic X-ray machines. In fact, radium element has been used in this way for many years, but it has never been available cheaply enough or in large enough quantities to provide an amount of radiation comparable with the output of conventional X-ray machines. Now, however, there are several artificially produced radioactive substances available for this purpose, chief among them being radioactive cobalt.

A radioactive material for use in deep therapy equipment must have certain properties. (a) It should emit rays which penetrate human tissue as effectively as ordinary therapeutic X-rays — or even better, if possible. (b) The radioactivity should last a long time — that is, it should preferably have a half-life of at least a year. (c) It should be very readily produced by activation in a reactor so that a large amount of radioactivity can be concentrated in a very small size. (d) It should preferably be a solid material, not a gas or a liquid, easily available and conveniently handled.

After the war, physicists quickly recognized that cobalt metal in the form of Co 60 is practically an ideal material on all the above counts and stands almost alone for the specific purpose of therapy, equivalent to that available with supervoltage equipment. The rays that are emitted have about the same penetration in tissue as X-rays from a 2-million-volt X-ray machine; the half-life is over 5 years; a very large activity may be induced in a few grams of material. Nevertheless, it is only in the last few years that sources powerful enough to rival X-ray machines have become available and that manufacturing companies have housed these sources in suitably engineered devices. Cobalt in radioactive form and suitable for therapy is produced by inserting small pieces of ordinary cobalt metal into nuclear reactors and subjecting them to neutron bombardment for, in general, at least one year.

Today, the use of Co 60 in place of or alternating with supervoltage X-radiation is entirely practicable. It has the advantages of being of relatively small physical size, easy to manipulate, economic and reliable, and possessing radiation always available. Certain disadvantages in comparison with supervoltage X-ray machines lie in the necessity of replacing the cobalt source every few years, a somewhat lower radiation output which increases treatment times, and poorer definition of the beam edges due to relatively large source sizes. There is promise, however, of these disadvantages being ameliorated by the production of even more intense sources in the U. S. and Canadian nuclear reactors.

SUPERVOLTAGE THERAPY AT M. G. H.

The installation of a Cobalt 60 machine for therapy is but one step in a continuing sequence of advances at the M. G. H. in the technique of supervoltage therapy. In 1939, a new type of machine — the "pressurized" Van de Graaff generator, the first of its kind used for hospital equipment — was installed in the X-ray Department. It was designed to generate a million and a half volts and to produce a more penetrating X-ray beam than had hitherto been available. This pioneer machine was the result of intensive research and development at the Massachusetts Institute of Technology over several years. It has been a regular work horse in the Department and with it, over the years, thousands of cancer patients have been treated.

That machine, now 17 years old, has reached the end of a useful life, in addition to which technical advances in the generation of supervoltage X-rays have made it largely obsolete. Some of its work was taken over by a more modern Van de Graaff machine operating at 2 million volts, which was installed in 1948. Yet the number of patients with deep cancer who would be benefited or cured by X-ray therapy has continued to grow. Recently it became imperative that a reliable successor to this original machine be secured to act as a needed supplement to the 1948 machine. At this time, a newly designed Co 60 machine which seemed to meet our particular requirements came on the market. Largely because of its compact design, versatility, economy of operation and protection, it was decided to install one of these new units.

It should be emphasized that this new unit will accomplish no more and no less than the existing 2-million-volt X-ray machine — radiation from cobalt having the same desirable properties. Principally these are: (a) the improved tolerance of the skin compared with ordinary therapeutic X-rays, (b) the increased penetration of the body, (c) the reduced amount of scattering which keeps the beam narrowly confined to its initial direction, and (d) the low absorption in bone. The cobalt unit is a necessary supplement to the present treatment capacity of the Department and not a new approach to cancer treatment.

THE MGH COBALT UNIT ("BOMB")

The photograph on page 6 shows the unit now installed in the White Building. The radioactive cobalt metal in it weighs only about half an ounce, but so active is it that its radiation output is equivalent to about 2 pounds of radium, which is more radium than the amount in use in the whole of the U. S. A. The cobalt is in the shape of a very small pillbox, less than the width of a dime in diameter and about one-third of an inch high. The "bomb" in which the source is shielded is made of tungsten alloy and lead, and has a radial thickness of 8 inches. The total installed weight of the unit is 4500 pounds.

The unit is designed for rotational therapy of deep cancer. In this particular form of treatment, the patient lies supine on a light aluminum table and the source of radiation is moved on a circle around his body, so that the radiation beam is always passing through the cancer. In this way, a much greater treatment dose is delivered to the cancer than to the patient's skin (or other intervening tissues), since each individual skin area is irradiated for a relatively short time as the beam moves across it.

The rotation of the cobalt bomb is achieved electrically and is controlled from a panel outside the treatment room. Likewise, the movement of the tungsten shutter which exposes the patient to the radiation is controlled from this panel.

Radiation protection

The problem of radiation protection is an old one and well understood in X-ray departments. The introduction of intense sources of Cobalt 60 brings the problem into the foreground, because the radiation is ever-present and can never really be turned off as can an X-ray machine, and because of the highly penetrating nature of the radiation. The U. S. Atomic Energy Commission, which controls the production and distribution of all radioisotopes, has introduced special rigorous standards for installations of Cobalt 60. The shield surrounding the source must be designed to reduce leakage radiation to safe levels for radiology personnel who will be near the machine. Moreover, since during treatment an intense beam of radiation is released from the shield and is partially scattered in all directions, the treatment room itself must also be shielded to protect hospital personnel and the general public in the vicinity.

This situation illustrates another activity of the physicist in the atomic energy field. Having developed these intense radiation sources, he is called upon to solve the associated protection problem. In this case, the Atomic Energy Commission stipulates that a qualified radiation physicist shall design the protective walls of the treatment room and that subsequently he shall ensure by detailed measurements a safe radiation level around the installation. For the MGH unit, it has been the responsibility of the writer to satisfy these regulations.

The built-in protection afforded by the particular design of the cobalt machine we have secured is one of its most attractive features. On the far side of the patient, a large thick slug of lead is mounted, which absorbs most of the radiation emerging from the patient. The lead is mounted so that it moves around the patient with the cobalt source, being always diametrically opposite. (*See* photograph) This reduces drastically the amount of lead or concrete necessary in the walls and floor of the room. This feature alone has saved the Hospital many thousands of dollars in protection costs. Notwithstanding this, however, walls containing one inch or more of lead, or alternatively at least one foot of concrete, are necessary to shield the treatment room.

The cobalt unit, then, takes its place as an improved weapon in the fight against deep cancer and strongly reinforces the heavy artillery already available in the X-ray Department. It will enable us to treat more cancer patients than has ever been possible up to this time — and with the most modern techniques of radiation therapy.

Edward W. Webster, Ph.D.,
Physicist in Radiology

* * *

The Board of Trustees, at their meetings on July 20 and August 17, voted:

To accept the resignation of Dr. Robert C. Coe, effective July 31;

To accept with regret the resignation of Dr. Elbert P. Tuttle, Jr. from the position of Assistant in Medicine;

To grant Dr. Walter Bauer leave of absence from August 16 through November 30;

To grant Dr. Harriet L. Hardy leave of absence from November 1, 1956 through May 31, 1957;

To continue Dr. David B. Murray's appointment as First Assistant Resident in Pathology beyond June 30, until his induction into the Armed Forces;

To rescind the appointment of Dr. Anthony C. Allison as Assistant Physician and Assistant Pathologist, as Dr. Allison has decided not to accept this dual appointment.

To promote:

Dr. Aileen K. Adams from the position of Clinical Fellow to that of Assistant in Anesthesia, if and when she obtains a full Massachusetts license;

John M. von Felsinger, Ph.D. from the position of Associate Psychologist to Psychologist, as of July 1;

Dr. Paul C. M. Zamecnik to the position of Physician for the remainder of the Hospital year, effective July 1.

To appoint:

Dr. Richard C. Austin as Assistant in Surgery, beginning July 1;

Dr. Bernard D. Briggs as Assistant Anesthetist, for the month of July;

Dr. Donald J. Davis as Second Assistant Resident in Surgery, for the month of August;

Dr. Edward L. Ferguson as Second Assistant Resident in Surgery, beginning August 1;

Prof. Robert J. Hansen, Associate Professor of Structural Engineering at M.I.T., as Consultant in Biomechanics;

Dr. John J. Lorentz as Assistant in Physical Medicine;

Dr. John E. Mazuzan, Jr. as Assistant Resident in Anesthesia for one year, beginning December 1;

Dr. Thomas C. Peebles as a Dalton Scholar for four months, beginning July 1;

Dr. Ernest H. Picard as Third Assistant Resident in the Neurology Department, beginning July 1;

Dr. Walter T. St. Goar as Assistant in Medicine;

Dr. Porter H. Smith as Assistant in Anesthesia, beginning December 1;

Dr. Norman Trieger as Assistant Dental Surgeon, effective July 1;

Dr. Yang Wang as Resident in Medicine, beginning January 1, 1957.

At their meetings on August 8 and September 5, the General Executive Committee voted:

To accept the resignation of McIver W. Edwards, Jr., B.S. from the position of Research Fellow in Biochemistry, effective August 17, because of his call to active duty with the Armed Forces;

To accept the resignation of Dr. Charles H. Weed as Clinical Assistant in Medicine, with regret that it is necessary for him to resign at this time and with the assurance that if he wishes to apply for reappointment at some future time the Committee will be glad to consider his application;

That Dr. Joachim S. Gravenstein may continue to hold his appointment as Clinical and Research Fellow in Anesthesia at the Hospital coincidentally with his undergraduate work in Harvard Medical School;

To rescind the appointment of Dr. Willem deK. Kruger as Fellow in Anesthesia.

To extend the appointments of:

Dr. Howard J. Bagnall as Clinical and Research Fellow in Neurosurgery for one year, beginning September 22;

Dr. Fernando Rosas-Peña as Research Fellow in Neurology, from September 21, 1956 through March 31, 1957.

To reappoint:

Dr. Walter H. Caskey as Clinical Assistant in Medicine for one year, beginning May 1;

Dr. Adolfo C. Coussirat as Clinical Fellow in Anesthesia for one year, beginning September 1;

David M. Geller, Ph.D. as Graduate Student Assistant in Biochemical Research for one year, beginning September 30;

Dr. Cesare T. Lombroso as Clinical Fellow in Neurology for one year, beginning July 1;

Dr. William B. Looney as Clinical and Research Fellow in Medicine for one year, beginning September 19;

Dr. John F. McGinty as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning May 27;

Dr. George Martz as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Phillips W. Robbins, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. Albert O. Seeler as Clinical and Research Fellow in Medicine, assigned to Occupational Medicine, effective as of August 15;

Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;

Dr. John B. Vander as Clinical and Research Fellow in Medicine for one year, beginning October 1.

To appoint:

Howard T. Blane, M.A. as Research Fellow in Psychiatry, beginning August 15;

Dr. Arthur E. Brown as Clinical Fellow in Medicine, beginning August 8;

Dr. Howard T. Hermann as Clinical Assistant in Psychiatry for one year, beginning August 1;

Dr. Bror-Axel Lamberg as Clinical and Research Fellow in Medicine, beginning October 1;

Dr. Ernest E. Musgrave as Clinical Fellow in Medicine, beginning August 20;

Joseph O. Wehrmüller, Ph.D. as Research Fellow in Medicine for one year, beginning October 1.

* * *

Seventeen eminent physicians, leaders in Pediatric Medicine, have announced the formation of the National Council on Infant and Child Care, Inc. The members of the Council, which is independent and nonprofit, are associated with more than a dozen medical schools and children's centers throughout the country. Dr. Allan M. Butler, Chief of our Children's Medical Service, will serve as President of the Council.

Dr. Butler says that the NCICC has been formed for the purpose of providing medical counsel in the utilization of mass media of communications. He explains that the program of the NCICC includes an information service for persons writing on medical subjects for newspapers, radio, television, and popular magazines. The NCICC will inaugurate awards for outstanding contributions to public understanding of matters pertaining to the health and welfare of infants and children.

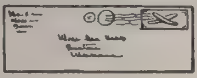
Dr. Butler announced that an NCICC Code for Advertising has been adopted to "encourage truthful, informative promotion of products that are important to child care." The Code will be available to manufacturers of medical and nutritional products, to assist them in conducting their promotion along lines that would provide factual information to the public and would encourage the patient's trust and confidence in his physician.

Dr. Butler also described the NCICC Editorial Guide which, he said, had been prepared to promote accurate public understanding of developments in the field of pediatrics.

The NCICC is supported by financial grants from interested business and other organizations.

In addition to Dr. Butler, outstanding physicians from all over the United States will serve as officers, board of directors, and members of the organization. Dr. James R. Wilson of Winnetka, Illinois, lecturer in the Department of Food Technology of M. I. T., is consultant to the group.

The NCICC has established headquarters in the New York Academy of Sciences Building, 2 East 63rd Street, New York City. Dr. Margaret Lyman, former research fellow of the U. S. Public Health Service in the Department of Pediatrics at the State University of Iowa, has been appointed educational director and will devote full time to this function.



New addresses:—

Dr. Richard C. Austin (*S.* 1951), Concord Medical Center, Concord, Mass.
Dr. Crawford S. Brown (a.r.p. *D.* 1952), 541 W. Roses Rd., San Gabriel, Calif.
Dr. Hunter H. Comly (*C.M.* 1944), 951 E Lafayette St., Detroit 7, Mich.
Dr. David W. Compton (r.p. *An.* 1946), Rt. 2, Box 6648, Issaquah, Wash.
Dr. Willard Dalrymple (*M.* 1947), 93 Livingston Rd., Wellesley 82, Mass.
Earl W. Davie, Ph.D. (res. fel. *Biochem.* 1956), Dept. of Biochemistry, Western Reserve University, Cleveland, Ohio
Dr. Burnet M. Davis (a.r.s. *W.S.* 1942), U.S. Public Health Service, Washington 25, D. C.
Dr. Edward Dunn (a.r.s. 1956), Veterans Administration Hospital, Syracuse, N. Y.
Dr. William F. Fritz (*M.* 1950), 2 W. University Parkway, Baltimore 18, Md.
Capt. Arthur Haut, MC, USAR, Box 323, 10th Field Hospital. APO 800, c/o Postmaster, New York, N. Y.
Dr. William P. Jencks (res. fel. *Biochem.* 1956), Dept. of Chemistry, Harvard University, Cambridge, Mass.
Dr. Jacob D. Judah (res. fel. *Biochem.* 1956), University College Hospital Medical School, London, England
Dr. Harrison E. Kennard (*W.S.* 1934), 246 Dudley Rd., Newton Centre, Mass.
Dr. Kazuo K. Kimura (C.*M.* 1955), Raymond Blank Memorial Hospital for Children, 1200 Pleasant St., Des Moines 14, Iowa
Dr. John H. Knowles (*M.* 1952), Dept. of Physiology, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.
Dr. J. Bradford Millet (*W.S.* 1943), Mayro Bldg., Utica, N. Y.
Dr. Elbert P. Tuttle, Jr. (*M.* 1952), Emory University Medical School, Atlanta, Ga.

MASSACHUSETTS EYE & EAR INFIRMARY

GLAUCOMA CONSULTATION SERVICE

Glaucoma is a disease characterized by abnormally high pressure within the eyeball; if the pressure is allowed to remain too long at excessive levels, irreversible changes are wrought in nerve fibres leading from the retinal percipient elements toward the visual cortex of the brain, and vision is permanently lost in proportion to the extent of such pressure-induced damage.

Glaucoma occurs in individuals of all age groups — newborn to nonagenarians. Its greatest incidence is in people over 40; certain surveys have shown that 1½ to 2½ percent of all persons over 40 in the United States have the disease. Unhappily, the commonest form of primary (cause unknown) glaucoma usually produces no symptoms, and is picked up when the patient is seen for a routine change of glasses or for some relatively unimportant complaint; pressure is often difficult to control in this type of chronic glaucoma. The acute form of primary glaucoma, on the other hand, is apt to make the patient consult his oculist early because of pain, or blurring of vision, or rainbows around lights; this type is sometimes easy to treat surgically, often with promise of complete cure. There are many types of (secondary) glaucoma which have a variety of recognized causes; some of these stimulate the patient to seek immediate advice, others do not. Some are easy to treat, others are not.

In 1948, Dr. W. Morton Grant, Associate Professor of Ophthalmic Research in the Howe Laboratory, Harvard Medical School, devised a technique known as tonography, which consists of the external application to the eye of an electronic pressure-measuring device which in turn is connected to a recording galvanometer. By this means a graph may be obtained showing intraocular pressure change resulting from application of the instrument to the eye for a period of four minutes. Under the weight of the instrument, pressure falls more readily in the normal than in the glaucomatous eye. After several hundreds of eyes had been measured tonographically, criteria were established which permit this procedure to serve as a diagnostic test in glaucoma suspects, and in certain obscure cases which were heretofore diagnostically difficult.

Tonography seems to indicate that intraocular pressure in glaucoma is elevated because the eye is unable to rid itself of aqueous humor normally. Previously it was thought that excessive production of aqueous humor was responsible for excessive intraocular pressure. Thus tonography, originally evolved as a research tool, has added something to the backlog of information which will one day permit greater understanding of the nature of glaucoma.

During the development of tonography, hundreds of patients, both clinic and private, were sent to the Howe Laboratory for evaluation. The patient and referring physician often benefited by consultation, and Dr. Grant benefited by clinical material from which to accumulate data. Other techniques previously used here and elsewhere — such as gonioscopy, and water drinking, and mydriasis tests — now began to be widely used in the Howe Laboratory in conjunction with tonography, and thus was developed a set-up for complete investigation of glaucoma patients and those suspected of having the disease.

The most spectacular development in the medical treatment of glaucoma in several decades has been the use of acetazoleamide (Diamox, Lederle). Some of the earliest definitive investigative and clinical work with this drug was carried out in the Howe Laboratory by Drs. Grant and Robert R. Trotter, starting in October 1953. A carbonic anhydrase inhibitor, Diamox reduces intraocular pressure presumably by diminishing the formation of aqueous humor (in contradistinction to the miotics — drugs used topically to reduce intraocular pressure by improving the ability of the glaucomatous eye to rid itself of aqueous humor). Tonography has been helpful in clarifying the mechanism of action of both Diamox and the miotics.

After tonography had been developed into a somewhat precise procedure, the tonographic evaluation of glaucoma patients no longer was appropriate as an activity of the Howe Laboratory, which is oriented toward basic research. Since such glaucoma study appeared to be diagnostically beneficial to the patient and the consultative function welcomed by the visiting staff, the Board of Surgeons saw fit to establish on July 1, 1955, the Glaucoma Consultation Service, which was put in charge of Dr. Robert R. Trotter and set up near the Eye Clinic where its facilities could be available with least confusion to Clinic patients. This new organization is intended to serve as a teaching facility through which house officers rotate for three months; its function is advisory and consultative. The Glaucoma Consultation Service is not intended to give total eye care to glaucoma patients, nor to control their care, whether medical or surgical.

There are about 2,000 glaucoma patients actively attending the Eye Clinic. The roster, of course, is constantly changing because of death, family relocation, or improvement in family financial resources. But the absolute number of glaucoma patients is growing and presumably will continue to do so as longevity increases generally. With increased longevity, patients will have more years during which glaucoma damage will become more severe, and it is therefore likely that more and more blindness will result from this disease unless more awareness on the part of the public is cultivated, and unless the general care of glaucoma patients improves.

Functions of the Glaucoma Consultation Service as it is presently constituted are:

1. To apply, on request from Eye Clinic or private physician, tonography, gonioscopy, or provocative tests in order to prove or disprove a tentative diagnosis, or to clarify the status of a patient in whom glaucoma is known definitely to be present.

2. To advise on medical or surgical measures on request of the referring physician.

3. To supervise the glaucoma follow-up worker whose duty is to keep track of Clinic patients who fail to keep appointments.

4. To provide an investigative pool in which promising new therapeutic or diagnostic procedures may readily be evaluated.

5. To afford concentrated training to house officers in diagnostic techniques and in the handling of glaucoma patients. The same opportunities for learning are available to fully-trained ophthalmologists who wish to make use of them.

Dr. Pei-Fei Lee of Taipeh, Taiwan (Formosa) is now working as a Fellow in Ophthalmic Research in the Glaucoma Consultation Service. One of his projects is tonography of eyes prior to cataract extraction and thereafter, in an attempt to clarify the causes of choroidal separation in the immediate postoperative period following cataract extraction. He is supported by the U. S. P. H. S.

Dr. Baruch J. Sachs, the first house officer to rotate through the new Service, has been working on tonography before and after the instillation of a cycloplegic in normal and glaucomatous eyes, in an effort to elucidate the mechanism by which certain cycloplegic substances appear sometimes to bring about rises in intraocular pressure.

It is expected that the Glaucoma Consultation Service will eventually upgrade the care of glaucoma patients in our Eye Clinic by providing closer supervision of their treatment, even though the supervision is indirect. Development is under way on a new method of record-keeping for glaucoma patients; this would eliminate much of the prolonged leafing-through by a doctor new to a particular patient in order to familiarize himself with the record — a process which presently makes the handling of glaucoma patients very time-consuming in the Eye Clinic. Such an innovation in the record-keeping system would not be incompatible with the present MGH-MEEI unit record system, but should supplement it in helpful fashion.

Thus it is hoped that glaucoma patients may some day be processed more speedily, cutting down their waiting time in the Eye Clinic. These are the greatest body of repeating patients in the Eye Clinic; it is well recognized that expediting their handling will encourage their cooperation in following the treatment routine prescribed for them. Not only are many of the glaucoma patients elderly, but many also seem to be tense and easily upset by prolonged waiting which has been the rule rather than the exception. There are being explored other possibilities for cutting waiting time for glaucoma patients.

Closer liaison with the Social Service Department has resulted from establishment of the Glaucoma Consultation Service. A glaucoma case worker, Mrs. Stella Cantor, has been attached to work with us and with the gaucoma follow-up worker. Thus glaucoma patients, ambulatory or hospitalized, who have non-ocular problems interfering with their eye care can be brought readily to the attention of Mrs. Cantor, who is often able to render assistance of great value in promoting successful treatment.

Quarters at present are one room; this is highly inadequate because of the lack of privacy and quiet necessary for satisfactory tonography and for other reasons. Discussions are under way looking toward the acquisition of additional space.

The potential usefulness of the Glaucoma Consultation Service can hardly be overestimated, especially in view of the unique position of the Eye and Ear Infirmary in the New England area. The Service has an opportunity and an obligation to stimulate physicians to make earlier diagnoses of glaucoma, to educate the public concerning the disease, and to aid in revising upward the standards of glaucoma treatment by teaching. Not the least of our opportunities is that concerned with further clinical investigation of glaucoma in conjunction with basic discoveries emanating from the Howe Laboratory. Whether or not we will succeed in this ambitious program only the passage of time will reveal. If we succeed, the foresight of Dr. Dunphy and the Heads of Service in establishing the Glaucoma Consultation Service will be apparent.

Robert R. Trotter, M.D.,
Assistant to the Chief of Ophthalmology

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the Office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Limiting factors in experimental pain.
J. Chron. Dis. 4:11-21.

Beecher, H. K.
Relationship of significance of wound to pain experienced.
J.A.M.A. 161:1609-1613.

Briggs, B. D., Sheldon, D. B., and Beecher, H. K.
Cardiac arrest: Study of a thirty-year period of operating room deaths at Massachusetts General Hospital, 1925-1954.
J.A.M.A. 160:1439-1444.

Dermatology

Reznick, L., Lever, W. F., and Frazier, C. N.
Treatment of pemphigus with ACTH, cortisone and prednisone: Results obtained in twenty-five cases over a period of five years.
New England J. Med. 255:305-315.

Laboratory Science

Matoltsy, A. G.
Human epidermal cells in tissue culture.
Transplantation Bull. 3:99-100.

Matoltsy, A. G.
Sedimentation studies of epidermal keratins. Keratin A and keratin B.
J. Biophys. & Biochem. Cytol. 2:361-363.

Proctology

Speare, G. S.
Anorectal disease in the community: With special reference to detection of rectal cancer
New England J. Med. 255:377-379.

Psychiatry

Sifneos, P. E. (Editor)
Clinic on psychosomatic problems: Long-term psychotherapy in a patient with epigastric pain.
Am. J. Med. 21:275-281.

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From August 27 to September 5, the Somerset Hotel in Boston was the headquarters of the largest meeting of hematologists and blood transfusion specialists which has ever been held.

First, there was the meeting of the Fifth International Congress of the International Society of Hematologists, under the presidency of Dr. William Dameshek. Hematologists from all over the world participated in this meeting, and 710 papers on all the different aspects of hematology were presented. Thanks to Dr. William H. Baker of the Massachusetts General Hospital, who was Chairman of the Communications Committee, a very successful arrangement was made with the I. B. M. people and translators whereby it was possible to follow all the scientific papers in English, French, or Spanish.

An extremely interesting program on leukemia, hemorrhagic disorders, anemia, and nucleonics was presented during the week, finishing up with one day of immunohematology, which brought about a natural continuation into the following meeting of the International Society of Blood Transfusion and the Ninth Annual Meeting of the American Association of Blood Banks, under the presidency of Drs. I. S. Ravdin and J. J. Griffitts.

An extensive program of special events was arranged, starting Monday evening, August 27, with the official Congress reception. A cocktail-supper at the Museum of Fine Arts was the beginning of all the pleasant and, as for every International Congress, important social gatherings which took place during the 10 days of the meeting. As has been the experience in several Congresses in Europe, a museum with all its beautiful displays of art presents itself as an ideal background for an official Congress reception.

Wednesday afternoon the delegates had the opportunity of enjoying an excellent New England clambake, which had been expertly organized by Drs. Daphne and Allan Richardson Jones. In busses and cars, about 800 delegates and their wives were transported along the North Shore to Castle Hill in Ipswich where the clambake was served. This was followed by a fine outdoor concert, in which Mme. Jacqueline Latarjet of Paris, wife of one of the delegates, was among the soloists who entertained the group.

Friday evening, following a cocktail-reception at the Harvard Club, the official banquet of the Hematology Congress took place in the Louis XIV Ball Room at the Somerset Hotel.

The new president of the society, Dr. Giovanni DiGuglielino, announced that the next Congress will take place in Rome, Italy, in 1958. Following other official speeches, a dance was held for the delegates and their wives.

Over the week end a large group of the American hematologists left Boston and were replaced by the new group of blood transfusion delegates who came from all over the country. Most of the delegates who had come from other countries stayed over for the Sixth Congress of the International Society of Blood Transfusion and the Ninth Annual Meeting of the American Association of Blood Banks, which lasted from September 3 to 5.

Again, a very interesting scientific program, with 141 papers, was arranged for the delegates. The program consisted of presentation of the latest news in immunohematology, blood preservation, platelet and platelet derivatives, as well as hemolytic diseases of the newborn.

Also for this meeting an extensive program of special events was arranged, starting with a cocktail-supper reception at the Harvard Club on Sunday evening, followed by an official banquet on Tuesday evening, September 4. During this banquet the annual awards of the American Association of Blood Banks were presented. Dr. Philip Levine and Dr. Alexander Wiener received the Karl Landsteiner Award for their contribution in the field of blood group immunology, and Dr. Garrett Allen of Chicago received the John Elliott Award for his research work in connection with long-time storage of plasma at room temperature for the purpose of preventing transfer of serum hepatitis.

On Wednesday, September 5, the final papers were given, the meeting was brought to an end, and a group of exhausted Boston physicians could return to their laboratories and offices with the good feeling, I believe, that the meetings had been in every way successful and gratifying.

As usual, it was a very pleasant experience to meet with one's valued friends from all over the world. Fortunately, quite a number of them are still visiting with us.

Morten Grove-Rasmussen, M.D.,
Director, MGH Blood Bank

[Dr. Grove-Rasmussen has been elected Vice-President of the American Association of Blood Banks.——*Editor*]

Brief bits:—

After attending the conference of the American College of Surgeons in San Francisco, Dr. Oliver Cope will fly to Mexico City to give an address on "Adrenal surgery" at the celebration of the Tenth Anniversary of the Hospital de Enfermedades de la Nutrition on October 11.

Dr. Edwin O. Wheeler, who has been on leave of absence with the U.S. Public Health Service for the past eighteen months, has completed that service and is now back with our Cardiac Unit.

BIOGLETS

Dr. Carl N. Brownsberger, Assistant Resident in Medicine—born in India, May 11, 1930; grew up in Glendale, California; B.A., Yale University, 1951; M.D., Harvard Medical School, 1955; Intern IV Medical (Harvard) Service, Boston City Hospital, 1955-56; married.

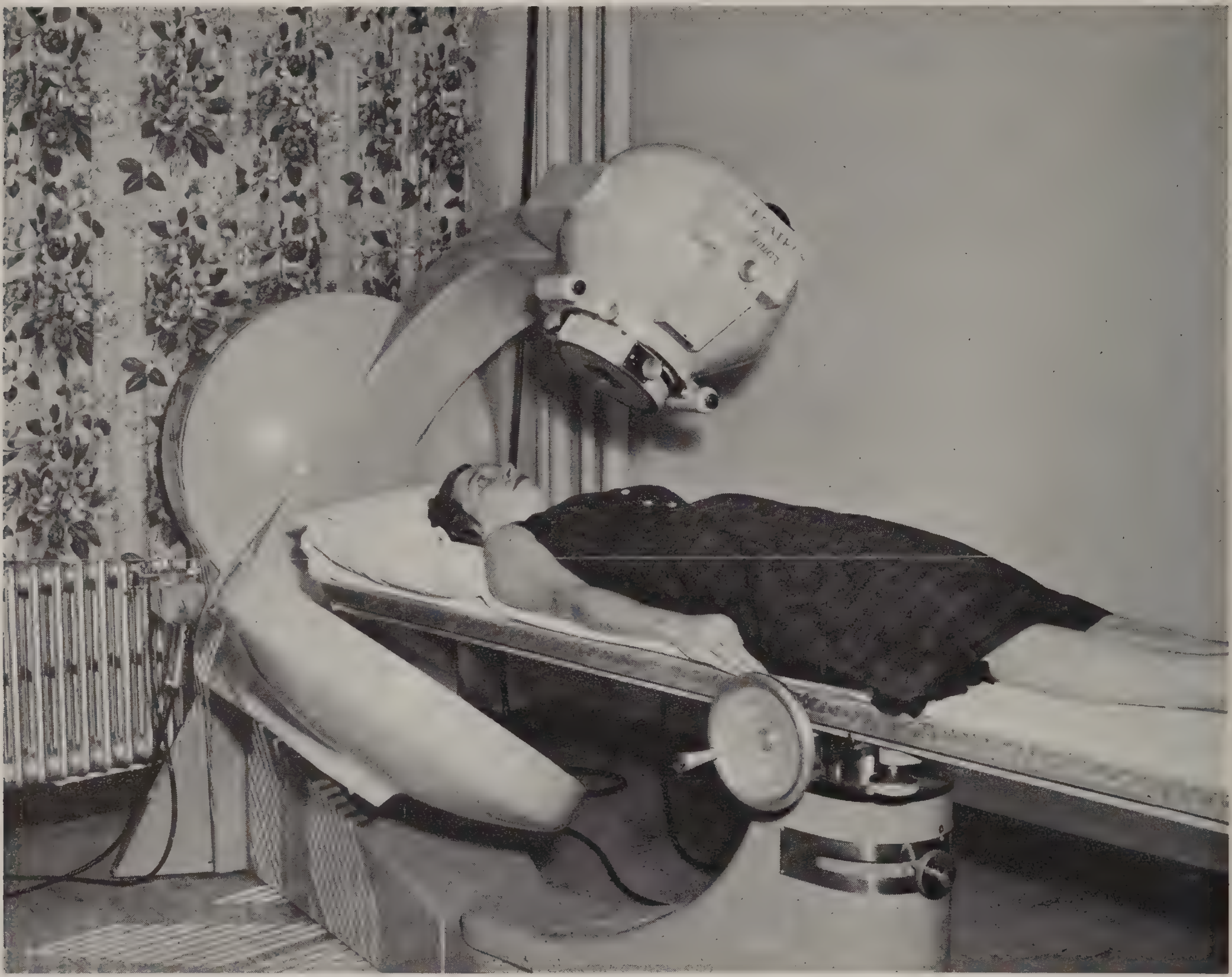
Dr. Richard F. Mayer, Assistant Resident in Neurology—born in Olean, N.Y., June 2, 1929; B.S., St. Bonaventure College, St. Bonaventure, N.Y., 1950; M.D., University of Buffalo School of Medicine, 1954; Intern in Medicine, Boston City Hospital, 1954-55; Fellow in Neurology, Mayo Foundation, University of Minnesota, Minneapolis, 1955-56.

Dr. William M. Thurlbeck, Assistant Resident in Pathology — born in Johannesburg, South Africa, September 7, 1929; B.Sc., 1949, M.B., Ch.B., 1953, University of Cape Town; Intern, Groote Schuur Hospital, Cape Town, 1954; Junior Registrar, Pathology Department, University of Cape Town, 1955; married; home: Cape Town, South Africa.

The Union of South Africa is a member of the British Commonwealth, is about twice the size of Texas, and has a population of some 14 million. About 2½ million of these are white, 1 million are of mixed blood or Asiatics, and about 11 million are Africans, i.e., negroes. About 60% of the whites are of Dutch extraction. They speak Afrikaans chiefly—a language peculiar to South Africa. The remainder of the whites are English-speaking.

At present there are 3 medical schools graduating students as doctors. The University of Cape Town and Witwatersrand University in Johannesburg are English-speaking schools, each with a class enrollment of about 110, of which some 20 are colored. The University of Pretoria is Afrikaans-speaking, graduates 50 students yearly, and is a segregated white school. A similar school exists at Stellenbosch University, and its first students will graduate in 1961. The University of Natal at Durban is a segregated school for coloreds, and its first students will graduate in 1959. The medical schools are modelled on the British schools. Students may enter medical school directly from high school and spend 6 years in training. However, about half of the students take some other degree before starting their medical training. The first year subjects are physics, chemistry, botany, and zoology. Anatomy, physiology, pathology, pharmacology, and an introductory course in clinical medicine occupy the second and third years. The last 3 years are spent in hospital training, with rotation through the various clinical departments, supplemented by regular — too regular — lectures to the whole class. The standard of medical training is probably equal to that of the English provincial medical schools.

Postgraduate training, also, is modelled on British lines. Some 25% of the graduates intern in a university hospital. About a fifth of these become the equivalent of residents and are called registrars. The time requirement for specialist training is longer, but it is not as carefully organized as here. The salaries are adequate and a long period of specialization is not a financial burden. The nature of the selection at intern and registrar levels ensures a fairly high standard of intellectual attainment. The majority of budding specialists go to England for a while and usually take a postgraduate degree there. Only a small number come to the United States, chiefly because of the expense and the difficulty of sterling-dollar conversion. Once properly qualified, the prospective specialist's credentials are examined by a government body —the South African Medical and Dental Council—and, if approved by them, he is entitled to charge higher fees and rise to a higher scale in government (Federal) and provincial (State) services. The percentage of certified specialists is low, and much work is done by general practitioners that would have a far happier



Our new "Theratron Junior" Cobalt 60 unit, ready for use in treatment of a malignancy in the larynx. Miss Glenn MacKenzie, Secretary in Radiation Therapy, posed for us as "the patient".

result in the hands of competent specialists.

The racial policy of the country produces a small fee-paying population and a large population unable to pay for adequate care. The white community is served by a system similar to that practised here, although it falls a good deal short of the efficiency of American medicine. Private practice exists to a limited extent in the non-white communities, but the patients generally can pay no more than office consultation fees and the bulk of the care of this group is in the hands of the provincial hospital services. Each of the 4 provinces has its own system which provides free care for those with incomes below a certain level. The doctors in these hospitals are full-time employees of the province concerned. The government hospital service provides free treatment and hospitalization for certain diseases, notably tuberculosis, venereal diseases, and mental disorders. The medical school hospitals are administered jointly by the province and the university concerned, and the majority of the staffs are full-time employees of the province. This produces the anomaly that to get the best available medical care one has to earn less than a stated amount.

There are few diseases peculiar to South Africa, but 2 notable examples are onyalai, a variant of thrombocytopenic purpura, and "nutritional heart disease", a form of idiopathic cardiac failure unrelated to beriberi. A number of nutritional diseases are seen relatively frequently, and scurvy, pellagra, beriberi, and kwashiorkor are not uncommon. Certain infectious diseases, such as tuberculosis, typhoid, schistosomiasis, and amebiasis are relatively common. Only part of the country has a subtropical climate and true tropical diseases rank among the exotica, but are seen occasionally. Other diseases have a varying and interesting racial incidence. Poliomyelitis, malignant lymphomas, coronary heart disease, diabetes mellitus, peptic ulceration, and appendicitis are rare in the African. Gout is almost unknown. An interesting genetic and anthropological fact is the low incidence of the sickle cell trait south of the Limpopo, as opposed to its incidence in the negro elsewhere. Kaposi's sarcoma, hypertension, melanocarcinoma, porphyria, and primary carcinoma of the liver are relatively common in the African.

This varying incidence of disease provides a fertile field for epidemiologic research, and it is a pity that there are only limited funds and personnel available. There is a fascinating and complicated background of nutrition, genetics, infection, and untold factors yet unexplored. A recent example of such research was the investigation of the racial incidence of coronary heart disease carried out by Bronte-Stewart, Brock, and Keys. The older work of Berman on liver cancer and of the Gilmans on cirrhosis and cytosiderosis is also worthy of mention. One feels that efficient research would lead to a much better understanding of the etiology and pathogenesis of many diseases of world-wide distribution.

William M. Thurlbeck, M.D.,
Assistant Resident in Pathology

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The July-August issue of The News reported the resignation of the Reverend James H. Burns as Protestant Chaplain to the Massachusetts General Hospital, and gave an outline of Mr. Burns's professional background and experience.

On the morning of August 31, a delightful coffee party was given in his honor in the Baker Lounge. Scores of Mr. Burns's friends came to express their appreciation of his services at the Hospital and to extend good wishes for his happiness and success in his future work as Head of the Departments of Social Relations and Pastoral Services of the Massachusetts Council of Churches.

THE NEWS

1811

No. 161 Boston, Mass. NOVEMBER 1956

DENTAL SERVICE AFFAIRS

The peculiar environment of the oral cavity controls to a great extent the early development in the soft tissues of the signs and symptoms of generalized disease. Because of the accessibility of the oral cavity, useful information may be obtained by examination of this area. To this end, emphasis has been placed on this aspect of mouth disease in the Dental Clinic. A sizable collection of data has been accumulated during the past several years. This material probably now represents one of the most comprehensive studies of mouth disease in this country. Frequently some of these findings have been presented to graduate dental as well as medical groups in various parts of the United States. The continued reputation of this Hospital to attract the oddity as well as the common, and the interest and training of the dental staff has made possible the collection of these data.

Most of the patients seen in our Out-Patient Department are adults. Consultation with the Medical Service is desirable. Proximity of the consulting service is important. The Dental Clinic is adjacent to the Medical Clinic and has been so situated for many years. However, when full-time staff members in both clinics became available, the freedom of consultation resulted in better ambulatory care for our patients. The inevitable benefit was better teaching and training for students and interns.

The number of patients in the Dental Clinic has been maintained at a good level. The number of patients admitted to our service in White and on the private floors was approximately 400 for the past year. Consultations on other services average about 300 for a year. Our number of fractured jaws treated is increasing. This past year we have had 40 admissions for treatment of fractures. All of these available experiences have made the internship attractive to graduates of dental schools in this country and we have been able to attract an excellent group of applicants.

Investigative activities have increased. Dr. Norman Trieger, a full-time member of the staff at the Hospital and an Instructor in Oral Medicine at the Harvard School of Dental Medicine, has been doing some studies on abnormal bleeders. Regardless of normal laboratory findings, one of the certain methods of determining abnormal bleeding is to carry out oral surgical procedures. Dr. Trieger, in collaboration with Dr. Joseph J. M. McGovern on the Pediatric Service, has recently published some studies on abnormal bleeding following tooth extraction. Dr. Trieger, through the offices of Dr. Benjamin Castleman, has been cataloguing oral surgical material in the Department of Pathology. This material should be of great assistance in the training of general pathologists as well as our own interns and students. Dr. Trieger has just completed the study of material on salivary glands and has collected this in the form of a monograph. It includes clinical findings, X-ray contrast studies, microscopic material, and references to the literature. Our interest in salivary gland disease is continuing. Because of some suspected abnormality of parasympathetic function, clinical trials with long-acting cholinergic drugs are in progress. Electrophoretic patterns of proteins of saliva are being studied on patients having diseases of the salivary glands. This study is being done at the Harvard School of Dental Medicine laboratory.

Our interest in precancerous lesions of the oral mucosa has been stimulated further, recently, by a two-year grant from the United States Public Health Service. The glycogen metabolism of human material has been studied by means of slice techniques. Our most recent finding, using C-14 labeled glucose, has demonstrated the ability of oral mucosa to synthesize glycogen. There is also some evidence suggesting that, clinically and microscopically, normal mucosa adjacent to leukoplakia shows some abnormality in glycogen concentration. This latter finding will be studied further. Because of our close association with the Tumor Clinic, most of the clinical material is obtained there.

Last but not least, the Dental Service was asked to assist in an emergency arising in some 30 polio patients last winter. Much time had passed since their admission. The teeth of most of these patients had become carious and in some instances rampant decay had occurred. All of these patients required restorative dental treatment. Many of them could not be removed from the respirators for long periods. All these patients could be transported only with great difficulty to dental offices. Our own Dental Clinic has never been equipped for restorative dental treatment, and our staff members have never been called upon to render this type of service in the Hospital. However, to meet this emergency the dental staff volunteered to care for these patients. Through the efforts of Miss Ruth M. Farrisey, R.N., Executive Officer for MGH Clinics, some equipment and supplies were obtained. Our staff members brought their own special equipment, and all of the polio patients were cared for. At least two lessons have been learned from this experience. One is the importance of planning for total care for patients, and the second lesson is the importance of being surrounded by a loyal and devoted staff. These men should be congratulated.

David Weisberger, D.M.D., M.D.,
Chief of Dental Service

* * *

Dr. Herbert E. Kaufman, Intern in Medicine, was awarded a prize at the annual meeting in September of the New England Society of Pathologists, as one of two winners who submitted papers on Pathology, in a contest sponsored by the Society, for medical students.

* * *

On October 5 a giant Red Feather flag was raised above the White Building, identifying the Massachusetts General Hospital as one of the 277 Red Feather agencies of Greater Boston that benefits substantially from the Community Fund.

On October 15 the 1957 MGH-Red Feather campaign was launched. I urge you to get behind the hard-working committee and the 350 solicitors in their effort to achieve—or exceed—the MGH quota of $9,750, our share toward the total Campaign goal of $6,567,000. The MGH quota this year, unlike those of previous years, excludes the Visiting Staff since they are to be solicited separately. This means we need redoubled efforts on the part of the rest of us.

The 1957 MGH-Red Feather Campaign Committee is headed by Mr. Joseph W. Degen and Mrs. Soma Weiss, co-chairmen, assisted by four vice-chairmen — Miss Louise Hatch (Gold Division), Dr. John W. Littlefield (Red Division), Miss Ruth Sleeper (Blue Division), and Miss Miriam Huggard (Displays).

It has been truly said, "Our eyes see and our hearts tell us that many of our neighbors need assistance, and we are aware that there are thousands more in need whom we cannot reach personally." Surely we who work in a hospital know this to be true. We also know that we can help these people through the United Community Fund. I urge you to give to the 1957 Red Feather Campaign — to give thoughtfully and generously.

Dean A. Clark, M.D.,
General Director

The Board of Trustees, at their meetings on September 7 and 21, voted:

To promote:

Dr. John A. Mannick to Third Assistant Resident in Surgery, beginning October 1;
Dr. Edwin W. Salzman to Third Assistant Resident in Surgery, beginning October 1.

To reappoint:

Dr. John D. Constable as Second Assistant Resident in Surgery, beginning September 1;
Dr. Donald J. Glotzer as Second Assistant Resident in Surgery beginning September 15;
Dr. Charles E. Huggins as Second Assistant Resident in Surgery, beginning September 1;
Dr. Herbert L. Kraut as Assistant Resident in Dermatology, beginning January 1, 1957;
Dr. Donald N. Wysham as Assistant Resident in Medicine, beginning February 1, 1957.

To appoint:

Dr. Morris H. Adler as Attending Psychiatrist at McLean Hospital;
Dr. Herbert S. Cline as Clinical Assistant in Psychiatry at McLean Hospital;
Dr. Jeannette A. Hovsepian as Second Assistant Resident in Radiology, beginning July 1, 1957;
Dr. Mary L. Scholl as Assistant Physician to the Children's Medical Service;
Dr. Maurice Vanderpol as Assistant Psychiatrist at McLean Hospital.

At their meetings during September and on October 3, the General Executive Committee voted:

To accept the resignation of:

Dr. Bryan Williams, Jr. from the position of Clinical Assistant in Medicine, assigned to Cardiology, as of October 15, with thanks for his valuable services during the absence of Dr. Wheeler.

To promote:

Dr. James F. Donovan to the position of Senior Resident on the Orthopedic Service for the period October 1, 1956 through December 31, 1957.

To extend the appointments of:

Dr. Howard S. Cameron as Assistant Resident on the Orthopedic Service from October 8 through December 31, and that he be promoted to Senior Resident for the term January 1 through June 30, 1957;
Werner Ritschard, Ph.D. as Research Fellow in Biochemistry, through November 30.

To reappoint:

Dr. Leo J. Cass as Clinical Assistant in Medicine for one year, beginning May 1;
Heinz Kohler, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;
Mr. Alden V. Loud as Research Fellow in Medicine for one year, beginning July 1;
Audrey S. Mishler, B.S. as Research Fellow in Psychology for one year, beginning September 1;
Richard R. Peebles, Ph.D. as Research Fellow in Psychology for one year, beginning September 1;
Dr. John H. Sisson as Clinical Assistant in Medicine for one year, beginning May 1;
Dr. Ingrid Sondergaard as Clinical and Research Fellow in Psychiatry for one year, beginning October 15;
Dr. Edward J. Welch as Clinical Assistant in Medicine for one year, beginning May 1;
Babette S. Whipple, Ph.D. as Research Fellow in Psychology for one year, beginning September 1.

To appoint:

Prof. Eugene Bell, M.Sc. as Research Fellow in Biology, in the Department of Neurosurgery;
Dr. Richard B. Gresham as Clinical Fellow in Orthopedic Surgery, for the period October 1 through December 31;
Dr. Anthony J. Leonsins as Clinical and Research Fellow in Surgery for one year, beginning October 1;
Dr. Gilles G. C. Lyon as Clinical and Research Fellow in Neurology for one year, beginning October 1;
Dr. Chung H. Lyou-Kim as Clinical Fellow in Pediatrics, for the period September 4, 1956 through February 28, 1957;
Dr. Reginald S. Rilling as Graduate Student Assistant in Orthopedic Surgery, for the period September 4 through September 29.

MASSACHUSETTS EYE & EAR INFIRMARY

THE MICROCIRCULATORY LABORATORY

Microcirculation is related to observation of microscopic arterioles, capillaries, and venules and to the study of their functions. The main purpose of the Microcirculatory Laboratory is to learn more about the exchange of substances between circulating blood and the cells of living tissue. Such a concept is broad because cellular and humoral physiology is involved and it must, therefore, be approached by multiple routes. Anatomical, physiological, physical (such as electronics), and biochemical studies are all indicated, and require collaborative efforts with a number of laboratories located in the Massachusetts General Hospital, the Massachusetts Eye and Ear Infirmary, Harvard University, and the Massachusetts Institute of Technology. The Microcirculatory Laboratory, therefore, is well located.

This laboratory, like all others, started because someone had an idea. In 1948 Dr. Francis M. Rackemann felt that the Allergy Laboratory should engage in more kinds of basic investigation. He and Dr. Walter S. Burrage discussed the matter with Dr. Cecil K. Drinker who recommended the study of small blood vessels. Dr. John W. Irwin was sent to South Carolina to study under Dr. Melvin H. Knisely, who had devised the quartz-rod method of transillumination of living tissue and who is recognized for his studies of the circulation of the liver and the spleen. Dr. Irwin remained there for a year, and when he came back in the fall of 1950 a corner of the Allergy Laboratory on Domestic 5 was given over to the project. It was decided to observe the small blood vessels of the lungs of living mammals both before and during anaphylaxis. Equipment was difficult to secure because of the Korean War, and no funds were available. However, Dr. Burrage was successful in solving both problems, and work was under way within a few weeks. The early work showed that in anaphylactic shock in the guinea pig the blood vessels were involved quite as much as were the bronchial muscles, and that was an important advance in knowledge. Slowly the method and the findings attracted attention. In 1952 Dr. Francis L. Weille became interested in these techniques, and he considered that the method might be used to learn more about the circulation in regard to the spiral ligament in the cochlea of living guinea pigs. The projects gained impetus, and soon equipment filled the laboratory to such an extent that one had to thread one's way about the room. When the Massachusetts Eye and Ear Infirmary started new construction on its research wing, Dr. LeRoy A. Schall designated space for the Microcirculatory Laboratory. Movement of equipment to the new quarters on the fourth floor of the Massachusetts Eye and Ear Research Building commenced in late February 1956 and was completed by mid-July. These laboratory facilities are modern and designed for the studies at hand. Such excellent facilities are not only inspiring, but are greatly appreciated.

From 1950 to 1954 the vascular patterns of the small blood vessels of the lungs, the liver, and the cochlear spiral ligament of living mammals were studied with the aid of microscopes. It became apparent, at least under the experimental conditions, that blood flow was intermittent in any specific vessel of all these organs and that these small vessels all had the capacity to change the diameters of their lumina. During active anaphylaxis, changes in the calibers of vessels as well as alterations in the intravascular cellular elements were noted. It was possible to record observations on motion picture film, which has been used for several short movies. In 1955 the laboratory was asked to prepare an exhibit demonstrating the circulation of the spiral ligament for the Scientific Exhibits at the annual meeting of the American Medical Association. Our Art Department prepared the exhibit. The Certificate of Merit for its section was awarded, much to the satisfaction of all.

Since 1954 the hemodynamics of the pulmonary vascular system have been under investigation. Dr. Maurice B. Rappaport of the Sanborn Company redesigned a standard electromanometer which permits accurate measurements of both the systolic and diastolic pressures of the small pulmonary blood vessels. He donated his time very generously in instructing us in its use as well as in the use of the recording instruments. Without his constant aid it would not be possible to maintain the equipment in first class condition. By recording pressures of the carotid artery with large-bore cannulas as well as with micro-quartz cannulas, it was possible to show that pressures obtained with the micro-quartz cannulas were valid. These micro-cannulas have tips with an internal diameter of about 20 micra (1 micron=1/1000 of a millimeter). For comparison, a 25-gauge needle has an internal diameter of 0.3 of a millimeter. In other words, the micro-cannula is about 17 times smaller than the 25-gauge needle. Much time has been consumed in developing techniques which enable one to insert the tip (20 micra) of the micro-cannulas into the lumina of the small pulmonary blood vessels. All problems are not solved as yet, but some blood pressure curves have been recorded. Once the techniques are perfected, it should be possible to collect data of considerable interest.

The inner ear of mammals is a fascinating organ. Many of its secrets are still well guarded. The organ of Corti has not been proved to have any direct blood supply. It is bathed in endolymph whose exact origin is not known. Two groups of experimenters have found that the electrolytes of endolymph are present in the same concentrations as in intracellular fluid. In addition, the organ of Corti is one of the most active tissues of the body. The possibilities of fruitful investigation in this area appear great.

To date, techniques have been developed to expose the cochlea of a living guinea pig. In addition, a fenestration of about 250 micra is made in the bone over the scala media of one turn of the cochlea. The spiral ligament lies just under this bone. It has been possible to define with accuracy the vascular patterns of the spiral ligament. The question arises as to whether the endolymph is derived from the stria vascularis (capillaries in the spiral ligament) or from some other source. Pressure measurements of the spinal fluid and the endolymph of living animals are being made. Perhaps it will be possible to record the blood pressure within the capillaries (stria vascularis). Once valid data are secured, the pressure gradient may well give an indication as to the site of origin of endolymph.

Other irons are in the fire. In conjunction with the Acoustics Laboratory of the Massachusetts Institute of Technology, the so-called "floating room" (free of most vibrations and sound) will be staffed and equipped to study the microphonics of the inner ear of living mammals. Two fenestrae (each about 30 micra in diameter) will be made in the bone of the cochlea overlying the scala media and scala tympani. Through these windows minute microelectrodes will be inserted into the endolymph and perilymph. Dr. Moses H. Lurie's laboratory is equipped to check with serial sections of the cochlea the histological results of the experiments.

On the planning board are other experiments. It is hoped to develop a biochemical laboratory equipped with microtechniques which will facilitate the measurements of many of the substances in the endolymph. Such data may throw some light on the ability of the organ of Corti to function so well without a direct blood supply. If endolymph proves to be similar to intracellular fluid, the biochemical approach should be most interesting. Another problem of the ear is otosclerosis. This leads to the study of bone metabolism. Again, cooperation with other laboratories is indicated.

The Microcirculatory Laboratory looks forward to the future, and new ideas will always be welcome. Cooperation with all laboratories which have related problems will be continuously encouraged.

John W. Irwin, M.D.,
Director of Microcirculatory Laboratory
Francis L. Weille, M.D.,
Surgeon in Otolaryngology

The Board of Managers of the Massachusetts Eye and Ear Infirmary, at their meeting on September 26, voted to promote:

Dr. Julian F. Chisholm, Jr. from his present position of Assistant in Ophthalmology to Assistant Surgeon in Ophthalmology;
Dr. Richard B. Pippitt from his present position of Assistant in Ophthalmology to Assistant Surgeon in Ophthalmology.

* * *

I have recently returned to the Massachusetts General Hospital after spending three most rewarding and enjoyable years at the National Institutes of Health in Bethesda, Maryland. This stay was an enjoyable one not only because of the very stimulating scientific atmosphere which exists there, but also because it afforded an opportunity for the continued friendship and affiliation with many MGH alumni.

When I arrived in Bethesda in 1953, I was anxious to obtain training along fundamental lines so that I might eventually be able to bring some of the vast biochemical advances of recent years to bear upon clinical problems. I thus ventured into the realm of enzymology and into a study of the role enzymes play in some important biologic reactions. I should emphasize at the outset that such ventures were successful only through the advice and assistance of many superb scientists and investigators. Most notably, I am indebted to Dr. Gordon Tomkins and Dr. Herman Kalckar for their advice, assistance, and constant stimulation.

The studies which were carried out were concerned with the elucidation of three basic problems: 1) the manner whereby the body metabolizes and inactivates adrenal steroids, such as cortisone, into biologically inactive products; 2) the mechanism whereby such inactive steroid derivatives are further converted by the liver to their corresponding glucuronides; and 3) the determination of the metabolic defect in the disease galactosemia (galactose diabetes).

It has been known for some time that hormones, such as cortisone, are very rapidly metabolized by the liver to their corresponding "tetrahydro" derivatives (i.e., tetrahydrocortisone). In this process the liver adds four hydrogen atoms to cortisone, thus rendering it biologically inactive. It was of interest to us to learn exactly how this was achieved. We discovered at the outset that the liver possesses two very distinct enzymes—one converting cortisone to dihydrocortisone by the addition of two hydrogen atoms, and the other converting dihydrocortisone to tetrahydrocortisone by the addition of two more hydrogen atoms. But in what manner were these hydrogens added to the steroid molecule? They did not come directly from the atmosphere; neither did they seem to come from the hydrogen ions in the liver cells or their surrounding medium. Instead, it was found that the hydrogen atoms involved were those which were bound to a group of substances known as pyridine nucleotides. More specifically, the type of compound involved was the reduced form of triphosphopyridine nucleotide, or TPNH. It was observed that when TPNH was added to cortisone in the presence of the enzymes mentioned, the H (or hydrogen of TPNH) was transferred to the steroid molecule. In this manner cortisone was converted first to dihydrocortisone and then to tetrahydrocortisone. This proved indeed to be a very exciting and interesting mechanism.

We then proceeded to investigate how the liver further conjugates tetrahydrocortisone to its corresponding glucuronide (tetrahydrocortisone-glucuronide). It had been observed by others that, curiously enough, free glucuronic acid was not involved in this process. In a mechanism somewhat analogous to that described above, it was found that the reaction required a specific cofactor in which glucuronic acid was attached to a nucleotide. The cofactor in this case consisted of a molecule of uridine diphosphate (UDP) linked to a molecule of glucuronic acid to form the compound UDP-glucuronic acid. In the over-all reaction, the glucuronic acid was transferred to the steroid molecule, thus forming tetrahydrocortisone-glucuronide and leaving UDP. Again it was demonstrated that the liver possesses a specific enzyme to carry out this reaction.

We finally turned our attention to the disease galactosemia. This is a condition which occurs in infancy and childhood and in which milk cannot be tolerated. In fact, mental deficiency, cataracts, liver disease, and even death can result unless milk is removed from the diet. The symptoms occur because these patients cannot utilize the sugar in milk (galactose) and convert it—like the normal individual—into glucose and then energy. Such a disease would on the surface have no obvious relation to any of the above problems we were studying. However, the uridine nucleotides are also at work in helping the body convert galactose to glucose. Together with Drs. Herman Kalckar and Elizabeth Anderson, it was found in the investigation of this disease that these patients lack from birth a specific enzyme necessary for the normal metabolism of galactose. This enzymatic defect causes a galactose metabolite to accumulate in the body which is somehow involved in causing the numerous manifestations seen clinically.

As a result of these studies we have been able to devise a rather simple and yet specific blood test for the disease. This allows one to detect galactosemia without resorting to the potentially hazardous galactose-tolerance test which has previously been necessary in order to establish the diagnosis with certainty. We have, in fact, been able to diagnose the disease as early as in the delivery room by means of cord blood. As a result, patients with galactosemia can be placed on milk-free diets from birth in order to prevent the development of symptoms, especially the mental retardation.

Having arrived back at the M.G.H., the plan is to extend the investigations on the metabolism of galactose and glucuronic acid in normal and diseased states. In this direction, the Hospital and Dr. Bauer, as Chief of the Medical Services, have been most helpful in providing a laboratory and support, both moral and financial, to permit these problems to be pursued.

Kurt J. Isselbacher, M.D.,
Assistant in Medicine

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The Massachusetts General Hospital Red Cross First Aid Course, which began on October 2 with an enrollment of 31, grew to include 38 members. Mr. Clinton L. Pendleton, Safety Engineer, Safety Department, New England Power Company, one of the ablest first aid instructors in this area, conducted the 18-hour course from 6 P.M. to 8 P.M., Tuesday and Thursday evenings during the month of October.

Graduation exercises and a demonstration of the skills that were acquired in the course will be held on Thursday, November 1, at 6 P.M. Mr. E. Forest Hallet, Director of First Aid and Accident Prevention, Boston Metropolitan Chapter, American Red Cross, will award certificates to the graduates.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on current Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Medicine

Novey, H. S., Irwin, J. W., Welts, J., and Burrage, W. S.
Removal of ragweed pollen from environmental atmosphere of patients: The evaluation of an electrostatic precipitator combined with an air conditioner.
J. Allergy 27:398-408.

General Surgery

Waddell, W. R., and Kunz, L. J.
Association of salmonella enteritis with operations on the stomach.
New England J. Med. 255:555-559.

Gynecology

Simmons, F. A.
Recent advances in infertility.
M. Ann. District of Columbia 25:415-418, 472.

Physical Medicine

Watkins, A. L.
Medical rehabilitation in a general hospital.
Rhode Island M. J. 39:440-442, 456, 458, 459, 470.

Surgery—Reconstructive

Murray, J. E., and Cannon, B.
Skin grafts for chronic wounds of the lower extremity.
J.A.M.A. 161:1462-1465.

* * *

More than 12,000 hospital leaders from the United States and Canada gathered in Chicago, September 17 through 20, for the 58th Annual Convention of the American Hospital Association.

The theme of the 1956 meeting was "Planning for the future". Among the features of the Convention, whose sessions were held at the International Amphitheatre, were the hospital merchandise mart containing about 500 exhibits, and the 50 round tables on various phases of a hospital's operation.

The 9th Annual Conference of Hospital Auxiliaries was held in conjunction with the American Hospital Association Convention and drew approximately 1,000 representatives of the more than 1,000,000 volunteers working in hospitals. Other groups holding meetings during the Convention were the American College of Hospital Administrators, the American Association of Hospital Consultants, the American Association for Hospital Planning, and the American Association of Nurse Anesthetists.

The American Hospital Association House of Delegates, a 101-member policy-making body of the Association, convened on Monday morning. Ray E. Brown, President of the Association and Superintendent of the University of Chicago Clinics, presided.

Citations of accomplishment, on the 10th anniversary of the Hill-Burton Hospital Survey and Construction Program, were awarded to the authors of this legislation, Senator Lister Hill of Alabama and Associate Justice Harold H. Burton of the United States Supreme Court, and others.

Honorary memberships in the Association were conferred on Dr. Theodore G. Klumpp, Chairman of the Hoover Commission's Task Force on Medical Services; Dr. George F. Lull, Secretary and General Manager of the American Medical Association; and Dr. Emroy W. Morris, President and General Director of the W. K. Kellogg Foundation.

The Association's Distinguished Service Award was presented to Dr. Charles F. Wilinsky of Boston.

Among the speakers at the various sessions were Marion B. Folsom, Secretary of the Department of Health, Education, and Welfare; Dr. Theodore G. Klumpp; Dr. Jack R. Ewalt, Director of the Joint Commission on Mental Illness and Health and Commissioner of the Massachusetts Department of Mental Health; Dr. Lowell T. Coggeshall, Special Assistant for Health and Medical Affairs to the Secretary of Health, Education, and Welfare; George Bugbee, President of the Health Information Foundation; Harrison M. Sayre, President of the Columbus (Ohio) Hospital Federation; J. Stewart Baker, President of the Chase Manhattan Bank of New York City; Nathan J. Stark, Board Member of the Kansas City Area Hospital Association and Vice-President of the Rival Manufacturing Company; Dr. Alan E. Treloar, Director of Research, American Hospital Association; Dr. Howard A. Rusk, Chairman of the Department of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center; Dr. Joseph N. Schaeffer, Associate Medical Director of the Institute of Physical Medicine Rehabilitation, Peoria, Illinois; Dr. Leonard O. Bradley, Administrator of the Winnipeg General Hospital; Dr. Daniel Blain, Medical Director of the American Psychiatric Association; Samuel Cardinal Stritch, Archbishop of Chicago; Major General Silas B. Hays, Surgeon General, Department of the Army; Dr. Dwight H. Murray, President of the American Medical Association; William S. McNary, Executive Director, Michigan Hospital Service; Dr. Norman A. Welch, Chairman of the Blue Shield Commission; Dr. James A. Shannon, Director of the National Institutes of Health; and Dr. Albert W. Snoke, Director of the Grace-New Haven Community Hospital, New Haven, Connecticut.

Dr. Snoke was installed as President of the American Hospital Association.

Massachusetts General Hospital, of course, was well represented at the Convention. Dr. Dean A. Clark spoke on "Planning for the field tests" at the Session on "Planning for disaster". Mrs. Oliver Cope, Chairman of our Coordinating Committee, under the topic "Foreign aid", described the activities of the Reception Center for Professional Visitors run by the Massachusetts General Hospital Staff Wives Association. This was a part of the "Project parade" at the Hospital Auxiliaries Conference. Miss Ruth Sleeper, R.N., Director of our School of Nursing and Nursing Service, was one of the speakers at the General Session on "Hospital professional relations". Mrs. Soma Weiss, Consultant for Community Relations, conducted an Auxiliary Round Table Session on "Auxiliary-community relations". Others from the Hospital who attended the Convention were Mrs. Floyd H. Blackman, Joseph W. Degen, Frederick D. Foster, Edward Hallinan, Joseph Hill, Daniel A. Pettengill, and E. Michael White.

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VOLUNTEER GROUPS

MGH Staff Wives Hospital Committee

Concerts in the Chapel were resumed on Wednesday, October 24, at 3 P.M., after a year's silence unavoidably caused by construction of the new corridor outside the Chapel.

The Staff Wives Music Committee was happy to open its fifth season with one of its own members, Anne Talbot, mezzo-soprano, performing, accompanied by John Woodworth, pianist. Mrs. Talbot has been one of our most well-received performers. Not only the patients, but Hospital personnel and visiting audiences have appreciated her talent.

The second concert will be on November 7, at which time Homer Whitford, organist at the McLean Hospital, will again play for us.

All are most cordially invited to attend these free concerts.

Volunteers are needed to convey the patients from their rooms for these half-hour periods of music. Those interested in assisting should telephone Mrs. Daniel J. Holland, Jr. at Bigelow 4-3020.

The concerts have been planned for every other Wednesday, and will generally be held in the Chapel. However, it is hoped that we may take the music to the various floors where patients are restricted to their beds, and also to the children's floors. Such a concert will then replace the regular Chapel concert planned for that week.

Watch for notices outside the Chapel, at the Front Desk, the Reception Center, in the dining rooms, and also in this column.

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Brief bits:—

Dr. Edwin L. Cantlon (*E.S.* 1935) has been elected President of the Nevada State Medical Association.

Dr. Oliver Cope will speak to the St. Paul Surgical Society in St. Paul, Minnesota, on November 21. The subject of his address will be "Cushing's disease".

Dr. Wyland F. Leadbetter addressed the American College of Surgeons at their symposium on October 10 in San Francisco. His topic was "New methods of urinary diversion". From October 21 to 27 Dr. Leadbetter was Visiting Professor of Urology at the Indiana University Medical Center.

At the last meeting of the American Goiter Society, which was held in May of this year, Dr. Jacob Lerman, Associate Physician and a senior member of our Thyroid Laboratory, was elected First Vice-President for 1956-57. The President is Dr. Brown M. Dobyns, a former member of the MGH staff.

Dr. Vernon P. Williams spoke before the Ohio Academy of General Practice on "Psychotherapy in General Practice" on September 20 in Columbus, Ohio, at the Academy's Scientific Assembly.

New addresses:—

Dr. Charles R. Campbell (r.p. *Path.* 1955), Peninsula Hospital, Burlingame, Calif.; Mills Memorial Hospital, San Mateo, Calif.
Dr. Herbert S. Cline (a.r.p. *Psychiat.* 1956), 416 Marlborough St., Boston, Mass.
Dr. Robert C. Coe (*S.* 1951), 1115 Columbia St., Seattle 4, Wash.
Dr. Horace B. Frost (*E.S.* 1897), Lavonia Hotel, Lavonia, Ga.
Dr. Dorothy H. Henneman (res. fel. *An.* 1956), Anesthesia Laboratory, Peter Bent Brigham Hospital, 721 Huntington Ave., Boston, Mass.
Dr. Irving H. Itkin (clin. a. *M.*), 36 Pleasant St., Worcester, Mass.
Dr. Joan Kazanjian (r.p. *C.M.* 1956), 3200 Shorewood Drive, Mercer Island, Wash.
Victor V. Koningsberger, Ph.D. (res. fel. *Biochem.* 1956), Van't Hoff Laboratory, Sterrenbosch 1 G, Utrecht, Netherlands
Dr. Monroe A. McIver (*E.S.* 1922), Shiraz Medical Center, Nemazee Hospital, Shiraz, Iran
Dr. Donald B. Martin (*M.* 1955), c/o Dr. George Thorn, Peter Bent Brigham Hospital, 721 Huntington Ave., Boston, Mass.
Dr. Walter T. St.Goar (*M.* 1950), c/o Dr. Myles P. Baker, 262 Beacon St., Boston, Mass.
Dr. Jack E. Tetirick (*S.* 1952), 2922 Ruhl Ave., Columbus 9, Ohio
Dr. Frederick H. Verhoeff (cons. c. *Oph.*), 403 Commonwealth Ave., Boston 15, Mass.
Dr. Earl J. Waddington (a. dn. s.), 6 Haverhill St., Shawsheen Village, Andover, Mass
Dr. C. Gene Wheeler (*S.* 1956), Walker River Hospital, Shurz, Nev.
Dr. Ralph C. Williams, Jr. (*M.* 1955), New York Hospital, 525 E. 68th St., New York, N.Y.
Dr. William E. Wood (*Dn.* 1940), 1832 Connecticut Ave., N.W., Washington 9, D.C.

BIOGLETS

Dr. Reynout Donner, Assistant Resident in Pathology—born in Rotterdam, Netherlands, April 1, 1920; Arts degree (M.D.), University of Leiden, Netherlands, 1946; Assistant in Pathology, University of Utrecht, Netherlands, 1947; Red Cross service in Indonesia, 1948; Resident in Surgery, General Hospital, The Hague, 1949-54; Doctor of Medicine, 1954; Master of Surgery, 1954; Research Fellow, Postgraduate Medical School, University of London, 1955.

Dr. Robert P. Fornshell, Assistant Resident in Orthopedic Surgery — born in Cleveland, Ohio, July 3, 1925; Western Reserve Academy, Hudson, Ohio, 1943; Staff Sergeant, 94th Infantry Division, Third Army, ETO, 1943-46, A.B., Harvard College, 1948; M.D., Harvard Medical School, 1952; Intern and Junior Assistant Resident in General Surgery, Peter Bent Brigham Hospital, 1952-55; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1955-56; married; home: formerly Kent, Ohio, now Brookline, Massachusetts.

Dr. John W. Grover, Intern in Surgery—born in Moorefield, West Virginia, June 21, 1927; U.S. Navy: Electronics Technician, Washington, D.C., 1945-49; A.B. in Biochemistry, Harvard College, 1952; M.D., Harvard Medical School, 1956; married.

Dr. Dale G. Johnson, Intern in Surgery—born in Salt Lake City, Utah, September 27, 1930; B.S., University of Utah, Salt Lake City, 1953; M.D., University of Utah, 1956; married; two children.

Dr. Theodore van Ravenswaay, Assistant Resident in Pathology—born in Boonville, Missouri, July 29, 1927; 2nd Lieutenant, U. S. Infantry, 1945-47; A.B., University of Missouri, 1949; M.D., Washington University School of Medicine, St. Louis, Missouri, 1953; Intern in Medicine, Barnes Hospital, St. Louis, 1953-54; Assistant Resident in Pathology, University of California, 1954-55; Fellow in Infectious Disease, Washington University School of Medicine, 1955-56; married; two children.

Since I share with Holly Smith the dubious honor of being farthest along the sunset slope in years of service on the house staff, I, too, have been asked by the vigorous editor of The News for some memoirs.

All of us house men can reflect on a pretty rich collection of Hospital lore before we have spent many years here, and there have been a great many changes since I came from Chicago in 1948 and first walked awestruck up Grove Street to the foot of the sparkling White Building.

The surgical interns' quarters at that time were in the most dismal and distant corner of dear old No. 9 Parkman Street — a swaying tinderbox where we were no doubt placed because of the surgeon's supposed ability to move quickly in an emergency. That old building was said to have crumbled easily with a slight push by one small workman when Fruit Street was closed off and the Bartlett dormitory built. Many more changes, including the erection of the new Research Building with all the activity which it reflects, have occurred since then. Soon the office building and out-patient development will follow. Such evidences of the strength and adaptability of our Hospital are a clear source of pride to all of us.

But only last year when I had an opportunity to travel abroad and to work in an English laboratory did I come to fully realize the international character of this institution's influence. I was originally attracted to the idea of breaking off my clinical training for a year of research by reading the published accounts of the work of Professor P. B. Medawar of University College, London, in the field of transplantation immunity. It was he, with his colleague R. E. Billingham, who had beautifully demonstrated the ablation of the "homograft reaction" between unrelated animals of the same species by injecting the prospective recipient animal while still *in utero* with a cell suspension derived from the donor strain. This permanent "acquired tolerance" has been the background for much more work in what has become a tremendously expanding field.

As my wife and I flew from Boston on a cold day in September 1951 I was eagerly looking forward to an opportunity for some firsthand experience with British experimental biology. But there was certainly much more than this to being abroad, for we were immediately thrilled

No. 61 in a series of Staff photographs

Dr. John W. Irwin, Assistant in Medicine, M.G.H.—Director of the Microcirculatory Laboratory

with all the rich sights of old London. We were fortunately able to find, with only a moderate amount of footwork, a small flat along the Thames near Kew Gardens. Our first child insistently chose that moment to arrive ahead of schedule, but all went well on the midwifery service at the Middlesex Hospital, and as parents of one of Her Majesty's subjects we felt more at home.

By now it was time to report to my new chief, whom I found with some difficulty in a converted warehouse out behind the magnificent central building of University College. I thought that surely such a makeshift must have been due to bomb damage which had left so many scars in that part of the city. In his charming manner the professor told me, however, that Starling and Bayliss had worked in the same building. We all know of the reputation in America of English and Continental scientists working with few of our accustomed chromium-plated adjuncts. The distinction is an important one, though, because it seemed to pervade the entire thinking of the group with which I was fortunate enough to be associated. Everything they planned had an elegant simplicity which seemed to be appropriate for their unostentatious surroundings and, of course, with the full tradition of British biology.

Some of the marks of the past round the College were quite curious, however. For example, its founder, Jeremy Bentham, who died in 1832, still sits in a glass-faced cabinet in the front lobby of the main building for all to see. This phenomenon, made a little more lifelike by virtue of a skillfully modeled wax head made by the original Madame Tussaud, was provided for in detail by the will of the old "utilitarian", who felt that his guiding influence was too good a thing to end.

Coming directly from the urgent clinical world, it was strange to find myself part of a Department of Zoology where the top subjects of conversation might be parthenogenetic fish or Devonian fossils. The small group working on transplantation immunity was absorbed in its experiments but was right up to date on a wide variety of advances in the international world of ideas, from the sexing of patients by studying the blood smear to the inside story of the Dead Sea scrolls.

I was put to work on several projects, including some experiments with adrenal homografts between pure strain mice, an effort to learn more about the mechanism of Addisonian pigmentation, and finally a project on wound healing. In spite of this activity, I would get out my map of the London tube and bus routes whenever possible and make pilgrimages to the various ancient centers of medical learning round the city. Each one invariably had its boosters of the M. G. H., as I was constantly finding more and more Englishmen who had visited or worked here or had some special interest in us. One particularly fine fellow — John Anderson, a medical man from Durham — is now here working with Dr. Alex Leaf. In addition, there were quite a few other MGH-ers over there on missions similar to mine. George Richardson, Howard and Jane Rasmussen, John Burke, B. W. Cobbs, Ed Ferguson, Walter and Anne St.Goar, Billy Peete, and Dick Currie's sister Ruth were all there at one time or another. They all seemed to be having profitable and enjoyable experiences.

Most of us managed a vacation trip either through the British Isles or to the Continent of Europe. We took our Continental junket in the month of May and found it an ideal time, particularly in southern France and northern Italy.

Altogether the year sped by very quickly. I found that such a multitude of new experiences provided sound food for reflection and a handsome complement to my clinical background here at the Massachusetts General Hospital.

Paul S. Russell, M.D.,
Resident in Surgery

This short but welcome note has come from Dr. Chiu-chen Wang (r.p. *R.* 1952):

> I am now serving with Uncle Sam. I would appreciate it if you would send my News to me at U.S. Army Hospital, Fort Chaffee, Arkansas. I look forward to reading each issue with great pleasure.
>
> I am now the chief of the radiology service at this installation. The equipment is quite adequate and the work load is sufficient to keep me occupied.
>
> My best regards to all my friends and associates at the M.G.H.

[Dr. Wang, in a recent letter to Dr. Clark, says he has received his permanent Massachusetts medical license.—*Editor*]

THE NEWS

1811

No. 162 Boston, Mass. December 1956

UROLOGY SERVICE

Since the establishment of the Urology Service at the Massachusetts General Hospital in 1911, great changes have occurred affecting this special field of diagnosis and therapy. Emphasis in the early days was on the treatment of venereal diseases and their urological complications. The Out-Patient Department was filled with patients treated by urethral irrigations and instillations given for urethritis. Prostatitis, prostatic abscess, epididymitis, and urethral stricture were common sequelae. A urologist was a man who used a cystoscope. Urological surgery was considered unattractive and was, in fact, done in a rather rough and ready fashion by men, perhaps in many instances, inadequately trained to perform a few rather stereotyped procedures. Convalescence from prostatic, bladder, and kidney surgery was protracted and attended by a high morbidity. Consequently, many patients preferred catheter existence rather than the risk of the hazards of surgery.

All this has changed. The advent of specific antibiotic therapy has all but eliminated venereal disease from the Out-Patient Department. Irrigation equipment has all but disappeared from the Out-Patient Department, which now functions as a clinic in which the diagnosis of urological conditions is carried out and which, in effect, acts as a point from which cases are admitted to the ward for surgery and to which patients are discharged from postoperative care. The diagnosis and treatment of female urological conditions, particularly urethritis and cystitis, have become an important part of urological work. At the same time, although actual cure of urinary tract infection may not be regularly possible, control of infection has largely eliminated deaths from pyelonephritis following prostatic, bladder, and kidney surgery. This, together with earlier surgery, better preparation, and proper blood replacement has reduced morbidity and hospital stay of the urological patient to that of the average general surgical patient. Death from these operations is now a rare occurrence.

Although the cystoscope remains the main diagnostic tool, diagnostic methods have been and are continuing to be developed and refined to a point where exploration for diagnostic purposes is rarely necessary. Aortography, nephrotomography, and retroperitoneal air insufflation have provided means for study of the renal circulation and the differential diagnosis of various retroperitoneal tumors and associated lesions.

Urological surgery is now a broad field. The correction of congenital lesions — hypospadias, epispadias, exstrophy, vesical neck obstruction, neurogenic dysfunction, and ureteral and pelvic renal abnormalities — is one of the most interesting phases of urological surgery and encompasses a wide variety of operative procedures. Surgery of prostatic obstruction involving benign and malignant lesions includes special operative techniques which, because of the increasing numbers of older individuals in our population, becomes of great importance. Instead of the usual two-stage suprapubic prostatectomy of the old days, the urologic surgeon is now called upon to do conservative and radical perineal procedures, transurethral prostatectomy which was introduced in 1928, and conservative and radical retropubic prostatectomies. Suprapubic prostatectomy is now done in one stage, often with primary closure of the bladder. Rarely seen on the wards are the large numbers of patients with draining abdominal wounds which were so unsavory. Transurethral surgery has led to the development of difficult and exacting techniques with therapy of prostatic and bladder lesions which require much special training and skill. The radical surgery of bladder neoplasms calls for fortitude in performance of radical cystectomy and urinary diversion operations, which require extensive experience in large and small bowel surgery. Surgery of renal and testicular cancers involves experience in thoracic surgery. Corrective surgery for renal calculi and obstructive lesions involving the renal pelvis calls for fine technical conservative surgery. Experience with vascular lesions and the possibility of renal transplantation which is already an established practice between identical twins is involving the urologist in vascular surgical techniques. Much work is being done to rehabilitate patients with neurogenic bladder dysfunction, which bids fair to allow us to replace all or part of the bladder with segments of the small bowel. Ureters have been replaced with segments of ileum quite satisfactorily, which obviates cutaneous ureterostomy and nephrostomy in many patients. Incontinence of urine in the female is amenable to proper surgical therapy, and efforts are being made to solve this distressing problem in the male.

It has been thrilling for those of us who have engaged in urological work over the past 25 years to watch the developments in urologic surgery and to see how much can now be done for patients afflicted with urinary tract disease. It is likely that we have by no means exhausted the possibilities, particularly along preventive lines, in regard to cancer and urinary tract calculi. In spite of the relative effectiveness of antibiotics, we are a long way from being generally able to cure urinary tract infections.

The Urology Service at the Massachusetts General Hospital is trying to keep abreast of developments and, in a small way, make contributions to progress in this field. Perhaps its greatest contribution, aside from the immediate care of patients, is the training of our resident staff. As indicated above, developments in urologic surgery necessitate a rather long period of training in order to develop individuals who are not only familiar with the diagnostic and the therapeutic aspects of urological work, but who will be able to contribute to the progress in this field through experimental or clinical investigative work. The American Board of Urology now requires 3 years of clinical training in urology which must be based on a sound preliminary surgical experience. Our plan is to take men with 2 or 3 years of general surgical training for a 3-year period. A junior assistant resident rotates between the Baker, Phillips House, and White 10, learning the fundamentals of diagnosis and the care of patients on the wards, and being introduced to urological operative work. Experience in the Out-Patient Department is very valuable. Out-Patient service is stressed because here the resident has a chance to see the results of previous therapy and to acquaint himself with the principles of office diagnosis. Here he performs a very useful function, in that most of the work on the ward, of course, comes from the Out-Patient Department, and the work of the residents in the Out-Patient, therefore, becomes very fundamental to the service. I think we can say that our work in the Out-Patient Department is reasonably satisfactory at present. During his second and third years, graduated responsibility is assumed by the resident until, during his last year, he has control of the ward service on White 10 under the guidance of visiting men and the Chief. The variety of diagnostic and operative work has been quite satisfactory, particularly if we include the very important teaching material derived from private patients seen in the Baker and Phillips House. During 1955 there was a total of 1,373 urological patients admitted to the Massachusetts General Hospital. Five hundred thirty-seven came to White 10. There were 437 operative procedures done on these ward patients and 491 on private patients — a total of 928. Thirteen hundred twenty cystoscopic procedures were done — 723 on ward patients and 597 on private patients. Thus it can be seen that a large volume of diagnostic and operative work is being done in the Hospital. The house staff, even with the help of residents rotating through from surgery, are barely able to keep pace with the load.

Urological Grand Rounds are held the first and third Fridays of each month in the Bigelow Amphitheatre on White 3-A. All residents and students are invited, and visiting physicians are always welcome. In addition, ward rounds on White 10 are held at 4 P.M. on Tuesday and Friday of each week by the Chief of Service. Pathological material is reviewed twice monthly, and a Journal Club is held once each month. Our Tumor Clinic on White 2 each Wednesday morning allows the visiting and resident staffs to follow cancer patients cared for on the ward. Our Out-Patient schedule has been changed to afternoons, to allow better resident and visiting coverage. This is extremely important, since Harvard students attend regularly.

Lastly, an effort is being made to encourage investigative work, which is a significant aspect of a training program and of particular importance to the individual who may wish to engage in academic work after completing his residency. This is now difficult in view of the demands on the residents' time imposed by clinical work and may necessitate still further lengthening of the period of training in individual cases.

We have been fortunate in having visitors from many foreign countries, several of whom are well known. Usually, these men have made rounds with the residents and have brought them new ideas from many sources.

Wyland F. Leadbetter, M.D.,
Chief of Urology Service

* * *

Dr. Arthur W. Allen (*W.S.* 1915), formerly the Chief of the East Surgical Service and currently on our Board of Consultation and a member of our Board of Trustees, was awarded the Henry Jacob Bigelow Medal of the Boston Surgical Society at a meeting held on November 5. This high honor has previously been given to only thirteen recipients in some thirty-one years of its existence. It is worthy of note that the idea of the medal was conceived by Dr. William Sturgis Bigelow in honor of his father, who was not only one of the leading surgeons of his time (1818-1890) but also did much for surgery in this Hospital. In his honor the Bigelow Amphitheatre was built, where Dr. Bigelow's bust, conspicuous for its magnificent beard, dominates the room from a high round niche.

Essentially international in the manner of its bestowal, the medal has been given to four other surgeons associated at one time or another with this Hospital, including Dr. Edward D. Churchill (*W.S.* 1922), our Chief of Surgical Services. It is quite fitting, in this regard, that Dr. Allen should be a recipient of the medal. The effect of many of his studies in the fields of gastrointestinal and vascular surgery has been felt around the world. His influence upon American surgery and medicine through the medium of the American College of Surgeons, the Massachusetts Medical Society, and other associations of which he has been president, has been very important. But perhaps, as Dr. E. Everett O'Neil, the President of the Boston Surgical Society, pointed out, Dr. Allen's greatest contributions have been in the field of teaching and leadership within the walls of the M.G.H., to the many students, residents, and young doctors who have been fortunate enough to have worked with him.

After receiving the medal, Dr. Allen addressed the Society on the subject of "The development of surgery for lesions of the stomach and duodenum". Despite the difficulties of presenting this address to a mixed audience of over 300 people, Dr. Allen delighted his hearers by an extraordinary number of facts and stories about surgical leaders of many generations, presented in a witty and highly entertaining manner. Many persons from the Massachusetts General were able to attend the dinner, enjoy Dr. Allen's speech, and see him receive this high award, which he can add to the many he has received in the past.

Lamar Soutter, M.D.,
Clinical Associate in Surgery
Secretary, Boston Surgical Society

* * *

Dr. Joseph C. Aub was elected President of the Massachusetts Division of the American Cancer Society at the annual meeting of its directors, held in Boston on October 24.

Earlier in the year, Dr. Aub received the Bertner Foundation Award for outstanding contribution in the field of cancer research.

* * *

Francis O. Schmitt, Ph.D., Professor of Biology at Massachusetts Institute of Technology and a member of our Board of Trustees, has been named as one of two winners of the 1956 Albert Lasker Awards for "pioneering studies of the biochemical components of connective tissues, contributing to new understanding of arthritis and rheumatic diseases".

* * *

About 125 guests were invited to attend the unveiling of Dr. Stanley Cobb's portrait on Wednesday afternoon, October 31. Charles Hopkinson, who did the portrait, spoke of the pleasure he had derived from working with Dr. Cobb as a subject. Mr. Phillips Ketchum, President of our Corporation, acted for the Trustees in accepting the portrait, which is to be hung in the Herman Room on the third floor of the Bulfinch Building.

A tea and coffee social hour followed the unveiling ceremony.

* * *

Mr. Joseph T. Prekup, Assistant Director of McLean Hospital, has received the honor of being elected to membership in the American College of Hospital Administrators.

In 1947, prior to his career in hospital administration, Mr. Prekup entered the field of nursing and, after completing a three-year course, received his R.N. He continued in nursing as a charge nurse and in a supervisory capacity until 1950, when he was chosen to study hospital administration under Dr. W. Franklin Wood, then Director of McLean Hospital. At the same time, he studied at Boston University. Soon after receiving his Bachelor of Science degree in nursing, he was appointed Assistant Director at McLean by the Trustees of Massachusetts General Hospital.

Among other affiliations, Mr. Prekup is a member of the Massachusetts Hospital Association.

The Board of Trustees, at their meetings on October 5 and 19, and November 2, voted:

That leave of absence of Dr. Edwin O. Wheeler be terminated and that he be reinstated as Assistant Physician, effective September 1.

To reappoint:

Dr. Shen K. Wang as Assistant Resident on the Orthopedic Service, for the period January 1, 1957 through June 30, 1957.

To appoint:

Dr. Scott Adler as Assistant Resident in Orthopedic Surgery for one year, beginning September 11, 1957;
Dr. Gerald Caplan as Associate Psychiatrist;
Dr. Lincoln D. Clark as Assistant Psychiatrist, beginning March 1, 1957;
Dr. James H. Duxbury as Assistant Resident in Urology for one year, beginning July 1, 1957;
Dr. Thomas C. Hall as Assistant in Medicine;
Dr. William H. Harris as Assistant Resident in Orthopedic Surgery for one year, beginning February 4, 1957;
Dr. John R. Huckell as Assistant Resident on the Orthopedic Service for one year, beginning July 1, 1957;
Dr. William F. Murphy as Attending Psychiatrist at McLean Hospital;
Dr. Austin F. O'Malley as Assistant Resident in Urology, for the period January 1, 1957 through June 30, 1957;
Dr. Anne Parsons as Assistant Sociologist at McLean Hospital;
Dr. Narendra M. Purandare as Visiting Pathologist pro tempore, for the six-month period beginning September 24;
Dr. John B. Tallon as Assistant Resident in Orthopedic Surgery for one year, beginning April 18, 1957.

At their meetings on October 10, 17, and 24, the General Executive Committee voted:

To rescind the appointment of Dr. Ernest E. Musgrave as Clinical Fellow in Medicine, effective as of August 20.

To extend the appointments of:

Dr. Tucker A. Barth as Assistant Resident in Orthopedic Surgery, from January 1, 1957 through March 31, 1957;
Dr. William R. Shanahan as Clinical Fellow in Medicine to December 12;
Dr. Charles V. Treat as Clinical Fellow in Medicine to July 15, 1957.

To reappoint:

Mary D. Albert, Ph.D. as Research Fellow in Medicine for one year, beginning November 1.

To appoint:

Dr. Manik S. Kanvinde as Graduate Student Assistant in Pathology for one year, beginning September 24;
Dr. Marie-Louise Levy as Clinical Fellow in Anesthesia, beginning October 29;
Dr. Marc P. Moldawer as Clinical Assistant in Medicine, beginning October 15;
Allan U. Munck, Ph.D. as Research Fellow in Medicine for one year, beginning July 1.

The General Executive Committee also voted to appoint the following as Graduate Student Assistants in Medicine, assigned to Cardiology, for one year, beginning October 1:

Dr. Tsung O. Cheng	Shanghai, China
Dr. Roderick W. Childers	Dublin, Ireland
Dr. Alvaro Currea	Bogotá, Colombia
Dr. Louis R. Dinon	Drexel Hill, Pa.
Dr. Lee Ehrlich	Phoenix, Ariz.
Dr. Alberto J. Guinand-Baldo	Caracas, Venezuela
Dr. Aldo Jacono	Naples, Italy
Dr. Elbridge E. Johnston	St. Johnsbury, Vt.
Dr. Jayme Maltz	Pôrto Alegre, Brazil
Dr. James T. Moy	Wichita, Kan.
Dr. Kappiareth Nair	Bombay 5, India
Dr. Lawrence B. Reppert	San Antonio, Tex.
Dr. Jesus I. Sarkis	Alajuela, Costa Rica
Dr. Kenneth L. Stuart	Jamaica, West Indies

* * *

Dr. Paul C. M. Zamecnik, Physician on our staff, has been appointed Collis P. Huntington Professor of Oncologic Medicine at Harvard and Director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital here at Massachusetts General Hospital. He succeeds Dr. Joseph C. Aub who retired last summer but who is carrying on his research work in quarters in the new Warren Building. Dr. Zamecnik will also serve as Chairman of the Executive Committee of the Departments of Medicine at Harvard Medical School.

Dr. Zamecnik was born in Cleveland, Ohio. He received his A.B. degree (*magna cum laude*) at Dartmouth College in 1933 and his M.D. at Harvard Medical School in 1936. He is a member of *Phi Beta Kappa.* Immediately after graduation he became a medical resident and research fellow at the Collis P. Huntington Memorial Hospital. He interned in medicine at the University Hospitals in Cleveland. Since then he has been closely associated with Dr. Aub.

During 1939-1940 Dr. Zamecnik was a Moseley Travelling Fellow from Harvard Medical School and Visiting Investigator at the Carlsberg Laboratory in Copenhagen, Denmark. On his return to the United States, he served from 1940 to 1942 as a Finney Howell Research Fellow at the Rockefeller Institute for Medical Research in New York. He rejoined the Huntington Memorial staff in 1942, was appointed Instructor in Medicine at the Harvard Medical School, and, at the same time, was named Assistant in Medicine at the Massachusetts General Hospital. In 1946 Dr. Zamecnik was named as Associate in Medicine at Harvard Medical School and, in 1947, a Tutor in the Biochemical Sciences at Harvard. He became Executive Secretary of the Committee on Research and an Assistant Physician at Massachusetts General in 1948. In 1949 he was appointed Assistant Professor of Medicine at the Massachusetts General Hospital, Harvard Medical School, and in 1952 an Associate Professor of Medicine. From 1951 to 1954 he was also an Associate Physician at the Homberg Memorial Infirmary, Massachusetts Institute of Technology. Our Board of Trustees, on July 20, 1956, voted to promote Dr. Zamecnik to the position of Physician on our staff.

In 1946 and again in 1950, Dr. Zamecnik shared the John Collins Warren Triennial Prize, given every three years at Massachusetts General Hospital. The Prize, founded by the late Dr. J. Mason Warren in memory of his father, is awarded to the author (or authors) of the best dissertations on some subject in Physiology, Surgery, or Pathological Anatomy. In 1946 Dr. Zamecnik shared the award with Dr. Fritz Lipmann, and in 1950 with Dr. Ivan D. Frantz, Jr., a former member of the Hospital staff, and Dr. Mary L. Stephenson, a member of his laboratory staff.

Since 1910 both cancer research and teaching concerned with the clinical care of cancer patients at the Harvard Medical School have been centered in the Huntington Memorial Hospital and the Warren Laboratories. The hospital-laboratory combination was one of the first established in the United States dedicated to cancer research and the care of cancer patients. For more than two decades the Hospital and Laboratories were located at the intersection of Huntington Avenue and Shattuck Street in Boston, adjacent to the Harvard Medical School. This building is now occupied by a portion of the offices and laboratories of the Harvard School of Public Health. Since 1942, when the University decided that the care and treatment of cancer patients and research into the causes of the disease could better be served within a large general hospital, the Huntington Hospital and Warren Laboratories have been a physical part of the Massachusetts General Hospital. Since 1951 the hospital and laboratory services have been located in the new Research Building here.

Beyond his contributions as a medical investigator, Dr. Zamecnik has won high regard as a physician and teacher. He is regarded by his colleagues as "one of those rare persons who combine both these disciplines with great success."

In his investigations of chemical processes in both normal and tumor or cancer cells, Dr. Zamecnik has directed his major attention to the incorporation of amino acids into proteins — the building of proteins by body cells.

Proteins — one of the most important constituents of living matter — are formed by the linkage of amino acids (the so-called building blocks of the body), of which 22 are known to exist. The amino acids are joined in intricate patterns by chemical bonds to form peptide chains and the more complicated protein structures. Proteins form the fibres that provide the contracting elements in muscles; they spread as a shield over the skin surfaces to protect tissues lying beneath; as enzymes, they aid in the digestion of foodstuffs and synthesis of the constituents of new cells; as hormones, they direct the rate of body metabolism; and as antibodies in the blood stream, they protect the body against viral and bacterial diseases.

Suspecting there might be a linkage between the abnormal growth of cells (as in cancer) and the formation of proteins, Dr. Zamecnik and his group, in recent investigations, have observed that the rapid conversion of amino acids to proteins takes place in the microsomes — finely granular elements of protoplasm — and in tumor cells at a much higher rate than in cells of normal tissue from which they originated.

Much of Dr. Zamecnik's successful research has been through the use of radioactive "tagged" amino acids. He was one of the early researchers to use these nuclear tools in the study of normal and abnormal tissue growth. By replacing non-radioactive carbon in the amino acid molecule with Carbon 14, which is radioactive, Dr. Zamecnik and his group have been able to study not only the incorporation (synthesis) of the amino acids into proteins, but the rate of synthesis as well.

His current work is concerned with the chemistry involved in the formation of the linkages — peptide bonds — between the amino acids in the formation of proteins. It is a field in which a fundamental abnormality of cancer may well be involved.

Dr. Zamecnik is a member of the American Academy of Arts and Sciences, the American Association for Cancer Research, the Association of American Physicians, and the American Society of Biological Chemists.

* * *

The following letter was sent to all members of the Staff on October 9:

As you know, we are proud of the fact that the Massachusetts General Hospital has not had to increase room and board or Clinic rates in nearly five years, in spite of the fact that our annual expenses (excluding research) have gone up from $7.5 million to nearly $10 million and our annual free service from $1 million to $1.5 million during that time. We are at the moment charging the lowest board and room rates among the teaching hospitals of Boston. This has been made possible not only through rigid economies but also, in large part, with your greatly appreciated help, by the increase in occupancy over this period and, in addition, in the past year, by the magnificent support given the Hospital by the National Foundation for Infantile Paralysis.

We have now reached the point where no substantial increase in occupancy is either desirable or possible. Meanwhile, we have had substantial increases in salaries and wages and in the price of food, drugs, and general supplies, the full effect of which will not be felt until the current fiscal year which began October first, just past. Consequently, we have no choice now but to increase charges.

The Board of Trustees, at its meeting of October 5, 1956, authorized an average increase of $3 a day in room and board rates in all units of the Hospital, and of 50 cents per Clinic visit, effective October 15, 1956. This will bring our Ward rate for room and board to $19 a day and our Clinic rate to $3 a visit. These rates are comparable to those already being charged by other teaching hospitals in the city. We shall, of course, continue the policy of adjusting these charges downward for individuals in need.

All of us are sorry to have to make these increases, but the Board is confident you will understand the reasons for them and will join in our efforts to keep the occupancy as level as possible and to practice the strictest economy consistent with high standards of service.

Sincerely yours,
Dean A. Clark, M.D.,
General Director

MASSACHUSETTS EYE & EAR INFIRMARY

This year marks the 10th anniversary of the Boston Eye Bank. During these 10 years the services of the Eye Bank have played a vital role in providing eye tissue for the rehabilitation of nearly 200 blinded individuals through corneal transplantation. In addition, many eyes, which could not be used for transplantation, have been distributed for research studies into the causes of other blinding diseases, notably glaucoma and separation of the retina.

To accomplish this goal of providing necessary eyes for these vital purposes, a continuing program of education of the public and of the medical profession in general has been carried out. All modern means of communication have been utilized — such as TV, radio, newspapers, magazines, and posters. Talks before groups, illustrated by a technicolor moving picture with sound, have proved very popular and instructive. The success of the program has been due to the wonderful help, financial and otherwise, of many individuals and groups. Special credit is due to the young women who have so capably filled the position of Executive Secretary, with its many great responsibilities. The Boston Junior League gave unstintingly in time, effort, and finances, in the first years of the Eye Bank, thus assuring much of its success over these 10 years.

The Eye Bank is a nonprofit organization, dependent on voluntary contributions, and finances have been a major source of concern on many occasions. Along with public education and appeals for donation of eyes have gone appeals for financial contributions. The Eye Bank takes justifiable pride in the great good it has helped to accomplish for the blinded, while carrying on its services on a remarkably low budget. However, finances remain a major problem.

At the present time, nearly 70 hospitals throughout New England are affiliated with the Eye Bank, in the program of making eyes available. Without the interest and cooperation of the personnel of these institutions, the Eye Bank could not function. In this connection, special thanks are due the staff of the Massachusetts General Hospital.

Transportation of eye tissue has been accomplished through the voluntary and cooperative efforts of the airlines, railroads, and the Red Cross Motor Corps. This has simplified what could well be a major problem, and these agencies have earned the sincere gratitude of the Eye Bank.

With the ever-widening horizon of transplantation surgery, advances in operative technique and the accumulating knowledge from research, it is evident that the Eye Bank has come to occupy a most important position in the field of visual restoration and rehabilitation.

Aside from the necessary financial support, the future success of the Eye Bank rests on the receipt of eye tissue which, in turn, depends upon an informed public and interested medical profession. A program of continuing information and education is necessary.

Garrett L. Sullivan, M.D.,
General Director of the Boston Eye Bank

On October 15, the Executive Committee of the Massachusetts Eye and Ear Infirmary voted that:

Dr. Endre A. Balazs of the Retina Foundation, formerly a Fellow in Ophthalmology, be given the title of Biochemist in Ophthalmology;

Dr. Edward C. Ferguson be appointed as Fellow in Ophthalmology;

Dr. Kevin Hill be appointed as Fellow in Ophthalmology, retroactive to January 1;

Marie A. Jakus, Ph.D. of the Retina Foundation, formerly a Fellow in Ophthalmology, be given the title of Biologist in Ophthalmology;

Harold Kern, D.Sc. of the Howe Laboratory of Ophthalmology be given the title of Biochemist in Ophthalmology;

Jin Kinoshita, Ph.D. of the Howe Laboratory of Ophthalmology be given the title of Biochemist in Ophthalmology;

Dr. Pei-Fei Lee be appointed as Fellow in Ophthalmology;

Leona Zacharias, Ph.D., formerly a Fellow in Ophthalmology, be given the title of Biologist in Ophthalmology.

Ether Day was observed this year with the customary awarding of Service Pins. The occasion took place in the Moseley Rotunda, with Dr. Clark acting as master of ceremonies and awarding the pins. In his opening remarks Dr. Clark spoke of the "oneness of the Hospital", with every department working for the Hospital as a whole. Mr. Ralph Lowell brought greetings from the Board of Trustees and expressed the appreciation of the Board for the years of faithful service on the part of so many who are associated with the Hospital. Mr. David C. Crockett gave us a word panorama of the genesis of the new Warren Building, from the original introduction of the idea in 1903 to the present 12-story building on Charles Street.

Of the nonprofessional group, 144 received pins for 5 years of continuous service at M.G.H., 49 for 10 years, 8 for 20 years, and 9 for 30 years.

Members of our professional staff who received 25-year pins numbered 9 this year.

Three members of the Ladies' Visiting Committee were given special recognition for 50 years of volunteer service to the Hospital. They are Mrs. Richard W. Hale, Mrs. Arthur D. Hill, and Mrs. Sherman Miles.

Following these ceremonies, refreshments were served and all were invited to go on a tour of the new building.

* * *

The Reverend William B. Spofford, Jr. began his duties as Supervisory Protestant Chaplain at Massachusetts General Hospital on October 15, succeeding the Reverend James H. Burns.

The son of an Episcopal clergyman, Mr. Spofford comes to Massachusetts General from the position as Director of the Western Extension Center of the National Town-Country Church Institute of the Episcopal Church in Weiser, Idaho. Prior to that, he was Chairman of the Department of Sociology at Park College, Parkville, Missouri, and Associate in Research and Community Relations at the Roanridge Training Center in Missouri.

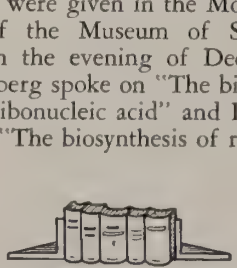
Mr. Spofford is a graduate of Antioch College, the Episcopal Theological School in Cambridge, Massachusetts, the University of Michigan School of Social Work, and the Yale School for Alcohol Studies. He was the first recipient of the General Service Fellowship of the Department of Pastoral Services of the National Council of Churches. He did his clinical training at the Topeka State Hospital and the Kansas Boys' Industrial School in Topeka, Kansas. His first assignment following ordination in 1944 was as Rector of the Church of the Good Shepherd in Boston, and Assistant Social Service Secretary of the Diocese of Massachusetts.

Mr. Spofford's major claim to fame, he states, is that he is the father of five sons, three of whom are triplets. He says his ambition is to sell them as a complete infield to the New York Yankees a few years hence, and then to spend the winter months helping the venerable Casey Stengel continue to produce world champions.

* * *

The Warren Triennial Prize Lectures of the Massachusetts General Hospital for 1956 were shared between Dr. Arthur Kornberg, Professor of Microbiology, Washington University School of Medicine, and Dr. Severo Ochoa, Professor of Biological Chemistry, New York University College of Medicine.

The lectures, which took the form of a symposium on the biosynthesis of nucleic acid, were given in the Morse Auditorium of the Museum of Science in Boston on the evening of December 5. Dr. Kornberg spoke on "The biosynthesis of deoxyribonucleic acid" and Dr. Ochoa spoke on "The biosynthesis of ribonucleic acid".



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Currens, J. H.
Medical treatment of hypertensive vascular disease.
Am. Pract. & Digest Treat. 7:1237-1241.

General Surgery

Cavanagh, C. R., and Parkhurst, E. C.
The management of acute cholecystitis.
Ann. Surg. 144:188-190.

Churchill, E. D.
General education in Surgery. (Editorial)
Ann. Surg. 144:506.

McDermott, W. V., Jr., Wareham, J., and Riddell, A. G.
Bleeding esophageal varices: A study of the cause of the associated "hepatic coma".
Ann. Surg. 144:318-335.

Sweet, R. H.
A consideration of certain benign lesions of the esophagus.
Surgery 40:447-458.

Sweet, R. H.
Excision of diverticulum of the pharyngo-esophageal junction and lower esophagus by means of the one stage procedure.
Ann. Surg. 143:433-438.

Laboratory Science

Isselbacher, K. J.
Enzymatic mechanisms of hormone metabolism. II. Mechanism of hormonal glucuronide formation.
In Recent progress in hormone research, New York, N. Y., Academic Press, Inc., vol. XII, pp. 134-151.

Neurology, Neurosurgery, and Psychiatry

Matarazzo, J. D., Saslow, G., and Guze, S. B.
Stability of interaction patterns during interviews: A replication.
J. Consult. Psychol. 20:267-274.

Saslow, G., and Peters, A. DeH.
A follow-up study of "untreated" patients with various behavior disorders.
Psychiatric Quart. 30:283-302.

White, J. C.
The autonomic nervous system; the neurosurgical relief of pain.
In Christopher's textbook of Surgery, Lloyd Davis, M.D., Editor, Philadelphia, W. B. Saunders Company, 6th edition, pp. 1415-1431.

White, J. C.
The neurosurgical treatment of angina pectoris.
J. Chron. Dis. 4:388-401.

White, J. C.
Role of sympathectomy in relief of pain in the extremities.
Lyon chir. 52:42-52.

White, J. C., Richardson, E. P., Jr., and Sweet, W. H.
Upper thoracic cordotomy for relief of pain: Postmortem correlation of spinal incision with analgesic levels in 18 cases.
Ann. Surg. 144:407-420.

Miscellaneous

Webster, R. C., and Coffey, R. J.
Social in-security — the trap awaiting the young M.D.
J.A.M.A. 162:231-235; 426-430.

BIOGLET

Dr. Judson G. Randolph, Assistant Resident in Surgery — born in Macon, Georgia, July 19, 1927; U.S. Navy: Seaman 1st Class, 1945-46; B.A., Vanderbilt University, Nashville, Tennessee, 1950; M.D., Vanderbilt Medical School, 1953; Intern in Surgery, Strong Memorial Hospital, Rochester, N.Y., 1953; Assistant Resident in Pathology, Vanderbilt Hospital, 1954; Assistant Resident in Surgery, Children's Medical Center, Boston, Massachusetts, 1955.

* * *

New addresses: —

Dr. Crawford S. Brown (a.r.p. *D.* 1952), 8218 Wisconsin Ave., Bethesda 14, Md.

Dr. Robert B. Giles, Jr. (a.r.p. 1956), Southwestern Medical School, University of Texas, 2211 Oak Lawn Ave., Dallas, Tex.

Dr. Craig S. Lichtenwalner (*M.* 1950), USOM, H & S, Box 32, Navy 150, c/o FPO, San Francisco, Calif.

Dr. Frank B. Norbury (*M.* 1949), 1631 Mound Ave., Jacksonville, Ill.

Lt. Jens G. Rosenkrantz, MC, USNR (*S.* 1954), U.S. Naval Station, Navy 103, c/o FPO, New York, N.Y.

Dr. Howard S. Yaffee (a.r.p. *D.* 1953), 1919 Northwood Apartments, North Campus, University of Michigan, Ann Arbor, Mich.

* * *

Brief bits: —

Dr. Edward B. Benedict attended the first meeting of the season of the New England Roentgen Ray Society, held in Cambridge on October 19. He discussed a paper by Dr. Bernard S. Wolf entitled "Lesions of the lower esophagus". Dr. Benedict has been appointed a member of the Board of Advisors of the Boys' Clubs of Boston.

On October 19, Dr. Edward D. Churchill gave the 7th Annual Alfred A. Strauss Lecture, at the University of Washington School of Medicine, Seattle, Washington. His subject was "The nature of wounds and wound healing". On returning from Seattle, Dr. Churchill gave a glowing account of the MGH graduates in that area. Among others, he saw Dean Crystal (*W.S.* 1942), Chuck MacMahon (*E.S.* 1938), Frank Milam (*S.* 1949), and, of course, Bob Coe (*S.* 1951), who had just arrived in the Northwest.

On October 28, Dr. Erich Lindemann addressed the Josiah Macy, Jr. Conference on Medical Administration. His topic was "Mental health and medical administration".

On October 18, Dr. Richard H. Sweet addressed the Academy of Medicine of New Jersey, at Newark, New Jersey, on the subject "The diagnosis and treatment of mediastinal tumors".

On October 16, Dr. Arthur L. Watkins gave the Lawrence Barnes Hayward Memorial Lecture, at the University of Vermont College of Medicine, in Burlington, Vermont. His address was titled "Electromyography as a diagnostic tool". Dr. Watkins also addressed the third year medical class at the University on the subject "Physical Medicine and rehabilitation".

Dr. James C. White was appointed a member of the National Institutes of Health Neurology Study Section, by the Surgeon General, last July.

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

The recent tea, given by the MGH Staff Wives on October 17 in Bartlett Hall, was most gratifying. The feeling of general good will was something that all the Staff Wives and our visitors from other lands will long remember. Fifty-nine different countries were represented at the tea. It is remarkable that the Hospital has attracted such an international group, and we all benefit from this cosmopolitan association.

Mrs. Daniel S. Ellis was chairman for this occasion, ably assisted by Mrs. Robert R. Linton as her vice-chairman. Working with these two ladies were Mrs. Henry K. Beecher, Mrs. Chester N. Frazier, Mrs. Charles B. Burbank, and Mrs. Claude E. Welch.

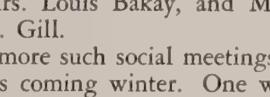
The members of the Ladies' Visiting Committee who poured were Mrs. Floyd H. Blackman, Mrs. Reginald Jenney, and Mrs. Morrill Wiggin. The Staff Wives who poured were Mrs. Howard Ulfelder and Mrs. Leland S. McKittrick.

Special hostesses for the tea were Mrs. Robert S. Shaw, Mrs. Richard C. Austin, Mrs. John P. Bunker, Mrs. John W. Cass, Jr., Mrs. Jackson M. Thomas, Mrs. Bartlett H. Stone, Mrs. C. Miller Fisher, Mrs. Laurence L. Robbins, Mrs. Victor A. Politano, Mrs. Louis Bakay, and Mrs. Benjamin F. Gill.

Two more such social meetings will be held this coming winter. One will be a morning coffee on Tuesday, January 15, and the other a tea on April 10. The Staff Wives hope that all will join us in the effort to make our visitors from other countries feel at home at the Massachusetts General Hospital.

The Morning Chorale, a group of 28 women from Belmont, Brookline, Cambridge, Lexington, and other surrounding towns, directed by Mary Loud of Lincoln, will once again sing a Christmas program in the Chapel, on Wednesday, December 12, at 3 P.M.

Watch for further announcements from the Music Committee, as they plan a series of interesting programs for the coming season. Mrs. John D. Crawford, Chairman of the Music Committee, is doing a very thorough job in making these arrangements.



This interesting letter, beginning "Dear folks", has come from Captain Oscar S. DePriest, III (*S.* 1955). His address is 279th Station Hospital, APO 742, c/o Postmaster, New York, N. Y.

To begin with, after leaving Boston in the middle of June, my family and I motored home

No. 62 in a series of Staff photographs

Dr. Paul C. M. Zamecnik, Physician — newly appointed Director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital at the Massachusetts General Hospital

by way of Washington. We had a much needed rest, but the vacation was all too short and was followed by an almost unbelievable experience at Fort Sam Houston, Texas.

I arrived at San Antonio on July 5, at 8:30 A.M. The temperature was 105 degrees. At this point I was certain I had made a mistake in volunteering for the Army. Nevertheless, after regaining my breath, I managed to find my way out to the Fort and was assigned barracks, field equipment, mess units, etc., all at once. My barracks — and they were indeed barracks — were renovated, but I use the word "renovated" very loosely. They were enlisted men's quarters which apparently had not been opened since World War II. They were located one mile from the quadrangle of the Army Medical Service School, and we grew so fond of them that we called the area Andersonville. There were 40 of us in the barracks, with bathroom facilities for 3. The one good aspect about the place was that there was a swimming pool right outside, and if you did not mind the risk of chloride poisoning (the water was very heavily chlorated) you could have a fairly enjoyable time there.

When I say it was hot in Texas, I mean it was really hot. The pleasantest time of the day was between 6 and 7 A.M. After that, the temperature rose rapidly, reaching great heights round 4 in the afternoon and staying there until 9 or 10 at night. Happily, at the time when the temperature reached its peak, the Officers' Club opened. Since this was one of the few air-conditioned places on the Base it was, needless to say, heavily and constantly patronized. The only other air-conditioned place was the theatre, and under these conditions even "Rock around the clock" looked good. I could give you more about some of the experiences in Texas while training to be a soldier, but. . . . On these matters I could write volumes — for instance, concerning the infiltration in close combat course at Camp Bullis — so you can perhaps imagine how pleased I was to be assigned to Germany. At that time I would have been pleased to have been assigned anywhere outside of Texas. On the day I left San Antonio it was 104 degrees, thus you have some idea of the mean summer temperature.

My next stop was at Fort Dix, New Jersey, and, after spending several miserable humid days there, we left for Germany. By this time I realized that I had been assigned to Berlin and, in view of the stories I had heard, I was not particularly overwhelmed with joy. Sixteen hours later, after a very ragged ride in a Navy Mats plane which lacked quite a few of the basic essentials of comfort, we landed in Frankfurt. From there a train took us through the Iron Curtain and we arrived in Berlin on 30 August at 7:30 A.M.

To say that I am surprised at and pleased with my assignment in Berlin would be a great understatement. This is perhaps one of the most beautiful cities I have ever seen. The people are friendly and courteous, and appear to be very appreciative of all we have tried to do for them. This is in contrast with some of the impressions we have received outside this Command. My job is Assistant Chief of Surgery, and the work here is very interesting. Our major procedures are in the category of thyroidectomies, and otherwise most of our work consists of the ever-present pilonidal sinuses, hernias, appendectomies, ingrown toenails, and a multitude of strains, sprains, and backaches. Nevertheless, I enjoy every minute of it. In addition to this, I am Chief of the Laboratory Service, and I have spent a great deal of time trying to reorganize the blood bank on the basis of the system we have at the M.G.H., thanks to the help of Drs. Rasmussen and Shaw. Our progress in this field is slow but steady.

With regard to the fact that we are the only American unit behind the Iron Curtain, one really does not notice it. We do not bother the others and they do not bother us. The town is so large that you never get the feeling of being restricted. The contrast between East and West Berlin is so great and so unbelievable that any discussion I might attempt would be so hard to believe I will not even make the effort.

I forgot to mention that Walter Klingensmith and Frank Austen also shared my trials and tribulations in Texas. Walter is now in Italy and Frank is at Walter Reed. One of the pleasantest coincidences is the fact that Jan Koch-Weser is now assigned to this hospital with me. Needless to say, this is like a breath from home, and together we are seeing Berlin.

⁂

THE MOSELEY PLATEAUS

While climbing the Matterhorn this past summer, my guide drew my attention to two small plateaus called the "Lower and Upper Moseley Platten". He told me that in 1879, in the vicinity of these two plateaus, Dr. William O. Moseley of Boston had fallen to his death. Dr. Moseley was an Intern on our West Medical Service in 1878. By the attachment of his name to these two plateaus Dr. Moseley's name is perpetuated in Switzerland, as it is in Boston by the Moseley Building of the Massachusetts General Hospital.

Dr. Moseley was one of the first to climb the Matterhorn, which had first been ascended in 1865 by a group of eight mountaineers, four of whom perished during the descent. The two "Moseley Platten" are located a short distance above the upper Matterhorn Hut, a small shelter at a height of 13,100 feet and 1,700 feet below the summit. Each of the two plateaus is reached by a nearly vertical climb in a so-called chimney. The two plateaus jut out slightly from the mountain, so that one looks directly down, thousands of feet, to the Matterhorn glacier. Moseley, according to the records at the Massachusetts General Hospital, on his way from the summit, slipped and fell down 2000 feet. A guide had accompanied him, but he had declined to be tied to the guide by a rope.

Walter F. Lever, M.D.,
Associate Dermatologist

THE NEWS

No. 163 Boston, Mass January 1957

DEDICATION OF THE NEW WARREN BUILDING

Our new 12-story, $4 million Warren Building was dedicated on the afternoon of December 3. Invited guests assembled in the lobby of the building at 2:45 for the dedicatory exercises. Seated on the platform were Right Reverend Robert P. Barry, Dr. Edward D. Churchill, Dr. George Packer Berry, Dr. Dean A. Clark, Dr. Wilder G. Penfield, Mr. Phillips Ketchum, Mr. Ralph Lowell, and Mr. Francis C. Gray, Chairman of our Board of Trustees, who acted as Chairman for the occasion.

Mr. Gray asked Monsignor Barry, a trustee of the Hospital since 1941, to offer the invocation, after which Mr. Gray opened the exercises with the following remarks:

We have asked you here today to thank you, and through you the thousands of other donors who could not come, and also to see this superb building which your interest, generosity, and belief in medical science has made possible. The building as originally planned was for pathology, neurology, psychiatry, and dermatology. Then the neurosurgeons made a strong case to be included and that added another floor. Later still, the trustees became convinced that some additional private and semi-private beds were greatly needed, as well as doctors' offices. So it grew to its present height — but your contributions went only to the five medical science floors. To those floors came gifts from far and near — from corporations and foundations, the United States Public Health Service — and above all from the friends of the Hospital. It may be of interest to note that charitable foundations outside the Commonwealth showed their confidence in the Hospital by contributing over one-third of the sum required.

The building houses not only the marvels of modern scientific equipment, brilliant doctors and scientists, but also your hopes and ours, that from the studies and investigations that take place within its walls, will emerge sources of knowledge to bring lasting benefit to mankind.

So let me, on behalf of the trustees and the staff, express our heartfelt gratitude to you — one and all — and to the warm and generous friends of the M.G.H. wherever they may be.

Following his opening remarks, Mr. Gray said that Mr. Phillips Ketchum, President of the MGH Corporation, and Mr. Ralph Lowell, a member of our Board of Trustees since 1940 and Chairman of the Building Committee, were not going to address the audience, but he asked them both to rise and take a bow.

Mr. Gray then introduced Dr. Churchill with these words:

Chief of the Surgical Services of this Hospital and John Homans Professor of Surgery at the Harvard Medical School, Dr. Churchill was Consulting Surgeon for the Mediterranean Theatre in World War II. His judgment and knowledge are constantly sought by foreign governments as well as our own, and, incidentally, he has just returned from a trip to the Middle East for the Defense Department in Washington. But today we ask him to turn historian and tell us of the contribution, so deeply woven into the fabric of the M.G.H., by generations of the distinguished Warren family for which this building is named.

Dr. Churchill's address:

My contribution to these exercises will be confined to the recording of an incident in the life of J. Collins Warren, a prime mover in the building of the present Harvard Medical School, and a revered member of the surgical staff at this Hospital. In 1867 young Coll Warren, in the course of medical studies abroad, had spent the spring semester in Vienna. He was looking forward to a summer in Switzerland and then to a return to Vienna for more advanced work in surgery and pathology. On July 25th, 1867, the work of the term having been completed, he left Vienna and reached Munich the following day. An event then occurred which threatened to cut short this important phase of his professional education. A not wholly unexpected cable message was relayed to Munich and through prompt action of the German police force reached Coll Warren at his hotel around midnight. The cable asked that he return home immediately because his father's illness had become critical. By four in the morning Coll was aboard the Vienna-Paris express on his homeward journey.

By catching the steamer, *City of London,* sailing out of Liverpool on the 31st, he arrived in Boston in time to see his father, J. Mason Warren, several days before his death. This occurred on August 19th, 1867.

Coll Warren was now twenty-five years of age and in his own words, "At the very outset of my career I was suddenly deprived of aid and counsel such as only a father can afford." An immediate decision had to be made whether to remain at home and at once take up the established practice of his father, or to return to Europe and go ahead with plans to obtain a well-rounded education. The opportunity to step into a going practice was a strong temptation to the young Warren. Young surgeons seeking to perfect themselves are ever pressed by curious friends as to when their seemingly endless preparation will come to an end and they will start the business of life.

Faced with this decision, young Coll sought the advice of Oliver Wendell Holmes, an old neighbor and friend of the family. The Autocrat was not a man to waste words in such circumstances. "A Warren," he said, "does not measure his professional success by patronage, as does a corner grocer."

"This was the keynote which persuaded me," Dr. Warren wrote in his reminiscences many years later. "I decided to return to Europe and complete the plan of education which had been formulated a year previously." Passage was booked on the Cunard steamer *China*. and he left Boston on October 25th.

The associations with Billroth, Langenbeck, Virchow, Cohnheim, and ultimately with Joseph Lister gave lasting form to his professional life. I have told elsewhere of the friendship with Henry P. Bowditch which developed in Paris during the spring of 1869 at the Collège de France. These two men brought scientific medicine to Harvard and through their efforts the present Medical School came into being.

And so the pattern of the life of J. Collins Warren was shaped by the proud standards of the Warren family. A friend of the family wrote in 1854: "On one occasion I saw in the surgical amphitheater three generations of Warrens, John C., J. Mason and J. Collins, the latter a boy of twelve." Holmes once spoke of the wisdom which accrued to a family doctor from being able to "triangulate" a family, meaning to observe it through three generations. Possibly he was thinking of his advice to young Coll.

The standards and values that were so productive in the life endeavor of J. Collins Warren as an individual and in the many works of the Warren family are equally valid for the Hospital. Against the background of our highly materialistic society these standards are likely to be confused or lost altogether. Today in giving the Warren name to this building the Hospital has again expressed a conviction that its own professional distinction cannot be measured by patronage. The Hospital is not a corner grocery. It has again given evidence of its intent to press ahead with educational undertakings and carry its share of the advancement of the healing arts. It is fitting that the name Warren once again be given to a major building of the Hospital. It is especially appropriate that the building which will carry this honored name is not primarily for the extension of practice, but provides space and gives emphasis to medical science and teaching.

Then followed Mr. Gray's introduction of Dr. Berry, with these words:

The Harvard Medical School was started in 1783. Thirty-eight years later the M.G.H. opened its doors and there began an affiliation, the benefits of which to the progress of this Hospital are incalculable. No forward step such as the opening of this building would be complete without the presence of the Dean of the School, and we are happy to have George Berry — a friend held high in our affection and regard — who, in the seven short years he has been the Dean, has brought strength to the School, to its teaching hospitals, and to the advancement of medicine.

[We regret that, since Dean Berry spoke from notes, we are unable to give the full text of his deeply moving address. However, he kindly sent us a copy of this portion of his speech. —— *Editor*]

At Colorado Springs, at the opening session of the 1956 Institute on Evaluation of the Student: The Appraisal of Applicants to Medical Schools, I tried to focus on the essential quality of the good teacher — his capacity to give of himself. For emphasis I chose some lines from *The Prophet* by Kahlil Gibran.

Several participants at the Institute asked me to send them the lines quoted. I take this convenient way of complying, and because I was also asked about Kahlil Gibran, I add a word about this remarkable man.

Kahlil Gibran (1883-1931) — poet, philosopher, artist — was born in Lebanon, a land that has produced many prophets. He came from a family of wealth and culture. Millions of Arabic-speaking peoples familiar with his writings in that language regard him as the genius of our age.

He visited the United States when he was twelve, but returned shortly to pursue his education in Syria. As a young man, he went to Paris to study at the Collège de Beaux Arts. He lived for the last twenty years of his life in New York City.

Gibran's earlier prose poems were written in Arabic, but by the time he was twenty he had adopted English as his medium. Before his untimely death in 1931, his fame and influence had spread far beyond the Near East. His poetry has been translated into more than twenty languages. His drawings and paintings have been exhibited in the great capitals of the world. Auguste Rodin compared his work to that of William Blake.

The Prophet was published in 1923. Since then, the American edition, published by Alfred A. Knopf of New York, has been reprinted more than three score times. This charming edition contains twelve illustrations reproduced from Gibran's mystical drawings. In *The Prophet,* the poet discusses particularly Man's relation to his fellow Man. Many find in his majestic language an expression of the deepest impulses of Man's heart and mind. In a later poem, *The garden of the Prophet,* published in 1933, Gibran deals with Man and Nature.

The lines from *The Prophet* quoted at Colorado Springs come from the eighteenth section, "On teaching":

"Then said a teacher, Speak to us of Teaching.

"And he said:

"No man can reveal to you aught but that which already lies half asleep in the dawning of your knowledge.

"The teacher who walks in the shadow of the temple, among his followers, gives not of his wisdom but rather of his faith and his lovingness.

"If he is indeed wise he does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind.

"The astronomer may speak to you of his understanding of space, but he cannot give you his understanding.

"The musician may sing to you of the rhythm which is in all space, but he cannot give you the ear which arrests the rhythm nor the voice that echoes it.

"And he who is versed in the science of numbers can tell of the regions of weight and measure, but he cannot conduct you thither.

"For the vision of one man lends not its wings to another man.

"And even as each one of you stands alone in God's knowledge, so must each one of you be alone in his knowledge of God and in his understanding of the earth."

Mr. Gray then introduced Dr. Clark as follows:

Ten thousand people cross the threshold of the Hospital every day, 23,000 patients are cared for during the year, emergencies such as the polio epidemic of a year ago have to be met, and new buildings must be built. All in all, the M.G.H. is a busy place and its General Director a busy person, not only in the running of the Hospital but also in responding to requests from the outside — such as his service on a Presidential Commission a few years ago to survey the health needs of the nation. I suspect that this new building is the apple of Dr. Clark's eye, and we have asked him to tell us what it will mean to the Hospital.

Dr. Clark's address:

The Warren Building is a reality today. The months and years of planning and construction are over and the activities in the new building are progressing steadily. The vision, cooperation and generosity of many people, both within the Hospital and outside, have made possible this latest achievement in the development of the Massachusetts General Hospital.

Even as we contemplate this most recent accomplishment with just pride and gratitude, we realize that we cannot stand still, we must constantly move forward to advance the tradition of service to humanity to which the Massachusetts General Hospital has been dedicated for nearly a century and a half.

Although the physical plant of the Hospital has grown from a single building to more than twenty, each designed and equipped for its particular function, the original objectives of the Hospital remain unchanged today except as they are expanded to meet the broader horizons of present-day medical care. These objectives are to care for the sick, to provide for the training and teaching of future doctors, nurses, and other professional workers in the health field, to encourage research, to advance the development of new knowledge and methods of preventing disease, to extend the Hospital's services into the community, and to assist the disabled to independence through rehabilitation.

The very age of some of the buildings points to the necessity for constant modernization. In June of 1950, at the request of the President of Harvard University for a description of future financial requirements, the Massachusetts General Hospital reported needs totalling $21,100,000. A survey made this past summer shows a total of $44,500,000 as a more accurate figure for future building and endowment requirements based on 1956 building costs. Of this only $1,000,000 would be utilized for new or additional beds. The balance is essentially for renovation and adaptation of the Hospital to its changing role in the community.

Mr. Gray then gave this introduction of Dr. Penfield:

We consider ourselves especially fortunate to have as our chief speaker on this occasion Dr. Wilder Penfield, Director of the Montreal Neurological Institute, whose work on the physiology of the brain has received worldwide recognition. In his earlier years and before he moved to Canada, Dr. Penfield played on the Princeton football team, was a Rhodes Scholar, was blown up on the *Sussex* during World War I, and received his training in the Presbyterian Hospital in New York. In his spare time he writes historical novels and currently is preparing one on Hippocrates. A member of the Royal Society in England and recently the recipient of the Order of Merit from Queen Elizabeth II, beloved and respected by all who know him, Dr. Penfield is universally regarded as the most distinguished neurosurgeon in the British Dominions.

Dr. Penfield's address:

The Reverend Robert Barry has asked a blessing on this new building and on the hands of those who work in it. What is there that I can say? My thoughts were expressed so well 3,000 years ago by the writer of Proverbs, in words that will never die:

Wisdom hath builded her house, she hath hewn out her seven pillars:

I wisdom dwell with prudence, and find out knowledge of witty inventions.

Come, eat of my bread, and drink of the wine which I have mingled.

For by me thy days shall be multiplied, and the years of thy life shall be increased.

There are many paths that lead to the house that wisdom builds. Walter Cannon in the last years of his life spoke of the wisdom of the body. It is this wisdom that we must hope to understand. But animal physiology is not enough. There is a wisdom, too, of the mind.

Some say that the mind and the body are one, and some say that they are two but joined together in a mysterious union. But whatever the monist may believe, and however the dualist may integrate biological fact with religious belief, each must approach his scientific work objectively, without prejudice or bias. For both of them, I believe, the final words of the author of Proverbs have deep meaning:

The fear of the Lord is the beginning of wisdom.

And there is another wisdom that we should consider carefully in these troubled times—the wisdom of man's behaviour. Considering this, medicine may well look abroad to wider horizons, taking her proper responsibility with religion and education, law and politics. Behaviour and misbehaviour are, in certain sense, no more than function and derangement of function in body and mind.

These three things we must study and must learn to understand: Man's body, his mind, his behaviour — three aspects of one central problem, a problem that belongs in the house of the seven pillars where wisdom may be found, even medical wisdom. It is for us to gather knowledge of normal structure and function. We must analyze disease, unreason, misbehaviour.

In this new building for medical science, certain special disciplines have places of their own. Pathology maintains the laboratory to which all clinicians should come to see their problems in retrospect. Neurologists, including, of course, neurosurgeons, may make direct approach to the brain, psychiatrists to mind and behaviour. The dermatologist will find his own peculiar pathway to the truth. His conclusions may also be profound, though his observations are only skin deep.

Sir William Osler gave the Shattuck Oration to the Massachusetts Medical Society in Boston in 1893. Afterward he wrote about the evening, as follows: "While the President was anointing the orator — looking over the 1200 men in the big Mechanics Hall, I received the impression that never before had I seen so large a collection of doctors with faces indicating breeding and pasture."

Yes, "breeding" and the ability to get the best out of your lovely New England pasturage characterize the men and the women in many walks of life here. We offered our best inducements, not long ago, to your brilliant neurologist and neuropathologist, Raymond Adams, hoping he would move to Montreal. Our plan of abduction failed, alas. But we understand many reasons why he preferred to remain here and wish him well, with James White and William Sweet and our other friends as they enter each on his own work in a sort of clinical institute in this new building so well integrated into the service of this great General Hospital.

It was in 1821 that Bostonians and their wives drove in horse and buggy along the banks of the Charles to see this Hospital open its doors for the first time — doors that have never been shut to the public, day or night, since then. How all the best people who had helped to build it must have admired the Bulfinch Building, with its curving dome and graceful white pillars rising above the river. It was a splendid monument to the generosity of those who could "indulge in the true luxury of wealth, and the pleasures of charity". This quotation is from the letter of James Jackson and John C. Warren — a letter described by James White, in a terse negative, as "too good not to quote."

It was more than a century later, in 1912, that the Hospital trustees opened the doors to medical science. They altered the East Wing then and established a "full-time teaching and investigative medical clinic" under the leadership of David Edsall. Edsall selected, from among the men he found on service, those who might serve his purpose: Walter Palmer, James Means, Paul White, George Minot. Those are illustrious names in the history of medicine now. Then, they were no more than house officers. If academic medicine had entered the Hospital at some earlier date, would it have discovered interns of the same potential ability? Must greatness depend on lucky chance and opportunity? Other brilliant names appeared in Edsall's department and in allied departments: Fritz Talbot, James Gamble, Joseph Aub, Louis Newburgh, Homer Wright, Roger Lee, Walter Bauer, Fuller Albright. Scientific medicine had moved in with "bag and baggage".

Ten years later, in 1922, came another memorable day, when a teaching and investigative clinic was established, and Edward Richardson as Surgical Chief set about farming out the well-selected young men who stood in his way. He sent them for special training in the basic sciences, as Edsall had done: Churchill, McIver, James White, Linton.

Then, after a short period, Richardson handed on his responsibility as Surgical Chief to Edward Churchill, and Churchill carried the plan along with great distinction, making physiology, pathology, bacteriology, endocrinology the part-time preoccupations of active operating surgeons. The plan has worked well, as Cope and Lyons, Allen, Smithwick, Freeman. McKittrick and other equally distinguished surgeons soon proved.

A special assignment scheme also met with remarkable success. Thus, Henry Beecher has brought basic research into anesthesia, Joe Meigs into gynecology. But the names that I should mention are far too numerous. Some have come to be household names among surgeons throughout the world: Jason Mixter. neurosurgeon; Smith-Petersen, orthopedist.

Was it a revolution during the last half century that I have been describing? Or was it the inevitable flowering of a hospital with a great tradition, backed by people who have always sought in all sincerity the best in life and thought?

The adoption of a satisfactory form of full-time practice for clinicians, called the Harvard Full-Time Scheme, certainly paved the way for better hospital practice. The planning of the trustees and their selection of the hospital directors — Howard, Washburn, Bigelow, Faxon, and Clark — were likewise most important.

But the outstanding feature of the introduction of medical science into medical practice here has been the remarkable cooperative effort of the Harvard Medical School with the Massachusetts General Hospital. It is not clear to me whether this means infiltration of Hospital by University or whether it is appropriation of University funds by Hospital! It is clear that no hospital could have done this without university aid and guidance, and no university could have introduced such effective research and medical teaching without such hospital opportunity and cooperation.

I have watched it all from afar. But at the same time I am no stranger here. Once, while I was in the process of deserting one mistress and was beginning to woo another, I spent a summer studying in the Dissecting Room at Harvard. The purpose of this apparent misuse of the summer months was to make me free to coach the Princeton football team in the autumn, without falling behind in my first year of medical training at Oxford. It was my good fortune to have Dr. Robert Green as my instructor. He introduced me to human anatomy and after the first week he coached me in Greek as well, doing it because he took such delight in the language. And so we had an hour of Greek each morning before we turned our attention to the cadaver.

Where else could a young man have found a physician who would prepare him for a Greek examination, as well as teach him anatomy? Educators sometimes seem to forget that medical science should not stand alone without the arts. All by itself, science is subject to a serious deficiency disease due to a lack of the vitamins which are found only in the humanities. It might be called Academic Avitaminosis.

And physicians in other places forget the importance of what Osler described as "breeding and pasture". I do not mean the indolence that is sometimes referred to as "graceful living". But "breeding and pasture" with plenty of hard work may help the doctor to do a good job in medical practice and to enter the house that wisdom builds.

I have other memories of Boston. I served a golden year as surgical intern in the Peter Bent Brigham Hospital while Mrs. Penfield, living near by, brought our second child into the world. I have given a series of University Lectures at Harvard — a terrifying challenge that turned into a very pleasant experience. Finally, most of my friends in medicine persist in living here in spite of everything that I can do: Stanley Cobb, Francis Hall, James White, and so many others!

Boston culture has provided leadership for American life and thought through strange and devious channels. In 1848, while anesthesia was having its difficulty with this city, Horatio Alger, Jr., the son of a Unitarian minister, was preparing to enter Harvard College. On admission he was shocked by the sin and saddened by the way of life in college. But he made a great discovery. Pluck and luck would bring any good boy to fame and fortune. It was a reasonable enough hypothesis, but little proof was produced and no scientific evidence. Also, it was somewhat overpublicized by 20 million copies of 135 juvenile novels! Many a self-made businessman who bears the name of Horatio Alger, Jr. on his crest might make a modest claim that his success proved the Alger, Jr. Thesis. But what of the control experiments? A scientist might ask whether some good Alger boys did fail.

The Massachusetts General Hospital was not always what it is today. It was luck with a good deal of pluck, rather than staff study, that led to the first use of ether in the operating room under the dome of the Bulfinch Building. It was a tribute to the character of Professor Warren that Morton came to him, of course. But there was no basic preliminary study, nothing like the years of thoughtful analysis that later led Lister, who might be called the first scientifically trained surgeon, to the secret of infection in the operating room.

Look into the Bulfinch operating room. A group of medical onlookers were present, expecting to jeer at humbug; Warren, dressed in sober morning coat, with mingled feelings of hope and mistrust in his heart; and Morton, the genius, in flamboyant waistcoat, with small mustache and glistening well-combed hair. He was a genius, no doubt of it, since he saw something to which the others were blind.

Chauncey Leake has told the story in cadenced verse:

"In silence and in awe they watched the Death of Pain, and were convinced.

"Said Warren, 'Gentlemen, this is no humbug.'

"Morton did not tell what he had used. Next morning all of staid old Boston was excited, for the news was in the papers,

"Yet Morton did not tell what he had used."

What a great discovery! and how badly handled!

Contrast with that the great discovery worked out by William Jason Mixter and his associates here just over a decade ago. They found the secret of the cause of the agony of sciatica and cervical neuralgia. But Mixter perfected the surgical cure quietly, modestly, scientifically. With no fanfare in the public press, he taught other neurosurgeons what to do. Here was the opening of a new field in surgery that has brought relief of pain to thousands. It was made possible by the scientific organization of this Hospital.

The discovery of the uses of ether in the Massachusetts General Hospital might seem to have been an accident. But I believe that Fate was marking out this Hospital for greatness. The compelling tradition of that discovery has been a potent influence in the subsequent evolution of this Chosen Hospital.

The future

It is my own belief that, in the future, it will be impossible to preserve the formal separation between medicine and surgery. Time was, of course, when the physician was superior in intellect and authority. He made the diagnoses and he directed the treatment. The surgeon, with reputedly clever and willing fingers, did what he was told. That time has passed. Physicians now conceal their feeling of superiority, except, I am told, in the privacy of "medical rounds".

Let me prophesy: In the future, hospital practice will be forced by the progressive advances, made possible by specialization, to pattern itself more and more according to the functional systems of the body.

For example: 1. The reproductive system — for clinician and basic scientist; 2. The respiratory system with physicians, surgeons, laboratory men; 3, 4, 5, etc. The visual and auditory systems; metabolism and endocrine systems; infant growth and care; digestive system; circulatory system; urinary system; bone-joint-muscle structures with arthritologist, operator, and gymnast; skin; and, finally, the nervous system.

You may build special institutes here and there. And I believe you should do so for the nervous system, since its problems are so vast and so important for the future of mankind. But, always, such institutes and such special units should be closely integrated into the body of a general hospital as you are proposing to do in this medical science building. Every practising specialist must strive for perspective so that he may understand what others can do. He must himself treat the whole patient, not the system alone.

These system units will develop according to the compelling force of the patients' needs, in the light that comes from the questioning of medical students in a teaching hospital, while the whole is cemented by the social service worker with the cement of human kindness.

Beyond that there will be an ever-increasing need for the general practitioner and family physician who is alert to every valid service that specialists can provide. This is a difficult role and he must be wise and alert. With national and local organization and development of recurring orientation courses for practitioners, they will return to the place of primary importance as family guides and advisors. Most of the ills and worries, from the cradle to grave, are better treated outside our hospitals.

There are many paths that lead to the house where wisdom "hath hewn out her seven pillars". Practitioner, Medical Scientist, Good Samaritan, and Educator must enter there where they may see the needs of fellow men in wise perspective.

[At one point, Dr. Penfield interrupted his address to say that at the Neurological Institute in Montreal they had succeeded in growing a few seedlings taken from the tree* under which Hippocrates carried on his teaching, and that he would be glad to send two of the seedlings to us at M.G.H., if we cared to have them, as he felt sure they would grow in our climate. He turned to those seated on the platform to get their reaction to his offer, and their nodded acceptance of this most unusual gift was underscored by hearty applause from the assembled guests. —— *Editor*]

*plane tree from Island of Cos off coast of Asia Minor

Following Dr. Penfield's address, Mr. Gray rose for his closing remarks. He said:

In closing this meeting may I say

First — we believe the most valuable contribution this Hospital can make is to march strongly forward under a staff having determination and vision and supported by modern facilities and equipment;

and

Secondly — we are ever mindful that bricks and mortar, laboratories and techniques are for one purpose and one purpose only — the patient, his care and his cure.

When the ceremonies were ended, the guests were invited to go on conducted tours of the new building. The building was also open for inspection from 10 A.M. to 6 P.M. the following day.

DEPARTMENT OF PATHOLOGY

Elsewhere in this issue are recorded the highlights of the dedicatory exercises of the Warren Building, in which the Department of Pathology is now comfortably ensconced. During the past month, it seems that all I have heard has been: It's about time; it was a long time in coming; you certainly deserve it; what a contrast; and many other similar remarks. Although we lived in the Allen Street building for sixty years, we were really not unhappy there. To be sure, there were no modern appointments, but there was a homeliness and intimacy that only age can bring. The benches were always full of microscopic slides. There was a mustiness and flavor that seemed to insure the correct diagnosis! Studies that have become medical classics were carried out in those rooms under James Homer Wright and Tracy Mallory. I trust we can carry on in their tradition.

To commemorate their names, the dedication of the James Homer Wright Pathology Laboratories and the Tracy Burr Mallory Memorial Library were held on Saturday, December 15. The main addresses were delivered by Dr. Fred W. Stewart, Pathologist at the Memorial Center for Cancer and Allied Diseases in New York City, and Dr. William Boyd, Professor of Pathology, *Emeritus*, University of Toronto. The portrait of Dr. Mallory was unveiled by Dr. James Howard Means. Greetings from the Trustees were presented by Dr. Arthur W. Allen; for the Hospital by Dr. Dean A. Clark, General Director; for the Harvard Medical School by Dr. Arthur T. Hertig, Shattuck Professor of Pathological Anatomy; and from the Armed Forces Institute of Pathology in Washington by its Director, Captain William M. Silliphant. These exercises were preceded by a morning scientific program presented by members of the Pathology staff. It was extremely pleasant to greet so many returning alumni of the laboratory.

Approximately 65% of the space in the three floors occupied by Pathology is for the routine diagnostic services — surgical pathology, post-mortem pathology, neuropathology, and cytology. The remaining 35% of the space provides us with what we woefully lacked — research laboratories. The latter can be classified into four general types: experimental (animal) pathology, histochemistry, microbiochemistry, and electronmicroscopy.

The experimental pathology laboratories are located in the basement, adjacent to the animal quarters. Here Dr. Winfield S. Morgan is expanding his studies on the Golgi apparatus. Dr. Morgan became interested in the Golgi apparatus when he spent a year with Dr. John Baker at the Zoological Laboratories at Oxford. Neutral red, when injected into the mouse, collects as granules in the acinar cell of the pancreas. These granules have the staining reaction of the Golgi apparatus. Dr. Morgan hopes to be able, by means of differential centrifugation to separate these granules and perhaps learn something about their biochemical properties and their relationship to the mitochondria and other cell elements.

Dr. Robert Scully became interested in the muscle changes following the repair of vascular injuries in soldiers during the Korean War. For example, the muscle injury caused by ischemia may be aggravated by sudden return of full circulation. He has already been able to produce changes in the dog similar to those in man. Histological and histochemical methods have been used so far, and it is anticipated that correlation with physiological methods will be used soon.

Dr. Scully has continued to maintain his special interest in gynecological pathology. Recently he has been concentrating on hyperplasia of the ovarian stroma, the response of the latter to the growth of neoplasm within the ovary, and the functional significance to both of these phenomena.

Dr. Austin Vickery continues his active interest in the thyroid, in which field there has been a stimulating and profitable association with the Thyroid Clinic. In particular, he has been studying the long-term post-radiation histological changes in the thyroid following I^{131} therapy for thyrotoxicosis and other non-neoplastic medical indications; the correlations of physiology and histology of metastasizing functional thyroid carcinomas and their response to radioactive iodine and other therapeutic agents; and, with Dr. Farahe Maloof, the mode and sites of action in the thyroid of isotope-labeled antithyroid drugs by their histological localization with special autoradiographic techniques. A collaborative investigation of nodular goiters is planned, with particular reference to relationships of biochemical function and histology of various nodules and the development and clinical detection of malignant tumors.

For some years, Dr. Castleman has been interested in the relationship of the thymus gland to myasthenia gravis, and has felt that this is probably an endocrine disease although extracts of the gland have not yielded any clues. Recently, Wilson in England conducted experiments which indicated the presence of a neuromuscular blocking agent elaborated by the thymus of myasthenia gravis patients. Dr. Sumner Zacks and Dr. Richard Cohen in our laboratory have repeated this work, using an isolated frog sartorius nerve muscle preparation to test the acetone extract of the thymus gland removed surgically from many myasthenia gravis patients. They obtained similar results, but showed that the potassium elaborated from the cells in the extract was really the agent responsible for producing the muscle inhibition. Because of considerable evidence in the literature suggesting a circulating or humoral blocking agent in myasthenia gravis, they are planning to continue the work, utilizing other methods of extraction and also testing sera of myasthenia gravis patients.

The Histochemistry Laboratories on the first floor are occupied by Dr. Agnes Burt Russfield and Dr. Richard Cohen. Dr. Russfield is studying the histological changes in the endocrine glands in patients with different types of cancer and various endocrine diseases. So far, attention has been concentrated on the changes of ratios of the various cell types in the pituitary associated with these diseases and on the changes produced in these ratios by hormone therapy. Histological findings in the pituitary have been correlated with gross and microscopic findings in the other endocrine glands. With our better equipped laboratory, it is planned to extend this research on an intracellular level, using histochemical methods correlating observations made with the light and electron microscopes and separating protein fractions of fresh glands by electrophoresis. The availability of animals may permit bioassay of glands and investigation of the physiological significance of anatomical findings.

Dr. Cohen is studying the relationship between adrenal cortical hyperplasia, benign neoplasia, and malignant neoplasia, utilizing routine morphologic and a series of histochemical techniques. Analogous studies in mice and rats have been planned. In both the human and animal material emphasis will be placed on investigation of transitional stages, if they exist, between hyperplasia and neoplasia. It is hoped that these investigations on the human and animal adrenal cortex may shed some light on similar relationships existing between hyperplasia and neoplasia in other endocrine organs, such as the parathyroid, thyroid, and pituitary.

The Microbiochemistry Laboratory is also located on the ground floor. Here, Dr. Edgar B. Taft, in cooperation with Dr. Jesse F. Scott of the Huntington Laboratories, will expand their microbiochemical studies of phosphorus metabolism in the rat liver to include the study of human liver and especially tumors of the liver. They have developed techniques which are, in essence, histologically controlled biochemistry. Sections of fresh frozen tissue are made in a cryostat, and certain of these are fixed and stained to serve as histological control for chemical and enzymatic measurements. They are able to measure ribose- and desoxyribose-nucleic acids, various phosphorus compounds in the acid-soluble fraction of tissue, and protein of these sections, as well as the activities of many hydrolytic enzymes. In addition, they can measure the dry weight of these sections. Using these methods, they have found a most interesting relation expressed in terms of protein between the ribosenucleic acid and the easily hydrolyzable organic plus the inorganic phosphates of the rat liver. This relation holds for all normal rat livers and all the non-tumorous changes induced in the rat liver by the azo dye butter yellow, but it does not hold for any of the tumors which result from the feeding of this dye. They have shown that this relation also holds for regenerating liver, for fetal liver, for liver from two-week-old rats, and for livers of rats in various states of metabolic stress. Thus, this difference appears to be a real means of differentiating tumors arising in the liver from non-tumorous, normal, and abnormal liver. They plan to investigate this relation in human liver disease. They are already embarked on an investigation of the metabolic significance of this relation in rat liver.

The field of analytic cytology embracing the techniques of electronmicroscopy, as well as polarization optics, x-ray diffraction, and analytical and physical chemistry, is making increasingly more numerous and important contributions. In view of the available knowledge concerning the above techniques and the structure and chemistry of many normal tissue components, it seems very timely to apply these methods to the study of fundamental aspects of cytology as related to pathology.

Realizing that this was one avenue along which pathology had to develop, we were very fortunate that Dr. David Spiro joined our staff two years ago while still working at M.I.T. Dr. Spiro, trained as an orthodox pathologist, decided to "tool up" and learn some of these newer methods of tissue study with Dr. Francis O. Schmitt of M.I.T. The aim of the program, therefore, is to set up an electron microscope laboratory devoted to the study of tissue ultrastructure, particularly as it bears on pathology. This is a long-range program, and at the outset it is planned to extend current work on the fine structure of muscle in order to support further Dr. Spiro's model of striated muscle. This model, which was the subject of Dr. Spiro's Ph.D. thesis, suggests a supercoiling of undenatured protein macromolecules as the basis of muscular contractility. An investigation of smooth muscle and several types of pathological muscle lesions will be initiated, and work on the developmental and other aspects of striated muscle continued. It is also planned to work on the kidney, with special reference to the elucidation of the ultrastructure of the renal glomerular basement membrane in both normal and pathological states.

The laboratory housing the electron microscope, located on the basement floor, was built with funds given to the Hospital by Mrs. Edwin S. Webster and has been named the Edwin S. Webster Memorial Laboratory in honor of her husband. The electron microscope and other major equipment were financed by the National Heart Institute of the U.S. Public Health Service.

All members of the Pathology Department were very pleased when Dr. Joseph C. Aub, now retired and free from administrative loads, joined our group. He now has a laboratory on the first floor, where he is investigating cell surfaces in cancer cells. He believes that some aspects of tumor cell growth can be explained in terms of abnormality to their surfaces. Following leads from studies of bacteria, he plans to study changes brought about on cell surfaces by the various families of detergents. Radioisotopes will be used to study changes in the permeability of cell membranes. He will use mouse and rat ascites tumor cells in these studies, as well as normal liver cells prepared by mechanical disruption of liver slices. It is really wonderful to have Dr. Aub with us!

At the other end of the age spectrum are two Harvard Medical School students who, after finishing their second year, are taking a year off to spend it in the laboratory as pre-doctoral fellows of the U.S. Public Health Service. They are learning what goes on in a pathology laboratory of a teaching hospital, and are spending more than half of their time on research projects. It is hoped that in this way some of the top students will be attracted to a career in academic pathology.

Benjamin Castleman, M.D.,
Chief of Pathology Department

On December 5, the laboratory staff of the Department of Dermatology presented an informal program covering the research projects in the laboratories. This was attended by guests representing the scientific staffs of industries and government agencies especially interested in problems of the skin. The meeting was held in the new laboratories of the department in the Warren Building.

During the day, the guests inspected the laboratories and had personal interviews with members of the staff concerning their work.

Following are the subjects discussed in the group meetings:

"Action of detergents on the skin", Irvin H. Blank, Ph.D.; "Enzymes of the epidermis", Robert D. Griesemer, M.D.; "Use of tissue-culture techniques in dermatology", Sabino J. Sinesi, M.D.; "Keratinization of the epidermis", A. Gedeon Matoltsy, M.D.; "Action of some topical antiseptics on the bacterial flora of the skin", Irvin H. Blank, Ph.D.; and "Clearing factor production by the intravenous administration of lipid emulsions", Walter F. Lever, M.D. and Edmund Klein, M.D.

* * *

Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service, was honored at the Annual Dinner of the Massachusetts League for Nursing on November 14, at the Hotel Somerset.

Miss Sophie Nelson, formerly Director of Nursing at the John Hancock Life Insurance Company and formerly President of the National Organization of Public Health Nursing, was Toastmistress. She introduced the following guests at the head table, each of whom paid high tribute to Miss Sleeper: Dr. Oliver Cope, representing the Surgical Services, Massachusetts General Hospital; Miss Florence Flores, President of the Massachusetts State Nurses Association; Miss Ruth Freeman, President of the National League for Nursing; Miss Catherine Garrity, President of the Massachusetts Practical Nurses Association; Miss Stella Goostray, formerly Director of Nurses, Children's Medical Center, and formerly President of the National League for Nursing Education; Mr. Francis C. Gray, Vice-President of the Massachusetts General Hospital Corporation and Chairman of our Board of Trustees; Dr. Chester M. Jones, representing the Medical Services, Massachusetts General Hospital; Dr. Frederick M. Meek, Pastor at Old South Church; Dr. Ellsworth T. Neumann, Administrator, Massachusetts General Hospital; Dr. Howard F. Root, President of the Massachusetts Medical Society; Dr. Daniel A. Rubenstein, Deputy Commissioner representing the Massachusetts Department of Public Health; Mr. Dan Traner, President of the Massachusetts Hospital Association; and Miss Margaret Varley, President of the Massachusetts League for Nursing.

The highlight of the occasion was the awarding of the following citation to Miss Sleeper:

"The Massachusetts League for Nursing hereby honors Ruth Sleeper for outstanding leadership and distinguished service in nursing. Nationally and internationally, she is recognized as one who works for the improvement of nursing education and nursing services, that the needs of the people may be met. Generous in understanding, thoughtful of human values, steadfast in principles, sound in judgment, unbiased in her decisions, Ruth Sleeper is an able administrator and teacher, a wise and friendly counselor, and an effective interpreter of nursing."

A scientific exhibit entitled "Radiotherapy of carcinoma of the accessory nasal sinuses with consideration of an intracavitary multiple source treatment procedure" by Drs. Paul M. G. St. Aubin. Edward W. Webster, and Milford D. Schulz of our Department of Radiology won a Certificate of Merit at the Annual General Meeting of the American Roentgen Ray Society held in Los Angeles, California, on September 25-28.

Dr. Joseph W. Gardella, Assistant in Medicine on our staff, has been named Assistant Dean for Student Affairs in the Faculty of Medicine, Harvard University. Dr. Gardella will be responsible for academic and nonacademic aspects of student activities in the Medical School. He will work with faculty committees concerned with the revision of teaching programs and with the details of student loans and scholarships, military affairs, and student health.

Dr. Gardella succeeds Dr. William F. Ketchum, who is returning to private practice.

The Board of Trustees, at their meetings on November 16 and 30, voted:

To accept the resignation of Dr. Jerome K. Merlis from the position of Clinical Associate in Neurology;

To permit Dr. Joseph S. Barr, Chief of the Orthopedic Service, to appoint two men in excess of his present quota of resident staff, for the year beginning January 1.

To promote:

Dr. Phillips Hallowell from the position of Assistant in Anesthesia to that of Assistant Anesthetist, effective as of June 1, 1956.

To appoint:

Dr. Henrik H. Bendixen as Assistant Anesthetist, effective January 16, provided he obtains a permanent Massachusetts license;

Dr. Kiyokazu J. Momose as First Assistant Resident in Radiology, for the period November 1, 1956, through March 31, 1957;

Dr. Robert G. Ojemann as Second Assistant Resident in Neurosurgery for one year, beginning July 1;

Dr. E. William Rosenberg as Assistant Resident in Dermatology, beginning July 1;

Dr. Clinton B. Seeley as Second Assistant Resident in Radiology, beginning October 1;

Dr. Thorkild Waino-Andersen as Assistant Anesthetist.

At their meetings on October 31 and during November, the General Executive Committee voted:

That, as Dr. Charles M. Shugg would be returning to Australia soon after December 15, his appointment would be terminated as of that date, with thanks for his valuable services to the Hospital and best wishes for his continued success and happiness in Tasmania;

To change Dr. Melvin J. Glimcher's title from that of Clinical and Research Fellow in Orthopedic Surgery to that of Clinical Assistant in Orthopedic Surgery, with the privilege of assisting the patients of Dr. Joplin in the Baker Memorial.

To promote:

Dr. John P. Connelly to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Sylvia A. Davies to the position of Out-Patient Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Nathan H. Fearer to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Nathan T. Griscom to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Gerhard Nellhaus to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Renee B. O'Sullivan to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Philip J. Porter to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1.

To continue the appointment of:

Dr. William R. Buchanan, Jr. as Out-Patient Resident on the Children's Medical Service for one year, beginning July 1, 1956.

To extend the appointment of:

Dr. Yee P. Moon as Graduate Student Assistant in Orthopedic Surgery through November 30, 1956.

To reappoint:

Dr. Albert I. C. DeFriez as Clinical Assistant in Medicine for one year, beginning December 15, 1956;

Dr. Alexander N. Drescher as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;

Dr. Susanne J. Lamdin as Assistant Resident in Anesthesia for one year, beginning September 20, 1956;

Dr. John T. Sharp as Clinical and Research Fellow in Medicine for one year, beginning December 1, 1956;

Dr. James L. Vanderveen as Clinical Fellow in Anesthesia for one year, beginning August 15;

Dr. Thomas J. Whitfield, III, as Chief Resident on the Children's Medical Service, through December 31.

To appoint:

Dr. Mary Bertucio Arnold as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1, 1956; her previous appointment as Assistant to the Children's Medical Service terminated as of June 30, 1956;

Dr. Mary P. S. Coley as Clinical Fellow on the Children's Medical Service, beginning October 25, 1956;

Dr. Luis L. de Mola as Graduate Student Assistant in Pathology, beginning November 1, 1956, and that he be appointed, in addition, as Clinical Fellow in Pathology if and when he obtains a temporary license to practise medicine in this State;

Dr. Hugh R. Dudley, Jr. as Clinical Fellow in Pathology, for the period October 18, 1956, through June 30, 1957;

Dr. Prisco T. Evangelista as Graduate Student Assistant in Surgery, for the period November 12, 1956, through June 14, 1957;

Dr. Marcia K. Iddles as Clinical Fellow on the Children's Medical Service, beginning November 1, 1956;

Dr. Zvi Laron as Clinical and Research Fellow on the Children's Medical Service, beginning November 10, 1956;

Dr. Haruo Matsuyama as Research Fellow in Neuropathology, for the period November 6, 1956, through February 28, 1957;

Dr. Richard A. Mayo as Clinical Assistant in Orthopedic Surgery for one year, beginning January 1;

Dr. Guan B. Ong as Graduate Student Assistant in Surgery, for the period November 12, 1956, through May 10, 1957;

Dr. Philip I. Salib as Graduate Student Assistant in Orthopedic Surgery, for the period October 29, 1956, through November 17, 1956;

Dr. José R. Solis as Graduate Student Assistant in Surgery, for the period November 12, 1956, through May 10, 1957.

* * *

Massachusetts General Hospital had reached 100% of its Red Feather quota by November 1 this year. When the campaign was over, 2,431 MGH donors (including 273 student nurses) had contributed a total of $10,811.39.

Due to the excellent work of the MGH-Red Feather Campaign Committee and solicitors, plus the usual spirit of the Hospital family, our goal was reached early.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Richards, D. W., Bland, E. F., and White, P. D.
A completed twenty-five-year follow-up study of 456 patients with angina pectoris.
J. Chron. Dis. 4:423-433.

Richards, D. W., Bland, E. F., and White, P. D.
A completed twenty-five-year follow-up study of 200 patients with myocardial infarction.
J. Chron. Dis. 4:415-422.

Dermatology

Matoltsy, A. G., and Herbst, F. S. M.
Observations on urea-extractable substance of the human abdominal epidermis.
J. Invest. Dermat. 27: 263-270.

Endocrinology

Benedict, P. H.
Use of estrogens in women after the menopause: Clinical note.
J. Am. M. Women's A. 11:399-402.

General Surgery

Waddell, W. R.
Effect of antrum exclusion on gastric secretion.
J. Appl. Physiol. 9:222-226.

Laboratory Science

Schmid, K.
Purification and properties of an a_2-glycoprotein derived from normal human plasma.
Biochim. et Biophys. Acta 21:399.

Waksman, B. H., and Adams, R. D.
A comparative study of experimental allergic neuritis in the rabbit, guinea pig, and mouse.
J. Neuropath. & Exper. Neurol. 15:293-333.

Waksman, B. H., and Bullington, S. J.
A quantitative study of the passive arthus reaction in the rabbit eye.
J. Immunol. 76:441-453.

Waksman, B. H., and Groupé, V.
Suppressive activity of xerosin on allergic and other inflammatory reactions of the skin in guinea pigs.
J. Immunol. 77:47-51.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E., and Hoessly, G.-F.
Postnatal and natal cerebral injuries: Neuropathological and neurosurgical aspects.
A.M.A. Arch. Neurol. & Psychiat. 76:236-246.

Ophthalmology

Donahue, H. C.
An unusual case of an intraocular foreign body.
Am. J. Ophth. 42:642-645.

Orthopedic Surgery

Rowe, C. R.
Prognosis in dislocations of the shoulder.
J. Bone & Joint Surg. 38-A, no. 5:957-977.

Proctology

Hayden, E. P.
Medical progress: Proctology.
New England J. Med. 255:809-814, 854-860.

Surgery—Reconstructive

Cannon, B., and Murray, J. E.
Plastic surgery: Tissue and organ homotransplantation.
New England J. Med. 255:900-904.

Miscellaneous

Churchill, E. D.
The Harvard Medical School, 1906-1956.
New England J. Med. 255:1035-1041.

Books

Benda, C. E.
Der Mensch im Zeitalter der Lieblosigkeit.
Stuttgart, Steingrüben Verlag.

MASSACHUSETTS EYE & EAR INFIRMARY

THE OCULAR MOTILITY CLINIC

Orthoptics is a relatively new branch of ophthalmology in this country. It deals with defective visual habits, defective binocular vision, and defective ocular motility. It is properly defined as the teaching or restoring of single binocular vision by means of graded exercises. Single vision, or fusion, is the ability of the brain to blend two separate images of a single object, seen by each eye simultaneously, into one image, resulting in binocular depth perception or stereopsis.

Orthoptic training can, by no means, be considered a cure-all for strabismus (or more properly, squint), but rather, a part of the treatment, which may include the wearing of glasses and/or surgery on the extra-ocular muscles.

This is a direct quotation from an article describing Orthoptics in "Orthoptic Clinic", which appeared in the October 1954 issue of THE NEWS. Since that time, there have been major physical changes in the clinic and it has acquired a new name — the Ocular Motility Clinic. This change of name was made in an attempt to eliminate the long-standing confusion resulting from the similarity between the words orthoptic and orthopedic.

The Orthoptic Clinic of the Massachusetts Eye and Ear Infirmary was opened in 1942, under the direction of Dr. Edwin B. Dunphy, Chief of Ophthalmology. It has grown steadily. All patients with strabismus (cross-eyes) who come to the Eye Clinic are referred to the Ocular Motility Clinic for evaluation. Disposition of each case rests with the Chief of the clinic. In 1948, a training school for orthoptists was started in conjunction with Simmons College. Since that time, twelve students have successfully passed the examinations of the American Orthoptic Council.

Originally, the clinic cared only for registered out-patients, but in June 1954, a private clinic was established, to which members of the visiting staff could refer their patients for evaluation, and for treatment, if indicated. The number of patients seen each year, both clinic and private, shows a steady increase. At the present time, the staff of the clinic consists of two full-time orthoptists, a student, and, for three afternoons each week, a resident in Ophthalmology.

With the growth of the clinic, the corresponding increase of staff and the addition of students, expansion of clinic facilities became necessary. The outstanding problems were lack of privacy during the examination of patients and lack of a teaching room. We were unable to obtain additional floor space, but during the past year an effective reorganization of the existing space was achieved.

The walls between the rooms were removed and sliding plywood panels were substituted, which, when drawn to their fullest extent, separate the area into five private examining rooms, each twenty feet in length — the standard length for vision testing. When these panels are pushed back, an area large enough to seat fifteen to twenty persons becomes available. Because of the small rooms, it was formerly impossible for the student orthoptists to have desks, but the reorganization provides a built-in counter of three student desks. The combination waiting room and secretary's office is separate.

The entire clinic was redecorated, the ceiling soundproofed, and bamboo draperies were hung at the windows, thus making the clinic a pleasanter place for patients and staff.

Pegboard equipment panels were installed on the wall of each vision lane, thus eliminating many tables and putting the equipment within easy reach of the orthoptist.

A helpful addition to clinic equipment is an improved device for after-image testing. This was devised by Dr. Trotter. The after-image test has long been employed as a method of determining the presence or absence of normal retinal correspondence — that is, whether or not the patient with strabismus could achieve single binocular vision if his eyes were straight. Formerly, this test was made by requesting the patient to cover one eye and fixate for thirty seconds the center of a horizontal lighted filament. The patient was then instructed to cover the other eye and once again fixate, this time on the center of a vertically positioned filament. In persons with a normal relationship between the two eyes, whether or not the eyes are straight, this test produces an after-image seen as a cross. If an abnormal relationship exists, the two lines of the after-image are separated. In such cases, establishment of single binocular vision after operation is much more difficult and often impossible. Because unwavering fixation on the center of the filament was required for a fairly long period of time, this test was often unsuccessful and unreliable with young children (the majority of our patients).

An electronic flash tube replaces the filament in our new test. Thus, only a split-second's fixation on the center of the flash tube is required; even inattentive young children can now cooperate. The after-image produced by this means is of such intensity and lasts so long (about twenty minutes) that the young patient can usually draw on a blackboard what he sees.

Dr. Trygve Gundersen has most generously given us a fifty-gallon aquarium, with a beautiful selection of tropical fish, for the waiting room. This is an unending source of delight and interest to the waiting children and their parents.

Ann E. Stromberg,
Orthoptist

* * *

VOLUNTEER GROUPS

MGH Staff Wives Association

The Music Committee of the MGH Staff Wives Association has arranged for two concerts in January, to be given in the Chapel. On Wednesday, January 9, at 3 P.M., three New England Conservatory students — Betsy Sheerin, soprano, Mary Monks, contralto, and William McKim, pianist — will offer a program of solos and duets. On Wednesday, January 23, at 3 o'clock, the MGH Nurses Glee Club, directed by Miss Margot Warner, will sing.

Distaff Club

Newly elected officers of the Distaff Club are:

President:	Mrs. Charles F. McKhann, III
Vice-President:	Mrs. Harold C. Urschel
Secretary:	Mrs. William L. Morgan, Jr.
Treasurer:	Mrs. Robert S. Harper

December was a busy month for the members of the Distaff Club. A bake sale was conducted early in the month and on December 18 Club members met to help wrap Christmas gifts for the patients in the Hospital.

The annual Christmas punch party for husbands and wives was given on December 12 in the Penthouse. This was a good opportunity for all of us to meet informally at a festive time of the year.

January plans include another evening devoted to getting acquainted. There are many new members who have recently been married or who are new to Boston. Therefore, the first meeting of the new year has been planned to provide an opportunity to welcome these new members.

New addresses:—

Dr. Charles B. Burbank (*W.S.* 1939), 94 Pleasant St., Arlington, Mass.; 270 Commonwealth Ave., Boston, Mass.

Dr. Evan Calkins (c.r.p. 1952), 74 Webster Rd., Weston, Mass.

Dr. Fa-Chi Dunn (a.r.p. *D.* 1954), 280 W. MacArthur Blvd., Oakland, Calif.

Dr. John B. Hartwell (*W.S.* 1905), 1520 Culebra Ave., Colorado Springs, Colo.

Dr. Edwin C. Hoodless (a.r.s. *Or.* 1952), Suite 415, Medical Arts Bldg., 1105 Pandora Ave., Victoria, British Columbia, Canada

Dr. Thomas C. Leinbach (a.r.s. *Or.* 1956), 1121 Penn Ave., Wyomissing, Pa.

Dr. Madan M. Singh (*M.* 1952), Gaya, Bihar, India

Dr. Louis L. Weiss (a.r.p. *An.* 1956), 1304 N. Delaware St., Indianapolis, Ind.

Dr. Alfred Yankauer (*C.M.* 1941), 84 Holland Ave., Albany 8, N. Y.

Brief bits:—

On October 3, at the Hotel Statler, Dr. Edwin F. Cave spoke before the Association of Surgeons of the New York Central Railroad on the subject "Recent advances in fracture management". On October 5, he addressed the New England Surgical Society, meeting at Poland Springs, Maine, on the subject "Delayed union and non-union of long bones".

Dr. Oliver Cope is to participate in the Postgraduate Course in Surgery at the University of Kansas Medical Center, Kansas City, January 21-24. He will speak on "The risk of surgical treatment related to the nutrition of the patient" and on "Recent developments in the treatment of burns".

Dr. Nathan B. Talbot delivered the Brenneman Lectures before the Los Angeles County Medical Society on November 7 and 8. His subjects were "Application of homeostatic principles to the care of patients with limited renal function", "The management of thyroid disorders in children", and "What does one see in a pediatric endocrine clinic?".

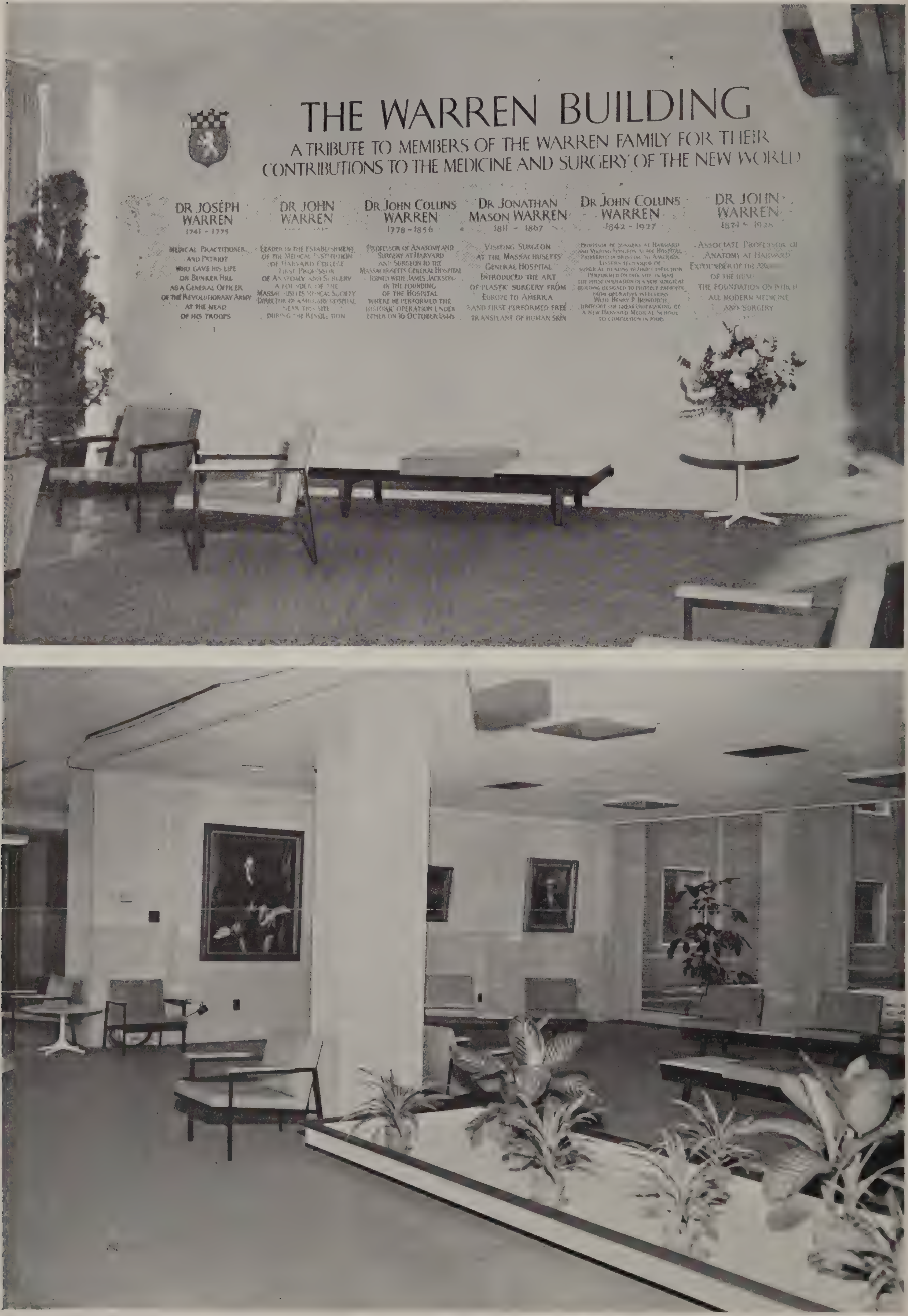
This short note from Brigadier General Richard Collins (*E.S.* 1933) will be of interest to his many friends:

> Thank you very much for writing in order to get my address and present condition of servitude correctly on the record. The above address — 202 West Glendale Avenue, Alexandria, Virginia — is my legal one and has been for the last five years or so. I would not go so far as to say that I have retired. It is true that I no longer practise medicine, but I am still on the active rolls of the Army.
>
> At present, I am in the Pentagon as Deputy Director of the Joint Staff for Intelligence. In short, I am the intelligence officer for the Joint Chiefs of Staff. The work is both important and interesting, so that I feel myself very fortunate. It is possible to get some very dull assignments in the Army.
>
> My best wishes to the Hospital and those who serve her.

* * *

The real meaning of Christmas could be felt in every corner and corridor of the Hospital during the entire holiday season this year. Special festivities included concerts and organ music in the Chapel, caroling in the halls and on the wards by glee clubs from local colleges and schools and our own nurses' groups, Christmas parties for children and grown-ups, and the student nurses' formal dance. The Beacon Hill Bell Ringers played Christmas music on the wards, and the nurses held their impressive Candlelight Service in the Moseley Rotunda.

Christmas is, perhaps, the most unfortunate time of the year to be in a hospital as a patient; but with all these activities, plus the Christmas decorations and gifts for every patient, as much of a home atmosphere as possible permeated every room and ward in Massachusetts General.


THE WARREN BUILDING
A TRIBUTE TO MEMBERS OF THE WARREN FAMILY FOR THEIR CONTRIBUTIONS TO THE MEDICINE AND SURGERY OF THE NEW WORLD
DR JOSEPH WARREN
1741 - 1775
MEDICAL PRACTITIONER AND PATRIOT WHO GAVE HIS LIFE ON BUNKER HILL AS A GENERAL OFFICER OF THE REVOLUTIONARY ARMY AT THE HEAD OF HIS TROOPS
DR JOHN WARREN
LEADER IN THE ESTABLISHMENT OF THE MEDICAL INSTITUTION OF HARVARD COLLEGE FIRST PROFESSOR OF ANATOMY AND SURGERY A FOUNDER OF THE MASSACHUSETTS MEDICAL SOCIETY DIRECTOR OF A MILITARY HOSPITAL NEAR THIS SITE DURING THE REVOLUTION
DR JOHN COLLINS WARREN
1778 - 1856
PROFESSOR OF ANATOMY AND SURGERY AT HARVARD AND SURGEON TO THE MASSACHUSETTS GENERAL HOSPITAL JOINED WITH JAMES JACKSON IN THE FOUNDING OF THE HOSPITAL WHERE HE PERFORMED THE HISTORIC OPERATION UNDER ETHER ON 16 OCTOBER 1846
DR JONATHAN MASON WARREN
1811 - 1867
VISITING SURGEON AT THE MASSACHUSETTS GENERAL HOSPITAL INTRODUCED THE ART OF PLASTIC SURGERY FROM EUROPE TO AMERICA AND FIRST PERFORMED FREE TRANSPLANT OF HUMAN SKIN
DR JOHN COLLINS WARREN
1842 - 1927
PROFESSOR OF SURGERY AT HARVARD AND VISITING SURGEON AT THE HOSPITAL PIONEERED IN BRINGING TO AMERICA LISTER'S TECHNIQUE OF SURGICAL HEALING WITHOUT INFECTION PERFORMED ON THIS SITE IN 1889 THE FIRST OPERATION IN A NEW SURGICAL BUILDING DESIGNED TO PROTECT PATIENTS FROM OPERATIVE INFECTIONS WITH HENRY P BOWDITCH BROUGHT THE GREAT UNDERTAKING OF A NEW HARVARD MEDICAL SCHOOL TO COMPLETION IN 1906
DR JOHN WARREN
1874 - 1928
ASSOCIATE PROFESSOR OF ANATOMY AT HARVARD EXPOUNDER OF THE ARCH OF THE HUM THE FOUNDATION ON WHICH ALL MODERN MEDICINE AND SURGERY

THE LOBBY OF THE NEW WARREN BUILDING

THE NEWS

1811

No. 164 Boston, Mass February 1957

PSYCHIATRY DEPARTMENT

We of the Department of Psychiatry are fortunate indeed to be able to look forward to an expansion of our research activities, as we expect to move the psychiatric laboratories to the sixth floor of the new Warren Building some time next summer. There it will be possible to develop our research program with adequate facilities, instead of being crowded together in the very small number of rooms on the third floor of the Bulfinch Building. At the present time much of our work is carried on by psychiatric interview techniques dealing with patients suffering from psychosomatic disorders. Drs. Blom and Long of the Child Psychiatry Division are seeking new information concerning the emotional aspects of asthma and rheumatoid arthritis in children, and Dr. Nemiah has investigated what type of personality predisposes to retarded convalescence of patients with orthopedic injuries. We also have a one-room unit for work in experimental psychology, in which Dr. Talland, together with Dr. Victor from the Neurology Service, studies changes in cognitive and other mental functions of chronic alcoholic patients. Finally, Drs. Saslow and Joseph Matarazzo are carrying out measurements of social interaction in a two-room unit located in the Clinics Building. As we obtain additional space in the Warren Building, it will be possible to develop a more comprehensive research program proceeding along four avenues:

1. Human ecology in psychiatry, where we are concerned with the distribution of mental illness and mental health in different types of populations.
2. Social science in psychiatry. Here we investigate the influences on mental health and illness emanating from other members of the groups in which one is forced to live and work—such as family, neighborhood groups, and work teams.
3. Psychophysiology, in which we study the internal milieu of the organism as it affects the central nervous system and behavior. Measurement of hormone levels in body fluids together with measures of cerebral irritability and of psychological functions will be made in the new laboratory, to secure much-needed information about the physiological control of behavior.
4. An expanded program in experimental psychology will help to develop methods of objective measurements of psychological performance and skills, which then will be of use not only in psychiatry but also to other departments of the Hospital—neurology, neurosurgery, and pediatrics.

It may be important to recall that under Dr. Stanley Cobb's leadership the Department of Neuropathology of the Harvard Medical School and the Department of Psychiatry at the Massachusetts General Hospital were combined into one unit. When Dr. Cobb retired, Dr. Raymond Adams, Head of the Neurology Service of the Massachusetts General Hospital, became Professor of Neuropathology at the Harvard Medical School, and a new Chair of Psychiatry was created by the University to make possible more vigorous development of the psychological and social sciences and their contributions to behavioral science in medicine. In order to implement such a program, we have developed preliminary plans for our work on the new research floor as follows:

1. Human ecology

Staff members involved in this program are, in addition to Dr. Lindemann, Dr. Gerald Caplan, Associate Professor of Mental Health at the Harvard School of Public Health; Dr. Peter Sifneos, a psychiatrist; Mrs. Laura Morris, M.A., a community organization worker; Dr. A. Paul Hare, a social psychologist; and Dr. Donald Klein, a clinical psychologist. Drs. Sifneos and Hare and Mrs. Morris are at present engaged in studying the population in the neighborhood of the Hospital. This group has four major objectives:

a. Studies in the distribution of mental ill health in certain areas of Metropolitan Boston, particularly in the so-called West End.

b. The development of screening methods for the appraisal of personality and mental health in the patient population of the Hospital and in the healthy population to which these patients give access.

c. Systematic studies of interpersonal behavior in groups of patients and healthy individuals with respect to the appraisal and development of social skills. This work will utilize the small group observation room to be described below.

d. The relationship of child rearing behavior of mothers of families in the neighborhood to the emotional development of their healthy and their sick children. We hope that this study will be correlated with the work in the Child Psychiatry Group and the Family Health Service.

2. Small group behavior study

At the present time research in the study of small groups is greatly hampered by the lack of adequate facilities. The new laboratory will provide space for research in group therapy, and for more systematic studies of the interaction of individuals in a small group setting. Group therapy is becoming an increasingly effective psychotherapeutic device, and research in group therapy will be applied to a wide variety of patient groups from the ward and clinic. The studies of interaction of individuals in groups are designed to provide basic information on the behavior of individuals in social situations, the roles they take, the skills they use, and the way in which individual personalities influence the group.

This laboratory will be used by psychiatrists and psychologists engaged in research in group therapy. Fellows and members of the staff will arrange to use the room one or more hours a week for this purpose. It is intended, however, that this work will merely provide a background for more specific research under the direction of our social psychologists: Dr. Hare and Dr. Talland.

The unit will consist of an experiment room and a long observation room adjoining it. The rooms will be entered from opposite directions, and there will be a one-way mirror and adequate soundproofing and sound equipment.

3. Biochemistry and human physiology

The Department of Psychiatry has been interested for some time in various aspects of psychosomatic research. We have, for instance, studied such illnesses as asthma, ulcerative colitis, rheumatoid arthritis, and neurodermatitis. We believe that the hypotheses we have developed should be further tested, not only by further separate but by combined psychological and physiological studies. The new research floor on Warren 6 will, therefore, have laboratories where physiological and associated biochemical studies can be carried out in conjunction with the psychological investigation. Recent advances in instrumentation make adequate laboratory space essential for this type of coordinated research.

The biochemical laboratory will be designed for flexibility so that a wide variety of procedures can be carried out, but it is not intended to provide space for basic research in neurochemistry. Recent developments in endocrine physiology and in neuropharmacology, however, make it highly desirable to have biochemical facilities available to a psychiatric service so that certain endocrine and drug effects can be studied. The laboratory will be used for a variety of routine determinations, using methods that have already been developed, but which will provide an essential service to the physiological investigation. In addition, space will be available for certain small-scale pilot studies that may appear to be fruitful, without demanding valuable laboratory space from other laboratories in the Hospital. This may be illustrated by a study now being pursued by Dr. Jack Mendelson.

A wide variety of hypotheses has been proposed to explain the fundamental mechanisms by which narcotics, convulsants, and hallucinogens are enabled to induce a number of stimulatory, depressant, or inhibitory activities. Results obtained in many investigations suggest two conceptual approaches to the factors (related to structural changes in the system) which are associated with the effective action of these compounds—the "physical" approach and the "chemical". The physical factors involve surface, membrane, and permeability phenomena; the chemical factors deal with the interrelationships and kinetics of energy-consuming reactions. On the basis of the data available at the present time, it would appear that the most logical view is what might be called "physicochemical". By the use of this term it is suggested that physical effects of drugs on the nerve cell membrane (Mullins, 1954), for example, are associated with and may be forerunners of chemical alterations in neuronal metabolism.

Numerous investigations have been carried out concerning the chemical alterations occurring in neuronal metabolism during narcosis and stimulation. However, relatively little information has been obtained on the effects of cerebral depressants and stimulants on the lipoprotein components of neuronal and mitochondrial membranes. The purpose of the present investigations will be an attempt to correlate the biological activity of a group of narcotics, convulsants, and hallucinogens with their effect on brain thromboplastin activity. Initial data have been reported demonstrating inhibition of brain thromboplastin activity (Schecter and Harrison, 1953) during narcosis. Thromboplastin has been selected as the initial lipoprotein for study because its activity in blood coagulation can be employed as a useful method of bioassay. In addition, specific thromboplastin components may be prepared from brain mitochondria and it is also possible to fractionate thromboplastin preparations to electrophoretically homogeneous units (Chargaff et al., 1949).

The basic experimental design consists of both *in vitro* and *in vivo* studies. The *in vitro* studies involve determination of changes in activity of total brain thromboplastin, brain mitochondrial thromboplastin, and fractionated brain thromboplastin in the presence of varying concentrations of narcotics and convulsants possessing differential biological activities. These studies will be coupled with electrophoretic and infrared studies to gain, if possible, information regarding changes in molecular structure. It is hoped that such coupled studies of bioassay and biophysical phenomena will aid in understanding the mechanism of action of narcotics and convulsants. The *in vivo* studies consist of injection of varying concentrations of the same drugs used in the *in vitro* experiments and administration of similar thromboplastin preparations with determination of any changes in activity. The experimental animals used for these studies are rabbits and mice.

The physiology laboratories will also be designed to be as flexible as possible. There will be a shielded room which will permit the use of sensitive recording devices, a general laboratory for observers and equipment, and rest rooms designed to make the patients comfortable during periods of observation and while waiting.

As an example of the type of work that is planned we might cite the investigation of the psychic effects of hyper- and hypothyroidism by Drs. Gardner Quarton and Howard Hermann. Such patients have been studied clinically, but there is no satisfactory explanation at present for the well-known changes in behavior seen with both overactivity and underactivity of the thyroid. The phenomena observed in myxedema are probably in part due to reduced cerebral metabolic rate. However, recent studies of hyperthyroid individuals seem to indicate that the cerebral metabolic rate is not elevated above normal. This means that we must consider other mechanisms. It may be that the phenomena are due to an augmentation of epinephrine or to effects on the sympathetic nervous system by the hormones of the thyroid. Some recent work suggests a synergistic action of thyroid and adrenal cortical hormones. We would like to develop a set of measures, some psychological and some physiological, that would permit the testing of these hypotheses. These measures must first be shown to discriminate between normal and thyrotoxic states. The search for such measures appears to be an ideal area for cooperation between psychology and physiology.

4. Experimental psychology

An experimental psychological laboratory is an essential unit in a psychiatric and neurological research center. Its primary purpose there is to test the validity of clinical observations, and of hypotheses derived from them, by applying more rigorous control than is practicable in the interview situation. The experimental psychologist's work in this setting may concern itself with diagnostic problems and the closer definition of nosological categories, with the principal and incidental effects of therapeutic methods and agencies, and with the patients' subjective responses to their various experiences in the course of hospitalization. This program includes basic psychological research, as well as projects especially designed round a closely circumscribed psychiatric or neurological problem—projects which are likely to be joint undertakings of experts in several disciplines.

The psychological program which is being developed at present by Dr. Talland is geared primarily to research in perceptual and cognitive processes. In studying mental illness, this means focussing on impaired capacities, e.g., accuracy of judgment, memory, ability to find solutions for problems, or consistent deviations from the norm which are of a habitual nature or learned, as well as those which are constitutionally determined. Characteristic traits in interpersonal behavior, as observed in the experimentally-created group, are also included in the research of our psychological laboratory. This kind of study includes analyses of the patient's self-perception in various roles and relationships, and also the more traditional study with the tachistoscope and similar instruments, along with tests of problem solving, learning, concept formation, and motor skills. A psychological study of Korsakoff's psychosis, conducted under the sponsorship of the Department of Neurology, and aimed at breaking down the clinically-observable symptoms of this disease into more basic psychological defects, offers an example of the type of research based on the experimental laboratory. We are planning a major research project on somewhat similar lines, with a view to determining the effects of aging on various perceptual and cognitive processes—a research so designed as to develop into a longitudinal laboratory study. Experimental techniques tested in these research projects will also be employed in studying the effects of addiction, of drug therapy, and of neurosurgery on perceptual and cognitive functioning.

The rest of the available space will be for offices for the individuals engaged in research. The space will permit five small offices, a secretarial office and waiting room area, and a conference room. The conference room will be divided by accordion walls so that it can be used most of the time as office space for research fellows.

As we develop our investigative program we will be much concerned with the training of young research psychiatrists who are well-versed in scientific methods and feel comfortable in working shoulder to shoulder not only with psychologists and social scientists, but also with clinical investigators in the fields of internal medicine and surgery and with the men who carry on studies in the basic biological sciences.

Erich Lindemann, M.D.,
Chief of Psychiatry Service

* * *

Friends of Miss Eleanore A. Lewis gathered in the Trustees' Room on the afternoon of January 4 for an informal reception given in her honor. Miss Lewis retired as Librarian of Treadwell Library the first of the year.

Dr. Dean A. Clark returned on January 14 from a 24-hour survey of damage to the Budapest Medical University and its related hospitals which resulted from the recent uprisings in Hungary. Dr. Clark went as a member of a 3-man team, at the request of the Rockefeller Foundation. Accompanying him were Dean Rusk and Dr. John Maier, President and European Medical Representative of the Foundation, respectively.

Reports of their findings as to medical needs in Hungary have been submitted to the Foundation; and Dr. Clark's impressions of conditions in Hungary, as given in an interview with the local press, are most interesting and enlightening—particularly when we realize that Dr. Clark is one of the few Americans to be permitted to pass through the Iron Curtain into Hungary.

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An Open House, to meet the staff of the Medical Records Department and to inspect the new facilities and equipment of the Department, was held on the afternoon of January 15.

The Board of Trustees, at their meetings on December 14 and 28, voted:

That the title of Dr. Thorkild Waino-Andersen be that of Associate Anesthetist rather than Assistant Anesthetist, as previously recommended, effective as of November 16, 1956.

To reappoint:

Dr. W. Hardy Hendren, III, as First Assistant Resident in Surgery, beginning January 1;
Dr. Federico Mora as Resident in Neurosurgery, for the period January 1 through June 30.

To appoint:

Dr. F. Harold Brown as Acting Anesthetist at McLean Hospital;
Dr. David A. Drachman as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Richard A. Field as Assistant in Medicine, beginning January 1;
Dr. William E. Karnes as Resident in Neurology for one year, beginning July 1;
Sidney Leskowitz, Ph.D. as Associate Immunologist in the Department of Medicine, effective as of October 1, 1956;
Dr. Paul R. McHugh as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Hugo W. Moser as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Lloyd H. Smith, Jr. as Assistant in Medicine, beginning January 1;
Dr. Walther T. Weylman as Second Assistant Resident in Radiology for one year, beginning January 1, 1958;
Dr. Irving Zieper as Assistant Resident in Neurology for one year, beginning July 1.

At their meetings on November 14 and 21, and during December, the General Executive Committee voted:

To conclude the services of Dr. Richard L. Rovit as First Assistant Resident in Neurosurgery, as of December 31, 1956. He goes to Lahey Clinic. It is assumed he will return on July 1.

To promote:

Saul Aronow, Ph.D. from the position of Research Fellow in Physics to that of Assistant Physicist (Medicine), effective as of December 1, 1956;
Dr. Roy J. Barry to the position of Resident in Radiology for one year, beginning January 1;
Dr. William R. Blade to the position of First Assistant Resident in Radiology for one year, beginning January 1;
Dr. John F. Burke to the position of Resident in Surgery, beginning January 1;
Dr. Ruth K. Freinkel to the position of Resident in Dermatology for one year, beginning January 1;
Dr. Egbert Mueller to the position of Resident in Psychiatry for one year, beginning July 1.

To extend the appointment of:

Dr. Soren Jorgensen as Clinical Fellow in Anesthesia for an additional three months, ending March 31.

To continue the appointments of:

Dr. Raymond N. Kjellberg as First Assistant Resident in Neurosurgery, for the period January 1 through June 30;
Dr. Alfred J. Luessenhop as First Assistant Resident in Neurosurgery at the V.A. Hospital, for the period January 1 through June 30;
Dr. John Mealey, Jr. as Second Assistant Resident in Neurosurgery, for the period January 1 through March 31, and as Assistant Resident in Neurosurgery at the V.A. Hospital, for the period April 1 through December 31;
Dr. Dagoberto Sosa as Second Assistant Resident in Neurosurgery at the V.A. Hospital for the period January 1 through March 31.

To reappoint:

Dr. H. Arto Aprahamian as Clinical Fellow in Anesthesia for one year, beginning January 1;
Dr. Gerald E. Davidson as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;
Dr. Thomas P. Hackett as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Jack H. Mendelson as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Olcay R. Neyzi as Clinical and Research Fellow on the Children's Medical Service, for the period February 1 through June 30.

To appoint:

Dr. Carl J. Bridge as Clinical Fellow in Neurology for one year, beginning January 1;
Dr. Walter C. Cotter as Resident in Neuropathology, for the period January 1 through June 30;
Dr. Nancy A. Durant as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. John R. Hills as Fellow in Neuropathology for one year, beginning July 1;
Dr. Zenos McP. Linnell as Clinical Fellow in Psychiatry, for the period December 1, 1956 through June 30, 1957;
Dr. Fleming McConnell as Clinical Fellow in Radiology, effective January 1;
Dr. Naomi M. Morris as Clinical Fellow on the Children's Medical Service for one year, beginning January 2;
Dr. Frank Cesare as Clinical Assistant in Surgery, assigned to Gynecology, with the privilege of caring for Dr. Langdon Parsons's private patients in the Baker Memorial and Phillips House, effective as of November 1, 1956;
Dr. Edward J. Rosen as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Richard H. Smith as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Albert H. Soloway, Ph.D. as Research Fellow in Neurosurgery, effective as of November 1, 1956;
Dr. Alfred D. Surtees as Clinical Fellow in Anesthesia for one year, beginning May 1;
Dr. Franz Wendlberger as Clinical Fellow in Anesthesia for one year, beginning August 1.

A vote of September 5, 1956 was delayed in reaching us. On that date the General Executive Committee voted to appoint Dr. Walter Frommhold as Clinical Fellow in Radiology, effective January 1, 1957.

* * *

INFECTIOUS DISEASE LABORATORY

The Infectious Disease Research Laboratory was reopened last spring, following a hiatus of three years after the departure of Dr. Thomas F. Paine, Jr. to accept a post at the University of Michigan Medical School. The laboratory is located on the top floor of the Domestic Building, two floors above the Bacteriology Laboratory. The activities of the unit fall into two main categories: 1. Consulting service to the various departments in the Hospital concerning problems of infectious disease; 2. Research in the biochemistry of the host-parasite interrelationship.

The clinical work of the unit is closely integrated with that of the Bacteriology Laboratory, under the direction of Dr. Lawrence Kunz. One of our very first "challenges" was a Hospital outbreak of salmonellosis which involved the private services of the M.G.H. The alertness of Drs. Rita Kelley and Thomas Gephart in picking up the first cases and informing us, and the very excellent work of the Bacteriology Laboratory personnel under Dr. Kunz, led to the early detection of the cause of the outbreak and to its control. In an institution as large as the Massachusetts General many problems in preventive medicine inevitably arise—e.g., in the areas of food handling, water supply, laundry, cross infection, isolation techniques, etc. The Hospital administration has recently appointed Mr. Sumner Waitz to the position of Hospital Sanitarian to aid in the management of these problems.

Each month one of the assistant residents on the Medical Service rotates through the Infectious Disease Unit. In this way he gets an opportunity to see the problems of infection that occur on the various services. Visits to the infectious disease rounds of Dr. Finland at the Boston City Hospital and the rounds of Dr. Weinstein at the Haynes Memorial Hospital serve as valuable instruction for both the resident and the writer. The Boston area offers much in the way of infectious disease pathology—exotic as well as common. In the past few months the "unusual" has included cases of leprosy, anthrax, echinococcosis, North American blastomycosis, malaria, and typhoid fever, to mention a few.

Every year seems to bring to the fore at least one or two new antibiotics. Because of the large number of such antimicrobial agents now available, their selective usage has become somewhat complicated. In hospital practice the problem of antibiotic resistant organisms has become a very important one. Every six months a survey of the sensitivities of staphylococci and urinary pathogens isolated from Hospital patients is made and distributed to the staff. In this way it is hoped that we can keep abreast of any changes in "our MGH flora".

In studying the host-parasite interrelationship a model system that has been found to be extremely helpful is that of *E. coli* and the T group of bacteriophages (viruses which attack bacteria). Many of the fundamental steps in viral attack on a host cell in animal tissues may find their parallel in this experimental system. The mechanism of virus attachment to the bacterial cell, and, of even more interest, the means by which the virus usurps the control of the host cell's metabolic machinery, may be studied in such a system. We are particularly interested in the changes in certain small nucleotides which occur in the coli cell during the early stages of infection. The rapidity with which changes are produced in the bacterial cell is striking. Between 20 and 30 minutes after the phage particle has attacked, the host cell ruptures and approximately 200 new phage particles are released. They then proceed to infect other susceptible bacterial cells. What biochemical changes enable the phage particle to stop protein and ribonucleic acid synthesis of the coli cell and convert that cell to making primarily phage desoxyribonucleic acid are fascinating problems.

Although at first glance this type of problem seems far removed from clinical medicine, it is becoming clearer and clearer that some of the bigger problems in infections stem not so much from the inherent virulence of the pathogen but, rather, from the reaction of the host. This is true of certain bacterial infections such as tuberculosis, staphylococcal disease, brucellosis, typhoid, etc. By learning more about the intracellular changes which occur in such infections, perhaps the effectiveness of our attacks on these diseases will be improved. While talking about bacteriophages, it might be of interest to point out that one disease of man is known that is directly related to bacteriophage. Strains of Corynebacterium diphtheriae that produce the diphtheria toxin are all suffering from a latent bacteriophage infection. In some way this latent infection alters some of the metabolic products of the diphtheria organism, and one of these is the toxin that produces the clinical manifestations of diphtheria.

In collaboration with Dr. John Benson of the G.I. Group and Dr. Morton Weber of the Bacteriology Department at Harvard Medical School we have undertaken a study of the role of the intestinal flora in the macrocytic anemia which occurs in patients and also can be produced experimentally in rats following surgical production of blind loops of the small intestine. It is thought that the anemia, in some way, is due to an abnormal bacterial flora in the loops. We are studying the various microorganisms in the loops and assaying their ability to incorporate or split folic acid and vitamin B-12.

In summation, we might say that the seed of an Infectious Disease Laboratory has just barely begun to germinate. We hope to be able to gradually increase our services, in this area of medicine, to other departments in the Hospital.

Morton N. Swartz, M.D.,
Head of Infectious Disease Laboratory

Brief bit:—

Dr. Oliver Cope is to participate in the Congress on Medical Education and Licensure, to be held February 9-12 at the Palmer House in Chicago, under the auspices of the American Medical Association.

New addresses:—

Dr. David W. Allen (*M.* 1955), c/o Professor Linus Pauling, California Institute of Technology, Pasadena 4, Calif.

Dr. Richard C. Batt (r.p. *R.* 1940), 206 Glen St., Glens Falls, N. Y.

Dr. Germain J. Bouchard (clin. a. *U.* 1956), 9 Central St., Lowell, Mass.

Dr. Howard S. Colwell (*E.M.* 1916), 158 Whitney Ave., New Haven 10, Conn.

Dr. Ruth C. Haynes (a.r.p. *An.* 1955), 131 S. Grant Ave., Columbus 15, Ohio

Dr. Walter M. Haynes, Jr. (*S.* 1952), 131 S. Grant Ave., Columbus 15, Ohio

Dr. John F. Heggie (*M.* 1956), 20 Cleveland Ave., Glen Head, Long Island, N. Y.

Dr. Lucius C. Kingman (*W.S.* 1905), 130 Slater Ave., Providence 6, R. I.

Dr. A. Gedeon Matoltsy (assoc. biol. *D.* 1956), Rockefeller Institute, 66th St. and York Ave., New York 21, N. Y.

Dr. Richard A. Mayo (sr. r.s. *Or.* 1956), 264 Beacon St., Boston, Mass.

Dr. W. Pierce Smith (r.p. 1956), Veterans Administration Hospital, 150 S. Huntington Ave., Boston, Mass.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
A comparison of two systems of anesthesia for thoracic surgery: Ether versus thiopental-succinylcholine.
J. Thoracic Surg. 32:419-423, 474-480.

Beecher, H. K.
Evidence for increased effectivenesss of placebos with increased stress.
Am. J. Physiol. 187:163-169.

Dermatology

Tilley, R. F.
Medical intelligence: Contact dermatitis from chlorpromazine hydrochloride.
New England J. Med. 255:1046-1047.

Laboratory Science

Griesemer, R. D.
Change in enzyme activity and ribonucleic acid concentration within the epidermal cell of the rat during the growth stage of the hair cycle.
J. Biophys. & Biochem. Cytol. 2:523-530.

Orthopedic Surgery

Rowe, C. R., and Detwiler, R. C.
Fractures in the aged.
J.A.M.A. 162:1517-1522.

Physical Medicine

Watkins, A. L.
Medical progress: Physical medicine and rehabilitation.
New England J. Med. 255:1233-1239.

Psychology

Talland, G. A.
Role and status structure in therapy groups.
J. Clin. Psychol. 13:27-33.

BIOGLETS

Dr. Gardner F. Fay, Assistant Resident in Orthopedic Surgery — born in Boston, Massachusetts, May 1, 1926; Phillips Exeter Academy, 1941-44; U.S. Navy: Pharmacist's Mate 3/c, Okinawa, 1944-46; A.B., Harvard College, 1949; M.D., Columbia College of Physicians and Surgeons, 1953; Intern in General Surgery, Presbyterian Hospital, New York City, 1953-54; Assistant Resident in Surgery, Veterans Hospital, Boston, Massachusetts, 1954-55; Assistant Resident in Orthopedics, Children's Medical Center, Boston, 1955-56; married; one daughter.

Dr. Jack J. Greenberg, Intern in Surgery — born in New York, N.Y., April 5, 1931; A.B., Harvard College, 1952; M.D., Harvard Medical School, 1956; married; two sons; home: Miami Beach, Florida.

Dr. Nathan T. Griscom, Intern in Children's Medicine — born in Philadelphia, Pennsylvania, June 21, 1931; B.A., Wesleyan University, 1952 (*Phi Beta Kappa*); M.D., University of Rochester School of Medicine and Dentistry, 1956 (AOA); married; home: Marlton, New Jersey.

Dr. Robert S. Harper, Assistant Resident in Pathology — born in Worcester, Massachusetts, June 14, 1929; A.B., Harvard College, 1951; M.D., University of Pennsylvania, 1955; Intern, rotating, Pennsylvania Hospital, Philadelphia, 1955-56; married; home: Boston, Massachusetts.

Dr. John W. Josse, Intern in Medicine — born in Minneapolis, Minnesota, February 20, 1930; Pillsbury Academy, Owatonna, Minnesota, 1947; U.S. Army: Sergeant, Korea and

Japan, 1947-49; B.A., University of Minnesota, 1953; B.S., University of Minnesota, 1954; M.D., University of Minnesota, 1956; married.

Dr. Arnold M. Katz, Intern in Medicine — born in Chicago, Illinois, July 30, 1932; B.A., University of Chicago, 1952; M.D., Harvard Medical School, 1956; home: Chicago, Illinois.

Dr. Herbert E. Kaufman, Intern in Medicine — born in Brooklyn, N.Y., September 28, 1931; Peddie School, Hightstown, New Jersey; A.B., Princeton University, 1952; M.D., Harvard Medical School, 1956.

Dr. John Mealey, Jr., Assistant Resident in Neurosurgery — born in Providence, Rhode Island, August 30, 1928; A.B., Brown University, 1949; M.D., Johns Hopkins University School of Medicine, 1952; Intern in Surgery, Johns Hopkins Hospital, 1952-53; Captain. MC, USAF, Assistant Surgeon USAF Hospital, Loring AFB, Maine, 1953-55; Clinical Fellow in Neurosurgery, Harvard Medical School and Massachusetts General Hospital, 1955-56; married; one son.

Dr. Gerhard Nellhaus, Intern in Children's Medicine — born in Stettin, Germany, September 16, 1923; immigrated to U.S.A., July 1936; AAF gunner, then Air Force Aerial Intelligence (commissioned) and OSS, Italy and Austria, 1943-46; A.B., Harvard College, 1946; M.A. in Comparative Literature, Harvard University, 1946; served with the American Friends Service Committee at the Student Center, Freiburg, Germany, 1948; Fulbright Scholar, Sorbonne, University of Paris, France, 1949-50; M.D., Western Reserve University School of Medicine, Cleveland, Ohio, 1956; married; two children; home: Boston, Massachusetts.

Dr. William M. O'Brien, Intern in Medicine — born in Bethel, Maine, February 26, 1931; University of Maine, 1948-49; B.S., Tufts College, 1951; M.D., Yale Medical School, 1956; home: Bethel, Maine.

Dr. Philip J. Porter, Intern in Children's Medicine — born in New York City, September 15, 1931; graduated from Princeton University, 1952; M.D., University of Pennsylvania, Philadelphia, 1956; married.

Dr. Raymond L. Robillard, Assistant Resident in Neurology — born in Montreal, Canada, July 10, 1927; B.A., University of Montreal, 1947; M.D., University of Montreal, 1952; Intern, Hôtel-Dieu Hospital, Montreal. 1952-53; Graduate Research Fellow of the Canadian Research Council, 1953-54; Assistant Resident in Medicine, New England Medical Center, 1954-55; Assistant Resident in Neurology, New England Medical Center, 1955-56; married; one daughter; home: Outremont, Province of Quebec, Canada.

* * *

Of all the seagoing birds and mammals, whales are the most completely adapted to aquatic life. Although they must breathe air at the surface, they are capable of diving hundreds of fathoms at once, and of remaining submerged continuously for upwards of an hour. This performance is all the more remarkable considering the whale's huge oxygen requirement. Some facts and figures (from Scholander) will help to illustrate this: a 27 meter, 12,200 kg. (or middle-sized) whale has a surface area of 275 square meters, and a vital capacity of 3050 liters. His basal oxygen requirement is 36 liters per minute (or 179 liters of air per minute). If he dives without bestirring himself, and if he can use all his oxygen, he should be able to stay under water for a maximum of 17 minutes. His observed submersion for an hour is therefore impossible except by some sort of special adaptive mechanism.

Whales must be met and studied in their own habitat, and consequently next to nothing is known about them from direct observation. It seems unlikely that they will ever find their way into a laboratory, especially a dry-land laboratory. In fact, a whale out of water promptly dies, as his great bulk collapses his lungs when the buoyancy of the ocean is removed.

Dr. Lot B. Page and friend

Fortunately, the whale is not the only warm-blooded animal in the sea. There are diving birds and other mammals such as beavers, muskrats, and seals. Of these, the seal is the closest kin to the whale, and is capable of physiological acrobatics that are nearly as impressive as those of the whale. A small seal, weighing 25 or 30 kg., can submerge for 15 minutes with ease, and up to 30 minutes under stress, emerging at the end of that time unruffled and only a little dyspneic. This feat is made possible by the activation of a "diving reflex" which, as shown by Scholander and Irving, is shared by all the aquatic birds and mammals. In the seal, the reflex is well developed and has widespread effects: heartrate drops to 10 or 15 beats per minute; peripheral blood flow stops, and visceral blood flow is reduced to a trickle. Only the cerebral blood flow remains unimpaired. Hence, for the duration of the dive, the seal becomes a "heart-brain" preparation.

There are many intriguing facts about the diving mechanism which are still unexplained and unexplored. The water balance of seals and the effects of diving on kidney function formed the basis of studies which have been carried out by Dr. Homer Smith's department of physiology at N.Y.U. I joined this department in 1950 and spent several summers at Mount Desert Island, together with other members of the department, pursuing seals both in and out of the laboratory.

The animals which we used for our experiments were the harbor seals, which are abundant along the coast of Maine. These seals are of no commercial value, and are regarded as major nuisances by fishermen because of their habit of tearing up nets in their pursuit of fish.

During the first summer, the seals were provided for the laboratory by the Sea and Shore Fishery Station at Boothbay Harbor. After that, we began to catch them ourselves, or rather, to let them catch themselves. The technique of capturing seals is a little absurd. It consists of finding a colony of seals, and stringing a stout net in the water somewhere close by. This is done as conspicuously and noisily as possible. The young seals gather round and watch while this is going on. When the net is left alone, they can hardly wait to examine it, and get themselves all tangled up in it. As soon as a seal is caught, the net begins to lurch and splash. The seal must then be extricated as quickly as possible to make room for another one. A seal that is left in the net for more than 4 or 5 minutes seems to forget his diving reflex and is usually drowned.

It is only the young seals that are caught in this way. The adults are either too wary or too lazy for this kind of game. This is fortunate, since the adults attain a weight of 400 to 600 pounds and would make quite a netful to handle if captured. Our captured seals were brought back to the laboratory dock, where they were kept in wooden cages partly immersed in the ocean, and provided with platforms for sunbathing. The "trained seals" of circuses are, of course, not seals at all, but sea lions. They are the intellectuals of the phocine world, and the true seals, by comparison, are moronic. In captivity they spend most of their time basking in the sun, or floating lump-like in the water. They are easily scooped out of the cages with a large dip net, which they stare at vacantly and without recognition even after months of captivity. In fairness to the seals, it should be added that their eyes are refracted for underwater vision, and they see less well on the surface. Perhaps they are not stupid — just nearsighted.

Most young seals are quite tame, and never offer any complaint except a wailing cry that sounds like "No! No!". A few, especially the older ones, are quite treacherous and will bite without warning or provocation. However, they are quite helpless out of water and, with a little practice, it is easy to handle them in a way which makes biting impossible. During my first summer at the laboratory we had a particularly large, active, and vicious seal — a yearling female, to which everyone was very respectful. Each time she was taken out of the cage and brought to the laboratory, 4 men were required to keep her neutralized until she could be put in restraints on an animal board. One day, late in the season, no one was available to help me when the time came to take her out of the cage. Full of confidence from several months of experience with handling seals, I reached in with the dip net and started to hoist her out. Instead of settling into the bottom of the net as the others did, she climbed over the rim and pitched herself out as I brought her toward the dock, knocking both of us into the ocean. I had my arms around her as though dancing when we fell, and in the skirmish that followed I got a scissors and headlock on her from behind. We had a long and disagreeable fracas, during which she wanted to go under water and out to sea, and I wanted to go up to the top and back to shore. She had the

No. 63 in a series of Staff photographs
Dr. Morton N. Swartz—Head of Infectious Disease Laboratory

tide on her side and most of the time we were in 8 or 10 feet of water. Fortunately, help finally arrived and our side won.

As experimental animals, seals are far from ideal. Despite their remarkable viability in the water, they seem to be quite fragile, and often curl up and die with the least provocation. Our experiments usually involved venepunctures, bladder catheterization, and passage of a Levin tube. Each procedure was a minor crisis, with everyone fearful that the seal would decide to die. This was especially true of water-loaded animals, which often developed seizures, presumably from water intoxication, if they became excited. Between procedures, however, they appeared to be their usual sleepy selves. "Diving" the seals during experiments proved to be quite easy, since all features of the diving reflex could be elicited by holding the animals' noses.

The attrition rate of experimental animals was usually high enough so that there were only a few living seals to dispose of at the end of a season. It was always a temptation to liberate the survivors, but autopsies were a necessary part of the experimental program. Perhaps I should close with a short description of a seal's viscera, which are as absurd as everything else about the animal. In brief, all the organs are much too large. The heart, liver, and kidneys of a 25 kg. seal are equivalent in size to those of an adult human. There are also a number of large, tortuous, anastomotic veins in the retroperitoneal area, leading into an inferior *vena cava* which is often over 3 inches in diameter. At the level of the diaphragm, the *vena cava* is encircled by a sphincter-like muscle. All these accessory venous structures are probably of importance as a device for pooling blood during diving.

There were those among us callous enough to sample seal meat and declare it edible, but I can only report this as hearsay.

Lot B. Page, M.D.,
Clinical & Research Fellow in Medicine

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VOLUNTEER GROUPS

MGH Staff Wives Association

The Music Committee of the MGH Staff Wives Association has arranged for two concerts in February, to be given in the Chapel at 3 P.M. On Wednesday, February 6, Phyllis Hardy Blodgett, contralto, gave a program of vocal selections, accompanied by Richard J. Reynolds at the piano. On Wednesday, February 20, Barbara Lloyd, a student nurse who plays piano and organ, is planning a program to be given with other student nurses who sing, and play various instruments.

◆

A 6-weeks' Refresher Course for Graduate Nurses is being offered, without tuition, by the Massachusetts General Hospital. This Course — offered by the Hospital for the first time since 1952—began January 28. It is being given to encourage nurses to return to the active practice of their profession after a lapse of years. It is to be given at the Hospital 3 days a week. It will include class instruction and practice in the newer procedures, as well as discussions of modern methods of nursing care and of medical and surgical care.

The Massachusetts General Hospital, like many other hospitals today, is faced with the problem of adequately staffing the floors. From time to time nurses who, for various reasons, have been out of active nursing, inquire about the possibility of a refresher course here at the Hospital. Approximately one-third of the graduate nurses working at M.G.H. today are married, and many of them have children.

Applications for and inquiries about the Refresher Course should be made to Mrs. Daley, Personnel Office, Massachusetts General Hospital. Mrs. Daley's telephone number is LAfayette 3-8200, Extension 607.

Items having to do with the history and development of Massachusetts General Hospital — such as portraits, certain pieces of furniture and equipment, etc. — are recorded in our Archives Department, together with their locations. Many of these items have been removed from time to time and placed otherwise, albeit with the best of intentions but to the utter confusion of your archivist. As an illustration of what we mean — on one occasion a visitor from far away made a special trip to the Hospital to see a certain portrait. We escorted her to where the portrait had been hanging for many years, only to find, to our embarrassment, that it had disappeared. After many, many days of fruitless searching and inquiry, we found that the portrait had been taken out to McLean Hospital.

As a result of this and similar experiences, it was decided that printed gummed labels should be attached to certain items in the Hospital. These stickers carry a small copy of the Hospital seal and read:

> This item is recorded in the Archives Department as being in this location. It is not to be moved without prior consent of the Archivist.

Dean A. Clark, M.D.,
General Director

THE NEWS

No. 165 Boston, Mass March 1957

NEUROPATHOLOGY LABORATORY

All of us who are concerned with the illnesses that beset mankind are continually impressed with the extremely difficult and complex problems which are presented by the diseases of the nervous system, many of which are still far from solution. A large amount of the time and activities of any medical center such as the Massachusetts General Hospital must, therefore, of necessity be devoted to nervous disease in the broadest sense. Thus, special services in neurology, neurosurgery, and psychiatry have grown up in close association with their parent branches of general medicine and surgery, and their continued growth is clear evidence as to their necessity. But any rational approach to clinical problems must be based upon as thorough an understanding as possible of disease itself —the nature of disease processes, their mechanisms, their effects. Thus, pathology, whose basic concern is the anatomical substratum of disease, must always be the strong foundation upon which clinical medicine and surgery can grow. Concomitantly, then, with the growth and expansion of the clinical services provided by this Hospital, there has been a parallel expansion and increase in the activities of the Department of Pathology. Because of the enormous complexity of the nervous system, and because of the more specialized techniques required for the study of its diseases, there has grown up within the framework of general pathology the younger science of neuropathology, which in turn forms the indispensable background for the understanding of nervous disease, and, therefore, the fundamental support for any rationally based science of neurology or psychiatry.

It was with these facts in mind that Dr. James B. Ayer, who was Chief of the Neurology Service at this Hospital from 1926 to 1946, with the approval and support of Dr. Tracy B. Mallory, late Chief of the Department of Pathology, was long interested in establishing a special laboratory for neuropathology at M.G.H. By a fortunate turn of events, Dr. Charles S. Kubik, who had just spent several years in clinical neurology at the National Hospital, Queen Square, London, and had also worked actively there in neuropathology under the guidance of Dr. J. G. Greenfield, came to Boston in 1926 to take on an appointment in psychiatry at the Boston Psychopathic Hospital. There he came to the notice of Dr. Ayer, who immediately invited him to found our new Neuropathology Laboratory. Dr. Kubik came to us in 1927, and has been the guiding spirit in neuropathological activities at this Hospital ever since that time. From its very beginning, the MGH Neuropathology Laboratory has been intimately associated with the activities of the clinical departments of neurology and neurosurgery; at the same time, the laboratory has from the first been equally associated with the Department of Pathology, of which it has always been an integral part. The close collaboration of these services, so wisely planned at the outset, has ever led to their mutual enrichment.

The beginnings were modest. Dr. Kubik recalls that he was given space to work in, and a microscope. For cutting tissue sections, he had to borrow a microtome, and he himself carried out the staining of the nervous tissues to reveal their intimate structure. Among the most precious items in the tremendously rich and varied collection of neuropathological material at this Hospital are preparations made with consummate skill and exquisite technique by Dr. Kubik — beautifully cut and stained sections which remain as examples and inspiration for those who have followed him in this work.

Eventually, Dr. Kubik did obtain a microtome for the newly created laboratory. It happened that one day he chanced to notice, hidden away under the seats of the old Pathology Amphitheatre and heavily coated with the untouched dust of many years, an abandoned microtome, which further inspection showed him was still serviceable and of a type particularly suited for cutting neuropathological tissue sections. This was resurrected from its dusty repository and it performed usefully for years until it finally was replaced by a newer model.

The years that followed clearly showed the farsighted wisdom of Dr. Ayer's choice of Dr. Kubik to head the new laboratory, and the good fortune of the M.G.H. in having a man of his abilities and personal qualities in this position. He eventually obtained the assistance of a highly skilled technical staff to aid him in the preparation of his sections — a group of exceedingly capable and devoted people, including Mrs. Jean Engborg, his first technician, who came in 1930 after receiving training in neuropathologic technique under Dr. Stanley Cobb at Harvard Medical School and who, after an interval of years devoted to the responsibilities of a growing family, returned in 1950 to give the laboratory the benefit of her special skills and still remains as one of its mainstays; Miss Virginia W. Towne, at present secretary to the Department of Pathology and assistant editor of the "Case records of the Massachusetts General Hospital" which appear in the *New England Journal of Medicine;* Mrs. Marie Reilly Tierney, who has lately returned to neuropathology to assist Miss Margaret Carroll in working on special problems for Dr. Raymond D. Adams; and Mrs. Klara Edwards, for nearly ten years chief technician of the Neuropathology Laboratory, to whom this laboratory has long owed a great debt of gratitude for ceaseless interest and conscientious work of the highest quality.

Under Dr. Kubik's guidance and active participation, the MGH Neuropathology Laboratory soon came to be one of the leading centers of neuropathology in this country. A number of fortunate physicians have been privileged to work with him for varying periods of time; many of them, now widely scattered in a number of teaching institutions, hold positions of leadership in neurology, psychiatry, neurosurgery, or pathology; all of them found in Dr. Kubik those qualities most prized in a teacher: clear thought, absolute honesty, sound observation and conclusions based on fact, not on fancy, and — with all this — kindliness, patience, and humor. Dr. Adams, now Chief of the Neurology Service at M.G.H. and Bullard Professor of Neuropathology at Harvard Medical School, received his start and first real inspiration in neuropathology under Dr. Kubik. Even after Dr. Kubik became Chief of the Neurology Service in 1946, on Dr. Ayer's retirement, he continued to take an active interest in the laboratory and to oversee its activities. It was during this period of time that the Trustees voted to establish a residency in neuropathology at M.G.H., and Dr. Mary Lorraine Gannon was the first to take on this post, in 1947. When the present writer returned to M.G.H. in 1949, after an interval of study in England, he was given the privilege of assisting Dr. Kubik in the laboratory, and, in frequent and close contacts with Dr. Kubik, developed an interest in neuropathology which has been of decisive importance in determining his subsequent career.

Not only did the Neuropathology Laboratory, under Dr. Kubik's leadership, afford an opportunity for the study of first-rate material with a wise, experienced teacher; it was also the source of a number of significant publications which have permanently enriched the medical literature. To name a few, the papers (with Dr. Adams) on the clinical and pathological features of basilar artery thrombosis, of pyogenic infections of the nervous system, including subdural empyema and influenzal meningitis, and, more recently, on the pathology of the demyelinative diseases, may truly be considered to be medical classics.

In 1951, Dr. Kubik retired from his administrative responsibilities and was succeeded as Chief of the Neurology Service by his former pupil, Dr. Adams. The writer took over the direct supervision of the MGH Neuropathology Laboratory. Very fortunately for us all, Dr. Kubik has continued his keen and active interest in our laboratory, and we all of us like to feel that he still considers the Massachusetts General Hospital as his principal professional home. It is always a happy occasion for us when he can afford us a little time, before he rushes off to his never-ceasing clinical responsibilities, to give us the benefit of his wisdom in informal conversations, and to help us when we encounter particularly difficult or perplexing problems. "What *is* this tumor?" we may ask; or, "What is the real meaning of the strange lesions we see in this case?" And the answers we get from him are always thoughtful, wise, thoroughly sound, and helpful.

As already mentioned at the outset, the concern of the Neuropathology Laboratory is the anatomical substratum of nervous disease. In a large general hospital like the M.G.H., with many active clinical services, an unparalleled opportunity is afforded to accumulate information on the effects on the nervous system of a very wide variety of disease processes, and to correlate this with the clinical facts. In accomplishing this purpose, part of the function of the laboratory is to check the accuracy of diagnosis and to aid in the correct classification of all material directly related to the nervous system that is removed at surgical operations. Much of the material removed in this way consists of tumors of the brain or spinal cord; for these, the Neuropathology Laboratory frequently is called on for rapid microscopic diagnosis during the course of a neurosurgical procedure, and its opinion is always sought for the final diagnosis. The largest bulk of the material studied in the Neuropathology Laboratory comes, however — as would be expected — from nervous tissue removed at post-mortem examination. In this regard, the Neuropathology Laboratory is responsible for the removal and preparation of appropriate tissues, and eventual diagnosis, on every autopsy performed by our Department of Pathology. For this purpose, a schedule is made up each month by the resident in neuropathology, so that there is a member of the neuropathology staff on call every day for whatever post-mortem examinations may be performed on that day. In many cases, an examination of the brain alone suffices, but in any instance where several levels of the nervous system may have been involved by disease, it may be necessary to obtain a very large sampling of material, including brain, spinal cord and roots, sensory ganglia, and muscles —an undertaking of major proportions, as will be realized by anyone who has attempted this.

Another function of the laboratory is to provide consultation service on already prepared sections, or to prepare and examine material from the nervous system, on cases coming to autopsy in other hospitals. Thus, for a number of years, our laboratory has from time to time had the opportunity of studying cases from the Boston Veterans Administration Hospital, and has obtained some of its most valuable material in that way. When the Lemuel Shattuck Hospital for Chronic Diseases was lately opened by the Commonwealth of Massachusetts, and Dr. Adams was appointed Chief of the Neurology Service there, an arrangement was made whereby neuropathological material of interest would be examined by our laboratory. In this way, we have obtained access to an even larger number of cases of chronic nervous system disease, which are particularly valuable for study and teaching. More recently, still another source of extremely significant and not otherwise easily accessible material in pediatric neuropathology has become available to us. In 1956, Dr. Philip R. Dodge, Assistant Neurologist on the MGH staff, was appointed by the Commonwealth as Neurological Consultant at the Myles Standish State School in Taunton, and through his efforts and the kindness of the responsible State officials, it has become possible for the MGH Department of Pathology to have access to all autopsies done at that institution. In this way, a vast field of congenital or acquired mental and neurological defects in infancy and childhood is opened up to our neuropathological investigations. In addition to these sources, we are very grateful to a number of hospitals, both inside and outside of Massachusetts, which have kindly sent us material from cases observed and treated at M.G.H., so that this final follow-up examination could be made.

Once obtained and appropriately fixed, the tissues from the nervous system are subjected to various embedding, sectioning, and staining procedures — each step requiring great skill and precision of technique, and each more or less time-consuming; then, a microscopical examination is undertaken. For obvious reasons, the examination cannot be equally detailed and thorough in every case, ideal though that might be on theoretical grounds. In many cases of ordinary interest, it must suffice to assess the nature and degree of a disease process with six to eight rapidly prepared small paraffin-embedded sections. In each of several cases every year, however, some hundreds of slides have to be prepared, with a variety of technical procedures being used, before any conclusion can be reached, and even then we often wish for a few more slides — a few more areas represented, a few more stains.

It may be wondered why it should be necessary to spend so much effort on the pathological examination of a single organ; yet it is quite apparent that the nervous system is itself made up of a large number of tissues, with interconnections of inconceivable complexity, and that a large number of areas must be examined in order to reach some idea as to the whole. Thus, the neuropathologist attempts, by the detailed microscopical study of the tissue sections, to gain some insight as to the presence of any disease process, and as to its nature. The cells and fibers that are disclosed by the microscope are dead, immobile structures; and yet, they are actors in a drama that are suddenly held still in the midst of their activity — in the midst of each pose or gesture — as in a photograph. It is the task of the tissue pathologist — and of the neuropathologist in this field of his activity — to infer, by means of his previous experience with other cases or with evidence of older or more recent stages of the disease process in the same case, what the scenes were that have gone on before, and what might have resulted had not the whole process terminated at that point. Viewed in this way, the scene may be that of a furious battle with hordes of cellular participants in various degrees of victory or defeat; or it may be more like a gradual, insidious decline and decay. Thus, in the mind's eye, the picture is no longer that of a dead stillness but, instead, of an active struggle between the forces of health and those of disease — the meaning of which may be readily apparent, or may yet defy interpretation. Or, it may be — as often is the case — that the florid manifestations observed during life are not reflected in any visible disturbances in the structures under scrutiny. This, too, must be discovered and understood. It must be admitted that there are disease processes which do not result in any changes that can be observed with the ordinary microscopical techniques at our disposal. Our methods are still inadequate to reveal subtle structural changes which must surely be present in many instances, and this must be an incentive to improve our techniques. Even then, it may well be that some cases of what could be called "disease" cannot be elucidated by any method of demonstrating structures, no matter how refined. This, too, we must know.

Apart from determining the detailed nature of disease in a given region, the neuropathologist must be concerned with the effects on conduction systems within the nervous system and on nearby or distant regions, and with the exact anatomical localization of the disease in question. Topographical localization is most accurately carried out in large sections including many areas on one slide, and on many such slides from the same case. For this purpose, the ideal method is to section serially the entire brain, as is done in the special problems under investigation by Dr. Paul Yakovlev and his fellow-workers at the Warren Museum, Harvard Medical School. Yet this method does not always lend itself well to the minute study of cellular pathology previously discussed. Thus, in any given case, we attempt in our laboratory to reach some compromise between elucidating the fine details of lesions and demonstrating their topography, and thus often obtain a variety of sections—some large, some small—to achieve both aims, fully realizing that emphasis of one of these aspects of neuropathology must always be at the cost of the other. Very happily for us, however, the technical facilities of the Warren Museum under Dr. Yakovlev have lately become available to us for cases requiring a more extensive investigation of topographical anatomy than our equipment permits.

The MGH Neuropathology Laboratory, so ably launched and set on its right course by Dr. Kubik, now continues under full sail into its 30th year. In the autumn of 1956 it moved, together with the Department of Pathology, into the beautiful James Homer Wright Pathology Laboratories, and is very appropriately situated in fine new quarters, in intimate relationship with the laboratories of general pathology on the second floor of the Warren Building. Administratively, the laboratory is, as it always has been and always should be, a part of the Department of Pathology, and thus its over-all head is Dr. Benjamin Castleman. At the same time, it is closely affiliated with the Department of Neurology under Dr. Adams, and from that department receives much necessary support. Dr. Adams, as Neuropathologist to the Hospital, and Dr. Kubik as Consultant in Neuropathology, provide the experienced, wise advice and guidance upon which the best functioning of the laboratory depends. The writer, as Assistant Neuropathologist, is responsible for the direct supervision of the regular activities of the laboratory. We are fortunate in having the faithful help of a fine team of technical assistants, now made up of Mrs. Klara Edwards, Mrs. Jean Engborg, Mrs. Beverley Hardacre, and Mrs. Hélène Tremblay.

In this setting, the Neuropathology Laboratory continues to carry out its work in service to the Hospital, in teaching. and in investigation. A sound basic knowledge of neuropathology is, as already emphasized, an indispensable background to adequate work in neurology and neurosurgery, and is necessary for general pathology as well. It can also be of great assistance in psychiatry. Thus, our laboratory has been fortunate over the years in having been able to participate in the training, and to have had the benefit of the hard work, of a considerable number of able physicians — men and women — from many countries, who have spent time with us. Several have gone on to important positions in other institutions. To name those from recent years: Dr. Howard S. English, Fellow in 1948-49, is active in the practice of neurosurgery in Utica, N. Y.; Dr. Rafael Estrada, Fellow in 1949, is established in neurology and neuropathology in Havana, Cuba; Dr. Remedios K. Rosales, our Resident in 1950-52, is now Assistant Professor of Neurology at Santo Tomás School of Medicine in her native city of Manila, P. I.; Dr. Ruth Stauffer, Fellow in 1950, is now Assistant in Neurology on the MGH staff; Dr. Raymond A. Adams, Fellow in 1950-51, returned to his home city of Richmond, Va., where he is now in charge of teaching in neurology at the Medical College of Virginia; Dr. Lawrence J. Barrows, our Resident in 1951-53, is now on the full-time staff in neurology and has started up a department of neuropathology at the Hospital of the University of Pennsylvania in Philadelphia; Dr. Philip R. Dodge, Fellow in 1951-52, was welcomed back here on the MGH staff in neurology in 1955, and continues his active work in neuropathology, with particular interest in nervous diseases in childhood; Dr. Carl F. Essig, Fellow in 1951-52, is on the staff at USPHS Hospital, Lexington, Ky.; Dr. Jerome K. Merlis, Fellow in 1952, returned to his post as Neurologist and Neurophysiologist at the Boston Veterans Administration Hospital, and, in 1956, was appointed Professor of Neurology at the University of Maryland Medical School, in Baltimore; Dr. Betty Q. Banker (now Dr. Betty Victor), our Resident in 1952-53, is a full-time staff member of the Department of Neurology at Boston City Hospital, under Dr. Denny-Brown, where she is doing basic studies on neuromuscular disease. Dr. O. Rhett Talbert, Fellow in 1951-52, is at present in charge of neurology at the Medical College of South Carolina, in Charleston, where he maintains an active interest in neuropathology; Dr. John N. Walton, Fellow in 1954, a neurologist from England, is now Neurological Consultant to the Royal Victoria Infirmary, Newcastle-upon-Tyne; Dr. Andres Rosselli, Fellow in 1955, from Bogotá, Colombia, has returned to the National Faculty of Medicine in Bogotá, where he teaches neurology and neuropathology; Dr. John O. Strom, Resident in 1954-55, has lately joined the neurology staff at Albany Medical College; Dr. Lowell W. Lapham, Fellow in 1954-55, has gone into full-time neuropathology in Dr. Alan Moritz's department of pathology at Western Reserve, Cleveland; Dr. Salomon Hakim, Fellow in 1954-56, after a long period of faithful and unusually able service at M.G.H., returned late in 1956 to his home in Bogotá, Colombia, where he will organize university teaching in neuropathology and neurosurgery; Dr. Françoise Robert (Robillard), who came to us from the University of Montreal as our Resident in 1955-56, is at present working in experimental neuropathology with Dr. Byron Waksman and Dr. Adams, and will continue in neuropathology as a future career; Dr. Pierre M. Dreyfus, Fellow in 1955-56, has lately begun work in quantitative histochemistry of the nervous system, in the research laboratories at McLean Hospital, under Dr. Alfred Pope; Dr. Cesare T. Lombroso, Fellow in 1955-56, continues his work in epilepsy and electroencephalography, at the Children's Medical Center, Boston; and during the first half of 1956, we were happy to have with us, as a Fellow for six months, a member of the Psychiatry Service, Dr. Thomas P. Hackett, who is at present a Fellow in Psychiatry.

In addition to providing training and experience for those planning careers in neurology or neuropathology, the laboratory also has participated regularly since 1951 in the residency training program of the Neurosurgery Service, whereby each of the residents in neurosurgery has a six-months' rotation in neuropathology. By arrangement with Dr. Castleman, the residents in pathology are assigned to neuropathology for what is now a minimum four-months' period. These workers in allied but not identical fields thus bring to our laboratory fresh points of view and stimulating ideas, for which we in neuropathology are grateful, indeed. Furthermore, the Tuesday afternoon Neuropathology Conferences ("brain-cutting sessions"), a regular feature of the laboratory activities since their initiation by Dr. Kubik in 1946, have continually drawn large audiences from the entire Boston area.

In the current year of 1956-57, our present medical staff consists of our resident, Dr. Elliott L. Mancall, who received his training in neurology at the Neurological Institute, Columbia University College of Physicians and Surgeons, New York City; and, as fellows, Dr. Miriam W. Carmichael, lately assistant resident on the MGH Neurology Service, who previously trained in internal medicine at the Medical College of Virginia, in Richmond, under our alumnus, Dr. Raymond A. Adams, and at the Neurological Institute in New York; Dr. Henry deF. Webster, recently resident on the MGH Neurology Service; Dr. Karl-Erik Aström of the Serafimer Lasarettet, Karolinska Institutet, Stockholm; Dr. Gilles Lyon of the Hospice de la Salpêtrière, Paris; and Dr. Haruo Matsuyama, a Japanese pathologist with the Atomic Bomb Casualty Commission in Tokyo, who is currently adding to his experience in neuropathology. This year, Dr. Allan McNie succeeded Dr. Sumner Zacks as the pathology resident assigned to neuropathology; and Dr. Richard L. Rovit, on the residency staff in neurosurgery, has been followed by Dr. Walter C. Cotter.

The investigative activities of the Neuropathology Laboratory at present cover a number of fields of great interest. First, precise and careful observations are being collected in the vastly important subject of cerebral vascular disease as part of a large-scale investigative project under the leadership of Dr. C. Miller Fisher, Associate Neurologist at M.G.H. and Assistant Clinical Professor of Neurology at Harvard Medical School, whose painstaking studies and great experience are a constant inspiration. The large topic of demyelinative disease of the brain as seen in human cases is under study, based on some exceptionally valuable and pertinent case material, by Drs. Aström, Mancall, and the present writer. Lately, this general field was the subject of an international collaboration between Dr. Paul B. Diezel of Heidelberg University, Germany, and the writer during the latter's six-months' stay in Germany in 1955 —work which included a histochemical as well as neuropathological study of some remarkable cases of degenerative diffuse cerebral sclerosis (leukodystrophy) from this laboratory. In collaboration with Dr. Philip Dodge, Dr. Lyon is studying some cases of metabolic encephalopathy occurring in childhood, as part of a far-reaching and extensive investigation of pediatric neurological disorders. The neuropathological aspects of the 1955 poliomyelitis epidemic are currently under review by Dr. Françoise Robert, who is finding a number of hitherto poorly recognized and little understood features of that disease process. The growth behavior of cerebral gliomas, with particular attention to their modes of origin and spread, is the subject of an extensive project under the direct supervision of Dr. Webster, with the aid of Dr. Yakovlev's laboratory at Harvard Medical School. Another large-scale project, in which basic neuropathological facts are being gathered, is a study of abnormalities of respiratory rhythm, including the Cheyne-Stokes variety, under Drs. Mandel E. Cohen, James Currens, Rhett Talbert (now in Charleston, S. C.), Wayne Hebertson, and the writer. Other work in progress includes Dr. Kubik's review of the clinical and pathological aspects of carbon monoxide asphyxia, for which he has gathered over the years an excellent collection of material; studies of a number of remarkable spinal cord syndromes, including chronic adhesive arachnoiditis following spinal anesthesia; and investigations of particularly interesting cases of progressive degenerative disorders of the brain resulting in varied abnormalities of mentation and motor performance.

We of the Neuropathology Laboratory are proud of our laboratory — of its history, its accomplishments, and of its potentialities. In the world at large, there are in fact very few laboratories or institutes that are equipped to do this fundamental work. We intend that the MGH Neuropathology Laboratory shall continue to be, as it has been, one of the foremost in this field of scientific activity.

Edward P. Richardson, Jr., M.D.,
Assistant Neurologist
and *Assistant Neuropathologist*

The Board of Trustees, at their meetings on January 11 and 25, voted:

That leave of absence be granted Dr. John W. Littlefield for one year, beginning January 1, to work in Dr. Roy Markham's laboratory at the Molteno Institute, Cambridge, England;

That leave of absence be granted Dr. Paul M. G. St. Aubin for a period of two years, in order that he may go to Japan with the Atomic Bomb Casualty Commission in their study of casualties and their offspring at Nagasaki and Hiroshima;

That official recognition be given to the fact that the Radiology Staff of the Massachusetts General Hospital is also the Radiology Staff of the McLean Hospital;

That permission be given the Distaff Club to use the name of the Hospital in connection with the subscription dance it is sponsoring for April 26.

To appoint:

Dr. Mauldin J. Boggs, Jr. as Exchange Assistant Resident on the Children's Medical Service, for the period January 7 through February 17;

Dr. Abdollah Gashgai as Special Intern on the Surgical Service, beginning July 1;

Dr. Robert J. Haggerty as Assistant to the Children's Medical Service, beginning January 1;

Dr. Walter G. Heimann as Second Assistant Resident in Radiology, beginning April 1, 1958;

Dr. Priscilla D. Taft as Assistant in Pathology, beginning January 1;

Dr. Herbert C. Wimberger as Resident at McLean Hospital.

At their meetings during January, the General Executive Committee voted:

To allow Dr. Robert P. Fornshell, Assistant Resident on the Orthopedic Service, to have a tour of duty at the Lemuel Shattuck Hospital, on a trial basis, for a period of six months, beginning January 1;

To allow Dr. Robert H. Hansen to serve two months on affiliation at the Children's Medical Center and one month on affiliation in obstetrics at the New Haven Hospital; this affiliation will mean that Dr. Hansen's appointment will be extended to a total of fifteen months, rather than one year;

To change the title of Dr. Margaret A. Single from Intern to that of Second Assistant Resident on the Children's Medical Service;

To rescind the vote passed on December 12, 1956, appointing Albert H. Soloway, Ph.D. as Research Fellow and to appoint him as Assistant Chemist on the Neurosurgical Service, effective as of November 1, 1956.

To promote:

Dr. Paul M. Black from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Norman K. Brown from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Leon I. Goldberg from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Edgar Haber from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. John W. Josse from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Charles S. Keevil, Jr. from the position of Assistant Resident to that of Resident in Medicine for one year, beginning July 1;

Dr. Frederick S. McAlpine from the position of Assistant Resident to that of Chief Resident in Anesthesia for one year, beginning April 1;

Dr. John A. Mills from the position of Assistant Resident to that of Resident in Medicine for one year, beginning October 1;

Dr. William M. O'Brien from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. James A. Rose from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Allan I. Sandler from the position of Assistant Resident to that of Resident in Medicine for one year, beginning July 1;

Dr. John D. Turner from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Arnold N. Weinberg from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1.

To reappoint:

Dr. Winnifred P. Chase as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. William B. Clapp as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Irving H. Itkin as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Louis Kunian as Clinical Assistant in Medicine for one year, beginning January 1;

Renee G. Naves, Ph.D. as Research Fellow in Medicine, beginning February 1;

Dr. Raymond J. Savignac as Clinical Assistant in Medicine for one year, beginning January 1;

Dr. Richard J. Taylor as Clinical Fellow in Pathology, for a period of six months, beginning January 1;

Dr. Gordon D. Winchell as Clinical Assistant in Medicine for one year, beginning January 1.

To appoint:

Dr. György Acs as Research Fellow in Biochemistry, effective as of November 25, 1956;

Dr. Hedda Acs as Research Fellow on the Children's Medical Service, beginning January 10;

Dr. Frederick J. Duhl as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Laszlo L. Fekete as Research Fellow in Dermatology, effective January 23, and Clinical Fellow if and when he obtains a license to practise medicine in this State;

Liselotte I. Hecht, Ph.D. as Research Fellow in Medicine for one year, beginning January 1;

Dr. Eugene M. Joly as Clinical Fellow in Orthopedic Surgery, for one month, beginning January 1;

Dr. Jorgen A. Kirchhoff as Senior Fellow in Anesthesia, for a period of six months, beginning April 1;

Dr. Emil J. Pawlowski as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Marie Sadka as Clinical and Research Fellow in Neurology for one year, beginning January 1;

Dr. Maurice Thibault as Clinical Fellow in Radiology for one year, beginning July 1.

Rev. Paul R. Swanson has been appointed Associate Protestant Chaplain at Massachusetts General Hospital, under the sponsorship of the Lutheran Social Service of the New England Conference of the Augustana Lutheran Church Body at Large. Mr. Swanson's home is in Muskegon, Michigan. After serving for a year in a parish in Kansas, he came to Boston, and is now studying under an Augustana Centennial Scholarship at Andover-Newton Theological School, in the field of Pastoral Psychology.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on

Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Lever, W. F., and Lyons, M. E.
Idiopathic hyperlipemia and primary hypercholesteremic xanthomatosis. VIII. Effects of protamine on the electrophoretic and ultracentrifugal changes produced in the serum by heparin.
J. Invest. Dermat. 27:325-334, 1956.

General Surgery

Zuidema, G. D., Clarke, N. P., Prine, J. R., and Salzman, E. W.
An experimental study relating fabric types with severity of burns.
Surg., Gynec. & Obst. 103:581-589, 1956.

Oral Surgery

Trieger, N., and McGovern, J. J.
Plasma thromboplastin antecedent (PTA) deficiency and oral surgery.
Oral Surg., Oral Med., & Oral Path. 10:55-62, 1957.

Neurology, Neurosurgery, and Psychiatry

Benda, C. E.
Darwin und Freud. Zum 100. Geburtstag von Sigmund Freud.
Die Medizinische Nr. 35/36:1205-1208, 1271-1276, 1956.

Benda, C. E.
Mongolism: A comprehensive review.
Arch. Pediat. 73:391-407, 1956.

Cohen, S. I., Silverman, A. J., and Zuidema, G.
Physiologic stress response evaluation by focused interviewing.
A.M.A. Arch. Neurol. & Psychiat. 76:670-674, 1956.

Surgery — Reconstructive

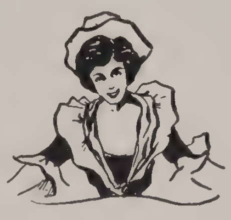
Kazanjian, V. H.
Bilateral absence of the ascending rami of the mandible.
Brit. J. Plast. Surg. 9:77-82, 1956.

Kazanjian, V. H.
Mandibular retrusion with ankylosis of the temporomandibular joint (Report of two cases).
Plast. & Reconstruct. Surg. 17:91-104, 1956.

Kazanjian, V. H.
Open bite deformities of the jaws — Surgical treatment.
Fortschritte der Kiefer- und Gesichts-Chirurgie 2:194-200, 1956.

Kazanjian, V. H., and Roopenian, A.
Median forehead flaps in the repair of defects of the nose and surrounding areas.
Tr. Am. Acad. Ophth. 60:557-566, 1956.

This is the last issue of The News in which 1956 titles will appear.



VINCENT MEMORIAL HOSPITAL

After its meeting on February 14, the Board of Managers of the Vincent Memorial Hospital presented to Dr. Joe Vincent Meigs the original drawing from which bookplates will be made for the medical library in the Joe Vincent Meigs Conference Room at the Hospital. The bookplate was designed by Mrs. Henry A. Morss, Jr., and the lettering was done by Mr. Edward A. Karr. The drawing was presented by Mrs. George Lewis, Jr., President of the Board.

Among those present was Mr. Charles F. Hovey, the newly elected Chairman of the Board of Trustees of the Vincent Memorial Hospital. He succeeded Mr. Louis Curtis at the Annual Meeting held February 13. Also attending the presentation was Mr. Henry W. Minot, Jr., who was elected a Trustee at the Annual Meeting. Mr. Minot replaces Mr. Charles B. Barnes, Jr., who has been Clerk of the Vincent Memorial Hospital for the past twenty-five years. Mr. Barnes has been an active member of the Board of Trustees of the Peter Bent Brigham Hospital for many years and succeeded Mr. Robert Cutler as President in April of 1955.

Dr. Meigs, who was Chief of Staff of the Vincent Memorial Hospital from 1930 to 1955, is now its Consulting Visiting Gynecologist and also Consulting Visiting Surgeon at the Massachusetts General Hospital. In addition to the Conference Room being named in his honor, money is being raised to endow a Chair of Gynecology at the Harvard Medical School — the incumbent to be known as the Joe Vincent Meigs Professor. The chairman of the Meigs Fund Committee is Dr. Maurice Fremont-Smith.

MASSACHUSETTS EYE & EAR INFIRMARY

AUDIOLOGY SERVICE OF THE WINTHROP FOUNDATION

Beginning with its establishment in 1940 as the center of a clinical research program in the field of deafness, the Winthrop Foundation has devoted a considerable share of its attention to the nonmedical aspects of deafness. With the recognition that a lion's share of the problems of deafness includes those cases which are not assisted by medical or surgical handling, interest spread to the psychological and educational ramifications of the problem. The Audiology Service is an outgrowth of this recognition.

Rehabilitation of patients with hearing impairment, regardless of whether the rehabilitation is medical, surgical, educational, or psychological, proceeds from competent diagnosis. Audiology — the science of hearing — deals primarily with the measurement of hearing impairment and the nonmedical considerations of rehabilitation. In addition to the role it plays in diagnosis, the Audiology Service also contributes to research and teaching programs of the Winthrop Foundation.

Testing of children

One of the most vital phases of the diagnostic program is the evaluation of hearing impairment in young children and infants. With the recent advances in technical and electronic equipment it has become possible to begin in the early preschool years the educational rehabilitation of the child afflicted with congenital deafness. Not too many years ago it was not considered important that deafness be recognized before the child was of school age, and nothing was done for him even in the face of early recognition. Research, however, including that of the pioneer study of the aural rehabilitation of preschool children, begun in 1942 at the instigation of the late Dr. Ruth Guilder of the Winthrop Foundation, clearly demonstrated the value of preschool recognition and training for the profoundly deaf child as well as the child with lesser hearing impairment.

Below the age of three years, testing of hearing becomes something of a problem. Obviously, when the child is old enough, it is possible to teach him to respond to sounds by performing tasks such as moving a bead or putting a peg in a hole. When the child is too young to associate the performance with the stimulus (sound), or if his behavior is such that he will not cooperate, techniques which do not require active participation on the part of the patient must be used. These techniques include reflexive responses to intense gross sounds, and psychogalvanic skin resistance audiometry (P.G.S.R.). This latter technique is a method which has developed in popularity since the application of two old principles (G.S.R. and conditioning) to auditory measurement in 1948. Despite its popularity, a considerable amount of concern has arisen recently over the reliability of the technique. This has been due to the high incidence of failure to elicit or maintain conditioning in the very young infant. The research program which we are now embarking on involves a detailed study of this technique, and is discussed below.

Understanding the whole child

Ultimate plans for rehabilitation of children are decided upon through conferences with otologists, psychiatrists, audiologists, educational psychologists, teachers, and social workers. In this way, the plan is worked out to fit individual needs.

Whenever there is residual hearing, it is the policy ultimately to recommend a hearing aid, although this is often preceded by a short period of intensive auditory training. In many cases, the residual is so slight that little more than noise comes through to the child. However, after years of training, he learns to give meaning to the noise. Although he may never understand speech on the basis of hearing alone, he can integrate lip reading and auditory cues, so that he will understand much more speech than if he had only lip reading to depend upon.

The tests and examinations given to the child when first examined are repeated from time to time, so that periodic medical, audiological, and educational evaluations may be made on his progress. The degree of hearing impairment is never the sole consideration. Other vital factors include psychological adjustment of patient and parent, availability of specialized training, age of onset, and intelligence. With a consideration of these factors the decision is then made as to the ultimate educational disposition — special school, special class in a regular school, or a regular class with additional outside assistance.

Psychological hearing losses

Another interesting facet of the work with children, particularly those of school age, has been the interesting problem of psychogenic deafness. In the past several years we have noted an increasing number of the children referred from school systems because of apparent hearing loss, as detected by the school hearing screening testing program, who appeared to have no organic loss. Instead, specialized testing reveals the hearing loss to be a somatic expression of some psychological problem. This discovery stimulated our staff to seek the advice and assistance of the Child Psychiatry Unit. As yet, our studies have been fragmentary and are still inconclusive. However, the lesson of caution before accepting a hearing loss as valid on the basis of superficial tests has been dramatically highlighted. The study of this problem is continuing as one of the areas of clinical research by the Audiology Service.

Service for adults

In addition to the testing and rehabilitation of children with auditory impairment, a considerable portion of the testing program involves the testing of adults. When surgery is ineffective or inadvisable, it becomes the job of the Audiology Service to counsel patients in selection and use of hearing aids and other rehabilitation procedures. Such counseling is considered important because of the oft-ignored fact that hearing losses are not "cured" by hearing aids. It should be recognized that there are a large number of people with significant hearing impairment who do not obtain benefit from hearing aids. In addition, some will obtain benefit, but it will not be sufficient from the patient's viewpoint to warrant the use of an aid. Thus, assets and liabilities of amplification must be discussed with the patient before specific purchase is made. Full appreciation of the hearing aid is always best accomplished when the patient also receives auditory training and speech reading. In order to assist the patients' achievement of maximum rehabilitation, these considerations must be brought to their attention.

The research program

Some of the clinical research carried out by the Audiology Service has been alluded to above. In addition to hearing testing, which serves as a basis of quantifying and evaluating improvement in hearing by a variety of surgical techniques, there is a continual attempt to evaluate and improve testing procedures, so that greater diagnostic assistance may be provided. In addition, a recent grant by the Deborah Munroe Noonan Memorial Fund has served to instigate the establishment of a coordinated and directed Hearing and Speech Research Project, the ultimate aims of which are to improve the methods of diagnosis of hearing loss so as to foster prompt and efficient medical and/or educational rehabilitation for young children afflicted with problems of deafness and resultant speech difficulties. Initially, it is the intended purpose of this research project to investigate the minute details of P.G.S.R. audiometry with the hope that a clearer understanding of its advantages and limitations may be reached. In addition, it is hoped that new and more efficient techniques for measurement might evolve from the investigation of other or corollary means of measurement. The recent completion of the new research floors of the Eye and Ear Infirmary has provided quarters which will enhance the carrying out of the research program.

A teaching service

Existing, as it does, in a teaching hospital, the Audiology Service also includes the training of house officers in diagnostic hearing techniques which will enable them to provide competent service for their own hard-of-hearing patients. As techniques are constantly changing, similar opportunities are made available for practising otologists to keep pace with these advances. In addition to the "hospital family" education, a course for industrial and office nurses has been instituted because of the increasing demands for personnel to be trained in the measurement of hearing.

The continually expanding services provided in audiology have necessitated the addition of specialized personnel. Whereas, five years ago the hearing testing was performed primarily by one psychologist not specifically trained in this area, the Audiology Service currently includes two specialists trained in the areas of audiology and speech pathology, and will very shortly have another person with advanced training added to the staff. Such a growth has been possible only through the recognition of the need by such farsighted administrators as Dr. LeRoy A. Schall, Chief of Otolaryngology, and Dr. Philip E. Meltzer, Surgeon in Charge of the Winthrop Foundation.

Alan S. Feldman, Ph.D.,
Director of Audiology

BIOGLETS

Dr. Daniel K. Bloomfield, Resident in Medicine—born in Cleveland, Ohio, December 14, 1926; B.S., U.S. Naval Academy, 1947; Ensign, U.S. Navy, with the 6th Fleet in European waters, 1947-50; M.D., Western Reserve University School of Medicine, 1954; M.S. in Anatomy, Western Reserve University, 1954; Intern and Assistant Resident, Beth Israel Hospital, Boston, Massachusetts, 1954-56.

Dr. Nathan H. Fearer, Intern on the Children's Medical Service—born in Malden, Massachusetts, May 27, 1927; U.S. Army: Sergeant, Panama Canal Zone, 1945-46; B.S., Tufts College, 1951; M.D., Tufts Medical School, 1955; Intern, rotating, Colorado General Hospital, Denver, Colorado, 1955-56.

Dr. Leon I. Goldberg, Intern in Medicine — born in Charleston, South Carolina, September 26, 1926; B.S., 1946, M.S., 1951, Ph.D. (Pharmacology), 1952, Medical College of South Carolina; M.D., Harvard Medical School, 1956.

Dr. William L. Morgan, Jr., Resident in Medicine — born in Honolulu, Hawaii, November 18, 1927; B.A., Yale University, 1948; M.D., Harvard Medical School, 1952; Intern and Assistant Resident in Medicine, Massachusetts General Hospital, 1952-54; U.S. Public Health Service: National Heart Institute, National Institutes of Health, 1954-56; married; home address: Honolulu, Hawaii.

Dr. Egbert Mueller, Assistant Resident in Psychiatry — born in Mannheim, Germany, March 7, 1928; Karl-Friedrich Gymnasium, Mannheim, 1938-47; military service, January 1944-May 1945; M.D., Heidelberg University Medical School, 1953; Intern in Surgery, St. Marien Hospital, Erwitte, Germany, 1954-55; Resident in the Psychosomatic Clinic, Berleburg, Germany, 1955-56.

Dr. Robert K. Osborne, Intern in Medicine — born in Terre Haute, Indiana, June 20, 1930; graduated from Westtown School, Westtown, Pennsylvania, 1948; A.B., Earlham College, Richmond, Indiana, 1952; M.D., Medical College of Virginia, Richmond, Virginia, 1956; home: Bloomingdale, Indiana.

Dr. Jan-Henrik Probst, Assistant Resident on the Children's Medical Service — born in Chojny, Denmark, August 25, 1922; A.B., University of Copenhagen, 1947; M.D., Faculty of Medicine, University of Copenhagen, 1952; Intern, rotating, University Hospital, Copenhagen, 1952; Assistant Resident in Medicine and Pediatrics, Finsen Memorial Hospital and Radium Institute, Copenhagen, 1953; Assistant Resident in Pediatrics, Sundby Hospital, Copenhagen, 1955; Resident in Pediatrics, University Clinic, Kinderspital, Zurich, Switzerland, 1955; home: Copenhagen, Denmark.

Dr. Sanford I. Roth, Intern in Pathology — born in McAlester, Oklahoma, October 14, 1932; Vanderbilt University, Nashville, Tennessee, 1952; M.D., Harvard Medical School, 1956; home: Oak Ridge, Tennessee.

Dr. Thomas J. Whitfield, III, Chief Resident on the Children's Medical Service—born in Portsmouth, Virginia, October 14, 1926; Duke University, 1944-46; M.D., Harvard Medical School, 1950; rotating internship, Philadelphia General Hospital, 1950-51; Lieutenant (jg), U.S. Navy, attached to 3rd Marine Division in Southern California, 1951-53; Research Assistant to Dr. William R.

Waddell, Massachusetts General Hospital, September through December 1953; Intern, Children's Medical Service, Massachusetts General Hospital, 1954; Assistant Resident, Children's Medical Service, Massachusetts General Hospital, 1955; Senior Resident, Pediatric Service, Kaiser Foundation Hospital, Oakland, California, January through June 1955; married; one son.

* * *

VOLUNTEER GROUPS

MGH Staff Wives Association

On January 15, in subzero weather, a most delightful morning coffee party was given in Bartlett Hall by the Staff Wives for our visitors from abroad. Mrs. Daniel Ellis, Chairman, reported that it was a most successful occasion, and everybody was very much pleased with the turnout —about 150, despite the weather. Our guests were from North and South America, Europe, and the Orient.

Assisting Mrs. Ellis, as pourers, were Mrs. Chester Jones, Mrs. Walter Bauer, Mrs. Perry Culver, Mrs. Warren Point, Mrs. Fuller Albright, and Mrs. Dana Farnsworth. The hostesses were Mrs. Earle Wilkins, Mrs. Frank Wheelock, Mrs. Alfred Kranes, Mrs. Reed Harwood, and Mrs. Arthur Pier.

Due to an unforeseen conflict of dates, the tea planned for April has been postponed. As soon as a definite date is arranged for the spring tea, it will be announced.

In addition to the group of visiting doctors from other countries, our first Hungarian family, fleeing their homeland and communism, arrived here last December. Their possessions consisted of merely the clothing they wore when they fled. They had nowhere to live. The Staff Wives found them an apartment and provided them with furniture and clothing — all in the same day, practically. It was most gratifying to those at the Reception Center to be able to help them.

Mrs. Claude Welch recently addressed the Women's Auxiliary of the Springfield Hospital, which has a large number of interns from other lands. The Auxiliary is planning new activities similar to those of our Staff Wives, and Mrs. Welch was proud to tell them of the work of our group and of other volunteers at Massachusetts General Hospital.

Our Music Committee has arranged for two concerts in March, to be given in the Chapel at 3 P.M. On Tuesday, March 5, Leonard Moss, a member of the Boston Symphony Orchestra, gave a violin concert, accompanied at the piano by his wife, Frances Moss. On Wednesday, March 20, a program will be given by Gladys de Almeida, soprano, and Mrs. Seth T. Crawford, harpist.

Do you play an instrument or sing? If so, and if you are interested in entertaining patients either formally or informally, please give your name to Mrs. John D. Crawford, President of the Staff Wives Association Music Committee, CLearwater 9-8323, or leave it at the Staff Wives Reception Center at the Hospital.

Distaff Club

Distaff Club members met in February in their local areas. These smaller group meetings appeal to many Distaff-ers who enjoy this more personal type of invitation from their local hostesses.

Future plans of our Club include an afternoon party in March and the annual Spring Dance on May 17. If distant readers of this paper are interested in obtaining tickets for the dance, they are invited to get in touch with Mrs. Charles F. McKhann, at 44A Aldrich Road, Watertown, Massachusetts.

New this year is the Distaff Club newspaper, inspired and edited by Mrs. Thomas J. Whitfield.

New addresses:—

- Dr. Ralph H. Adams (*W.S.* 1935), 31 Stone Ave., Newton. Mass.
- Dr. Clemens E. Benda (a. psychiat.), 111 Pleasant St., Arlington 74, Mass.
- Dr. James H. Currens (a. *M.*), Massachusetts General Hospital, Boston 14. Mass.
- Dr. Lamont W. Gaston (*M.* 1954), Dept. of Endocrinology, University Hospital, Ann Arbor, Mich.
- Dr. Basil B. Jones (*E.M.* 1918 & *C.M.* 1919), 526 North Blvd., Richmond 20, Va.
- Dr. Philip L. McCarthy (a. *D.*), 464 Beacon St., Boston 15, Mass.
- Dr. Nils Normann (a.r.p. *An.* 1951), Dept. of Basic Research, Eastern Pennsylvania Psychiatric Institute, Philadelphia 29, Pa.
- Dr. John D. Pitts (*S.* 1950), 314 Angell St., Providence 6, R. I.
- Dr. Leonard D. Rosenman (*E.S.* 1943), 2320 Sutter St., San Francisco, Calif.
- Capt. Guillermo C. Sanchez, MC, USAR (*M.* 1950), 137th Medical Detachment, APO 59, c/o Postmaster, San Francisco, Calif.
- Dr. Joseph M. Stolman (*Dn.* 1956), D 2912 Benson St., Camden, N. J.
- Dr. Anne G. T. Thomas (a.r.p. *Path.* 1956), Dept. of Pathology, Welch School of Medicine, Cardiff, Wales
- Dr. Alexander B. Timm, Jr. (r.p. *D.* 1956), 36 W. Main St., Milford, Conn.
- Dr. Louis L. Weiss (a.r.p. *An.* 1956), 811 W. 63d St., Indianapolis 20, Ind.
- Dr. Roger E. Wilcox (*S.* 1949), Beckley Memorial Hospital, Beckley, W. Va.

Brief bits:—

Dr. Henry K. Beecher was one of five scientists recently sent to Russia by the American Physiological Society. While there he lectured before the Academy of Sciences at Leningrad and the Academy of Medical Sciences at Moscow. He also delivered two University Lectures at Oxford, England, and one to the Royal Academy of Medicine at Dublin, Ireland.

At the meeting of the American Society for Surgery of the Hand, held in Chicago on January 25-26, Dr. Bradford Cannon spoke on his experiences in the South Pacific and on open grafting of the burned hand. At a meeting of the Cambridge (Mass.) Medical Improvement Society on January 31, Dr Cannon addressed the group on "Tissue and organ homotransplantation".

Dr. Robert R. Linton was a special guest speaker at the Seattle Surgical Society meeting on January 25 and 26, and he also took part in the Washington State Postgraduate Teaching Session held in the same city on January 24. It was a busy three-day period, with formal lectures and participation in panel discussions. The trip also permitted a pleasant reunion with a large group of MGH men who have settled in the Pacific Northwest. These included Dr. Charles MacMahon, Dr. Dean Crystal, Dr. Henry Garrigues, Dr. Robert Coe, Dr. Hugh Lawrence, and Dr. Wade Volwiler. In addition to these, Dr. Richard Kleaveland, from Spokane, Dr. Gordon Jones, from Olympia, and Dr. Toshio Inahara, from Portland, Oregon, joined the group. Dr. Linton added, "The trip also gave me an opportunity to see many old friends of my younger days, since I originally came from this area. It was also pleasing to have one of my former patients, on whom I performed a portacaval shunt at the Mason Clinic in Seattle in 1951, honor me with a cocktail party. Two days of skiing in the deep powder snow in the Cascade Mountains was also a pleasant interlude."

On January 1, Dr. Ernest A. Sneddon took over the responsibilities of the Anesthesia Department of Boston University Medical School (Massachusetts Memorial Hospitals), succeeding Dr. Arrowood.

* * *

Dr. György Acs, his wife Dr. Hedda Acs, and small son András, arrived in Boston from Budapest, by way of Vienna, on December 21. Dr. Acs's letter to Dr. Fritz Lipmann, dated November 27, asking to come to the Biochemical Research Laboratory in this Hospital, elicited prompt response, and the family left Vienna on December 14. They arrived at Camp Kilmer from Munich on the 17th.

Dr. Hedda Acs, now here in Dr. Nathan Talbot's laboratory, was a pediatrician at the Children's Clinic Number 2 of the Medical University of Budapest, which Dr. Dean Clark visited on his recent trip to Hungary. This is a 280-bed hospital, unfortunately situated directly behind the Hungarian military barracks of Kilian. On October 23, the hospital was badly damaged from shrapnel. On that particular day, there were only four doctors in the hospital. The others had been unable to get there due to the fighting which was going on all around the hospital. Dr. Acs herself attempted to get there the next day, and walked the four miles from her home, only to be turned back by the heavy fighting. It was not until five days later that she was able to reach the hospital. By that time all doctors were on 24-hour duty, returning home every alternate 24 hours. The children who could be moved were taken to their homes because of the danger of the situation. Most of the windows of the hospital had been smashed, but had been replaced very rapidly. On November 4, the fighting was resumed at the same location, and once again many of the windows of the hospital were shattered. During this second attack, one ward, the ambulance department, and the top story of the hospital were demolished. Only sixty children had remained in the hospital, and for four days the doctors, nurses, and children were obliged to stay underground. They all slept on mattresses on the floor.

No. 64 in a series of Staff photographs
Dr. Edward P. Richardson, Jr., Assistant Neurologist and Assistant Neuropathologist — Head of Neuropathology Laboratory

Dr. Hedda Acs has given us an account of the educational requirements necessary for the M.D. degree in Hungary, which proved to be very different from those in the United States. After eight years in an elementary school and a four-year high school course, the prospective doctor goes directly to the university for the five-year course in medicine. He then spends three months as an intern in medicine, three months in gynecology, three months in surgery, two months in pediatrics, one month in neurology, one month in ophthalmology, and one month in dermatology. There is an examination after each period and a final examination at the end. Among other subjects, this final examination includes hygiene and forensic medicine. For specialization in the field of pediatrics, it is necessary to spend four years after graduation in a hospital specializing in pediatrics. Ordinarily this would be a children's clinic hospital. Only after the examination at the end of these four years can one be called a pediatrician. The number of years required for specialization in some of the other fields are: psychology and psychiatry, three years; neurology, four years (psychology and neurology together, seven years); surgery, four years; ophthalmology and dermatology, three years; eye, ear, nose, and throat, three years.

In only a few hospitals or clinics is it possible to do research work. For one thing, research equipment is lacking. In addition, there are so many patients per doctor there is no time for research. Ordinarily, there are twenty infants assigned to one doctor in the four-year specialization period. The doctors have many more duties than those in this country, for nurses (who have a three-year training period, as here) are not allowed to give injections, take blood, or perform other such duties. Actually, in the pediatrics service the nurses only feed, bathe, and change the infants.

Dr. György Acs was engaged in enzyme chemistry research in the Biochemical Laboratory of Dr. F. Bruno Straub, at the Budapest Medical University. The research laboratory is government-supported, and is hampered by the unavailability of equipment and supplies. Little or no equipment can be obtained from outside Hungary or the Iron Curtain countries, and research is further curtailed because of the lack of industry in Hungary. It is very difficult to obtain radioactive chemicals, as Russia is their only source of supply. There never seems to be a sufficient quantity, and only four or five types are available at all.

The scientists in the laboratories are almost entirely from Iron Curtain countries. Dr. Acs remarked that it is wonderful to see scientists and doctors from other lands in Massachusetts General Hospital, for there had been no one from the free world in their hospital in Hungary for ten years, and only a few from the immediately surrounding countries.

Dr. György Acs's research work was connected almost entirely with teaching, and apparently this was true of most of his colleagues. He gave five lectures a week (five teaching hours), and was very frequently responsible for the two to three hundred students of Dr. Straub. This obviously cut down on laboratory research time.

Publication of scientific work was almost exclusively in Hungarian and Russian journals, although a few limited publications were allowed in other European countries, particularly after 1954.

The scientific viewpoint in Hungary is largely restricted by the viewpoint of the professor, and if it is in any way contrary to the Russian-held beliefs, the scientist will probably lose his position and standing. For example, the Mendelian theory of heredity has very severe political implications from the Russian point of view. The hereditary principle as expounded by the Russian scientist Lyssenko was the only accepted theory, and if one openly expressed disbelief in the Lyssenko theory, one's position was in jeopardy, prior to 1956.

The Acses are now living in Nahant, where there are a few other Hungarians. They commute to the Hospital with several other MGH doctors. They are very happy to work and study in this country and to be able to live in peace.

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Dr. Robert B. Osgood, an Intern on our West Surgical Service in 1900 and a member of our Orthopedic Staff since 1904, died on October 2, 1956. On November 4, the Medical Advisory Board and the Board of Managers of Alfred I. duPont Institute of the Nemours Foundation, Wilmington, Delaware, passed the following Resolutions on Dr. Osgood:

> WHEREAS Dr. Robert Bayley Osgood, of Boston, Massachusetts, from 1937 to 1946 most ably served the Nemours Foundation and its Alfred I. duPont Institute as a member of the Medical Advisory Board,
>
> WHEREAS due to his guiding influence and wide knowledge of problems of rehabilitation of the crippled child, there was created a great medical institution for the hospitalization and education of the child,
>
> WHEREAS due to his keen interest in research and his belief that no medical institution should exist without a sound program of investigation, such a program was established,
>
> WHEREAS due to his broad vision and delightful and stimulating personality, it was a privilege for the members of the Boards and staff to work with him on the many problems of the Foundation and Institute,
>
> BE IT RESOLVED that we, the Medical Advisory Board and Board of Managers, desire to express to Mrs. Margaret Osgood and her daughter, Mrs. Ellen Osgood Jennings, our deepest appreciation for what Dr. Osgood did for the Foundation and the Institute during this important period in its development and growth.

Signatures of members of the Board of Managers and the Medical Advisory Board are appended, including those of Dr. Joseph S. Barr (*Or.* 1929), Chief of our Orthopedic Surgery Service, and Dr. Philip D. Wilson (*E.S.* 1914), an Honorary Surgeon on our Staff.

THE NEWS

No. 166 Boston, Mass April 1957

RESEARCH IN BURNS 1942 — 1957

Good care of the burned patient demands an enormous amount of continued attention and hard work from doctors, nurses, dietitians, and hospital personnel. So fatiguing and disagreeable can this work be that many of the hospital staff shy away, and the burned patient becomes the orphan child of the surgical service. Since January 1942 the Surgical Research Laboratories of the Massachusetts General Hospital have maintained a continuous program of research in burn therapy, under contract with agencies of the Federal Government. The research has been possible only through the wholehearted collaboration of several services, the nurses, and the administration. Over the fifteen years many individuals have worked on the project. They number so many that it will not be possible to mention all in this brief review of the work. Having been the Responsible Investigator throughout, it falls to my lot to present the review.

Research in burns was not new to the M.G.H. in 1942. Ever since 1821 the Hospital has accepted burn patients, and members of the staff have shown special interest in them. Within present memory, Dr. C. Allen Porter tried homografting in the early 1920's. In 1928 the Hospital cared for the victims of the Beacon Oil explosion in Everett, and advanced studies for the time were made upon them. The impetus for the start of investigation in 1942 was, of course, the Second World War. Experiences of the war in Europe and Pearl Harbor showed that burns were to be a principal injury in modern warfare, and it was at the suggestion of the National Research Council that this Hospital became involved in the research program in burn therapy.

A conference on burns was called by the National Research Council for January 7, 1942 — exactly one month after Pearl Harbor. Dr. Isadore Ravdin of Philadelphia was its organizer and chairman, and he appointed me the secretary. I had had no special experience in burns, and the reason I was invited to the conference, I presumed, was my interest in the adrenal cortex. There were indications at that time that the adrenal cortex was involved in surgical shock and it was believed by some that adrenal cortical extract could diminish the need for fluid therapy in burned patients. In the two years before Pearl Harbor I had been investigating the relation of adrenal cortical function to capillary permeability and the results of the investigations had been published immediately preceding Pearl Harbor.

Being unfamiliar with the recent literature on burns, I spent the ten days preceding the conference reading and thinking about burns. I sketched a memorandum for myself of the direction research in burns should take. It is interesting reading now, fifteen years later, because the thoughts that I had then have actually guided in a large part the course of the research since. I doubted the claims for tannic acid; the fluid therapy needed a formula to anticipate the requirements of the patient and a simple method of measuring the adequacy of the therapy. It occurred to me then that the urine output should logically be such a measurement. The role of the endocrine glands in support of the patient was, of course, a part of my thinking.

The burn patient presents a multifaceted problem, and the investigations at the M.G.H. from the outset attacked the traditional aspects, the wound, the fluid balance, the disordered metabolism, and infection; in addition, they have turned out a new aspect—the psychologic factor which was not envisaged at the outset.

The accepted treatment of the burn wound in 1941 was tannic acid. This treatment required debridement of the dead skin and the spraying of tannic acid over the surface until an eschar had formed. Generally this required twenty-four hours. Silver nitrate had been advocated to hasten the formation of the eschar. Vital dyes had also been offered as an alternative.

In the first place, these methods of producing an eschar were complicated and time consuming for the professional personnel. Secondly, tannic acid had been advocated on the basis that it would not injure viable cells, tanning only the dead tissue; and it was also believed that it would fix toxins *in situ,* holding them from absorption into the circulation. These were unproved assumptions, and on evidence available appeared unreasonable.

The assumptions were put to the test by Dr. Bradford Cannon, who used a simple, ingenious approach in patients who needed grafts. Carefully controlled split-thickness grafts were removed from comparable areas on both sides of the patient and the donor sites treated in various ways. It was soon apparent that the questioning was justified. The wounds were deepened by tannic acid and the dyes. Those treated by the blandest ointments or nothing at all healed most rapidly and with least scarring. These observations provided the principal piece of evidence against the use of tannic acid.

An obvious difficulty with the tannic acid approach was the debridement of the wound needed before the solutions could be sprayed on. Such debridement of extensive wounds required a great deal of professional time and was very painful to the patient, who often required anesthesia. Under conditions of warfare, professional personnel would be in short supply in comparison with the number of casualties, and therefore much needed was a simplified treatment which could be applied rapidly to many patients by a few trained personnel.

The idea of doing nothing to the wound, the simplest of all treatments, immediately came to the fore. But before this could be seriously considered, it was essential to know what would happen to various types of burn wounds if they were left alone. What would happen to a burn bleb if it were left unruptured and merely protected by a dressing? Would it become infected or would healing proceed beneath without interference? A single experience in 1935 convinced me that it was worth a try. I had wrapped up in grease and dry gauze the hand and wrist of a young girl burned by boiling water. This was a highly unorthodox treatment at the time. Hot water, I figured, had probably not destroyed the skin all the way through and, if the surface were kept sterile by the gauze, healing should be excellent. This proved to be the case, although there were uneasy days in the family of the child.

To test the concept that the best should result from doing the least, it was necessary to start with small burn wounds and observe them carefully from every possible angle, including infection and ultimate healing. Thirty-four patients were so treated — a number from the Hospital personnel. A ward maid and a student nurse burned the front of their wrists from opening a sterilizer prematurely. The burns were carefully wrapped in the protective dressing, and from time to time fluid was aspirated from the blebs and cultured. Infection developed in only one of the thirty-four, and this was not serious. Healing generally was rapid and excellent. We then began treating the deeper wounds. After the wounds had been completely covered with petrolatum strips and a generous gauze dressing, a pressure bandage was applied. This so-called pressure dressing was advocated by surgeons of Cincinnati and St. Louis who thought it spared fluid, and it seemed wise at the time to add it. The combined effects appeared so effective that more extensive trial seemed justified. In November 1942 an extensively burned young woman arrived in the Emergency Ward. The house staff (it was an East day) applied the simplified dressing and attended to the fluid needs of the patient. In double-quick time intravenouses were running, the patient was catheterized, and in bed. The simplified therapy of the wound freed the available personnel for the immediate lifesaving measures. This was just one week before the Cocoanut Grove disaster. The East Surgical Service had had a trial run.

The Cocoanut Grove disaster, late in November 1942, was on an East E.W. day. If ever the advantages of forethought and preparation were to be demonstrated it was in the care rendered by the Massachusetts General Hospital to the victims of the Cocoanut Grove disaster. In preparation for civilian bombings, Dr. Edward D. Churchill and Dr. Nathaniel W. Faxon had worked out a plan for disaster management. The principles of triage, of congregating all victims in one area of the Hospital where they could be properly cared for, the setting up of a morgue—these and many other matters had been thought of. Supplies had been collected and the Blood Bank readied by Dr. Soutter for a catastrophe.

On the night of the Cocoanut Grove fire, as soon as it was clear that there had been a disaster and that the Hospital was to anticipate a large number of casualties, the Administration cleared White 6. The patients there were transferred to the available beds elsewhere. After a short survey in the E.W., the victims were immediately taken to White 6 where the resident staff of the East Surgical Service treated the wounds. The house staff members of the other services joined in the care of the patients as indicated. Only a minimal few of the older staff were needed. The organizational plan worked as anticipated.

The burn wounds healed as well as could have been hoped for and, as a result, the Armed Services recommended this approach to wound therapy. It is still in the minds of many as the best treatment for disaster conditions — its great value being that it enables a limited number of medical personnel available to get on with the lifesaving measures.

This simplified treatment did not discriminate between the superficial wound which heals excellently when left alone and the deep wound which subsequently must be grafted. When penicillin became available in 1943, a new program of immediate excision and grafting of the deep wounds was initiated. Penicillin was allotted to the Hospital for this program in the early days when it was otherwise available to only the Armed Forces. It was found that with penicillin the duration of illness could be curtailed and the final healing improved.

The initial care of the wound continues to be a problem, and Dr. Cannon is observing the effect of temperature and humidity upon the rate of wound healing. Both temperature and humidity should influence the growth of cells as well as of bacteria.

In 1947 Wallace, in Edinburgh, described the so-called open treatment of burns — that is, the complete abandonment of all dressings. This approach was so quickly and widely recommended that it appeared wise to evaluate critically the benefit of the so-called pressure dressing. Dr. Anne Wight Phillips and Mr. Douglas Jackson, Surgeon of the Birmingham Burns Unit who visited us in 1954, have examined this experimentally in dogs and have found that the benefit is not statistically significant. The claims made for the dressing in 1941 now appear to have been extravagant.

Regarding the fluid therapy, it was suspected in 1941 that the extensively burned patient needed huge volumes of fluid to survive. It was appreciated that plasma was lost into the burn wound and therefore presumably was indicated in treatment. It was not known how to anticipate the amount or kind of fluid a patient would need. The only formulas available were those which told how much fluid was needed to bring the patient back to normal once dehydration had been established. An early and principal endeavor was to develop a formula to anticipate the needs and not allow the patient to become dehydrated. The so-called surface area formula was the result. Although various modifications have been offered, the basic formula remains.

The concept of the formula originated from simple observation of the swelling of a burn wound. The amount of fluid collecting as edema in the wound appeared to be proportional to the extent or surface area of the burn. Therefore, calculation of the amount of fluid which will be lost in a fresh burn should include the surface area of the burn. It was, of course, necessary to test this hypothesis experimentally. It was also necessary to observe just how rapidly the edema collected, when it reached the maximum, and just how soon it was resorbed. An extensive series of investigations was carried out; starting on animals, the findings were later confirmed by observation of burn patients.

An extensive biochemical and physiological investigation of the burn wound was made to bring logic and order to treatment. The nature of the fluid lost from the blood into the burn wound was carefully quantitated, first in experimental animals and then in patients, by aspirating the fluid from the burn blebs. Drugs such as the sulfonamides were observed to pass in and out of the wounds. Adrenal cortical extract was found not to influence the rate of loss of fluid from the circulation. The posterior pituitary hormones were also ineffective. Simple cold, however, had a startling effect. The immersion of the burned foot of a dog in cold water not only stopped the collection of edema fluid but, also, if a considerable amount had collected before the immersion, some of it was resorbed. Also, pain was relieved. Unfortunately, the cold itself proved damaging if the wound were immersed for too long a time. Many took part in these experiments and in the development of the fluid formula: Drs. John L. Langohr, Cora R. Owen, John R. Graham, George Mixter, Jr., Addison G. Brenizer, Jr., Francis D. Moore, and Leon Rosenfeld.

Dr. Frederic W. Rhinelander carried out a series of experiments on the use of a plaster cast to limit the collection of edema fluid. Measuring blood flow as well as edema pressure, the observations are classic in the pathological physiology of a burn.

It was appreciated in 1941 that burn shock develops rapidly and that the blood pressure often does not fall until just before collapse. The blood hemoglobin concentration and hematocrit, therefore, were the measures at that time of the degree of dehydration. These were abnormal only after dehydration had taken place and were not sensitive enough for the adequacy of the therapy to be judged. It seemed as if the hourly output of urine should be a better measure. As long as the blood volume was within normal limits the blood flow to the kidney should continue and urinary secretion be possible if sufficient fluid were available. The measure of urinary secretion obviously did not depend upon a laboratory and centrifuge; the knowledge gained was immediately available at the bedside. As anticipated, the urinary output soon proved to be a reliable measure of a normal or nearly normal blood volume. By 1943 immediate catheterization of all burned patients, with hourly measurement of urine, was instituted as the standard guide to fluid therapy.

This measurement is not without possible pitfalls. The pain of the burn and the prompt dehydration which is due to the puddling of fluid in the burn wound should call forth a secretion of the antidiuretic hormone of the posterior pituitary. Therefore, during the last three years the urinary guide has been re-examined in the light of hormone suppression in a collaborative study by Drs. George Bascom and Alexander Leaf. Although the posterior pituitary is active, it is not sufficient to dominate and therefore the urinary test still remains as the best bedside guide to the fluid therapy.

Disturbances of intermediary metabolism have been a part of the studies from the beginning. The balances of nitrogen and the common electrolytes were measured on the patients of the Cocoanut Grove disaster. These were made in collaboration with Dr. Ira Nathanson and Hildegarde Wilson, Ph.D., of the Huntington Laboratory. The effect on nitrogen balance previously reported from England and Canada was confirmed, but with greater variation. For the first time, potassium balance was explored and was found not to conform with the nitrogen. This was an enigma which is still not understood. Dr. Wilson discovered that the severely burned patient excretes quantities of creatine in the urine. Dr. Nardi has carried the nitrogen observations further by measuring the pattern of amino acids in blood and urine. There is a rise in the blood and an outpouring in the urine of these acids. This economy of superabundance and apparent wastefulness also does not yet make sense.

The fluid spaces of the burned patient were studied, including that of radioactive sodium. Later, Dr. Moore made the first of his observations on the radioactive potassium and heavy water spaces. The role of the adrenal cortex in determining these spaces was, of course, under scrutiny. Dr. Nardi has observed the dilution of calcium occurring in the blood after severe injury. Most recently, Dr. Benjamin Barnes and Dr. Timothy Harrison have continued work in this field by measuring magnesium.

A fall in the blood serum level of sodium was observed in the first days after severe injury. The level reached is comparable to that of Addison's disease, yet there is every evidence of overactivity of the adrenal cortex. The fall occurs at a time when there is a positive balance of sodium — that is, sodium is accumulating in the body. This has been called the sodium paradox and is thought by some to be the result of the passage of sodium into the cells. Dr. Anne Wight Phillips's most recent observations, in patients who suffered a perforated peptic ulcer, have determined that this fall in sodium is due to a dilution in the extracellular space, not to passage into the cells. The kidney, for an unknown reason, does not hold sodium at the usual level. The meaning is still obscure but it is an indication of the complexity of the reorganization of bodily processes in response to injury.

Many of these changes are believed to be due to an outburst of adrenocortical activity following injury, and Dr. Lewis Engel has been working on this aspect during the last few years. Other metabolic influences, however, must be present. Study of our patients has revealed that the metabolic rate of the burned rises to heights consistent with severe hyperthyroidism. This is the reverse of what would be expected from adrenocortical overactivity. The rise undoubtedly accounts for the rapid body wasting and the need for the greatly increased intake of food. The reason is still obscure. With the collaboration of Dr. John Stanbury and the Thyroid Clinic, the thyroid gland has been found not responsible. A similar short-lived rise has been found to occur in the patients who suffered a perforated peptic ulcer, but it does not ordinarily follow operations or other traumas, such as fractures of the femur.

The study of infection was not a part of the initial program. Dr. Champ Lyons was studying the bacteria of traumatic wounds at the time of Pearl Harbor and it was not until he left for the Army several months later that the Surgical Bacteriology Laboratory was oriented to the problem of burns. Under Drs. Cora Owen and John Langohr infection became a major interest in the burn problem. They were among the first to measure the development of resistance of various bacteria to penicillin. They carried out the first major study of the role of the staphylococcus in the burn wound, and today it is realized that this organism has supplanted all others in significance.

Infection has emerged as the most important unsolved problem of the burned patient. It is now the most frequent cause of death. Before World War II severely burned patients died in the initial hours for lack of adequate fluid therapy. Today it is possible theoretically to carry any patient through the first days. As the wound becomes infected, however, the problem shifts to one of widespread bacterial infestation and sometimes this becomes overwhelming in spite of the chemotherapy available.

Infected wounds of burned patients present a major hazard to a hospital. It has been established by Colebrook in England that bacteria are shaken into the air, particularly when dressings are being changed. We have reason to believe that organisms are blown from one wound to another of the same patient and from patient to patient. The patients are hazards to themselves and to others. It is to be hoped that soon a new operating room with forced filtered air will be constructed—a so-called Colebrook Operating Room. All dressings and operations on burn wounds will be carried out in this room; it should be the cleanest room in the Hospital. Bacterial infestation of the burn wounds should be materially reduced and cross-infection to other patients eliminated. The money needed is available when decision is reached.

Anemia was found to develop rapidly in the burned patient and much time was spent in determining the source. A moderate amount of blood is destroyed by the heat, but a much greater loss comes in the days following injury. Using radioactive iron, Dr. F. D. Moore and Dr. Robley D. Evans of M.I.T. (Consultant in Physics on our staff) found that the blood marrow virtually ceases the new formation of red cells. Although the cause of the anemia is not yet fully determined, it appears to be related to the severe wound infection. Its development is the obvious reason why the burned patient needs so many transfusions over so long a period.

Certainly one of the most fruitful collaborations has been with the Unit of Child Psychiatry, under Dr. Lucie Jessner and Dr. Robert Long. To our amazement, they have been able to show us that many children and some adults unconsciously inflict the burns on themselves and that their subsequent difficult behavior relates to the same problem that led to the injury. They have thus been able to throw considerable light on the grotesque behavior of the burned patient. This study came about in the following manner.

The severely burned patients are notoriously difficult to manage from the professional and nursing point of view. Immediately after they are injured, they are cooperative, calm, and grateful. This pleasant attitude disappears within a few days, and not infrequently after a week a patient has become irritable, complaining, whining, often obscene in language and action, and thoroughly uncooperative. The abnormal pattern continues until convalescence is advanced and then, to our amazement, instead of an ornery, difficult patient, there emerges a well-balanced normal human being.

It occurred to us that this abnormal human behavior might be due to the outburst of adrenocortical activity in response to the injury. The behavior pattern has many features similar to those of the occasional abnormal psychological reaction of the patient injected with ACTH or cortisone. Dr. Jessner had been interested in the psychological reactions of children to operations and had wondered how much of what she was seeing might be due to changes in adrenocortical function. We decided to join forces. Dr. Robert Long was enticed into taking charge of the psychological aspect of the study. Dr. Engel has been carrying out the hormonal aspect. It was decided to start with the burned children because they had uniformly proved to be such psychologic problems.

Of the first twenty-five burn children studied, Dr. Long was able to find that approximately fifty percent had had an unconscious drive to burn themselves. They were getting back at their parents and the injury was in that sense deliberate. In the Hospital some of these children continued the desire for self-inflicted injury and rubbed off their grafts and dressings. Some raised Cain on the children's wards, breaking up the cooperative routine, and were severe behavior problems in general. After gaining this knowledge, Dr. Long pointed out that something of the same picture was being seen in the adults. Two women in particular who had been extensively burned by setting their beds on fire with lighted cigarettes had done so with unconscious intent. This was the method one chose to get back at her husband, and the other to protest her forced removal the next day to a tuberculosis sanitarium. This shed new light on why the alcoholic and others may get burned in bed from lighted cigarettes.

Dr. Long's and Dr. Norman Bernstein's more recent studies have indicated why children and adults who have been caught in true accidents may behave so queerly after entering the hospital. A grown man, used to caring for himself, finds himself helpless and once again totally dependent upon others for eating, moving his bowels, emptying his bladder, perhaps even moving at all in bed. His feeling of helplessness is increased by realization of the danger of his injury. Overwhelmed, he reverts to more childlike patterns of behavior. The tantrums are childhood tantrums. Understanding the reasons for the patients' reactions is already aiding us in management. Scolding only makes matters worse. The better understanding promises to lessen materially the burden of care, and since so much depends upon eating and a reasonable appetite, the psychological outlook of the patient is of the utmost importance.

The cost of the new special equipment needed for the new operating room and the special knowledge required for the care of the burned patient suggest that burned patients in the future will be cared for best in a Burn Center. Several years ago Colebrook realized this, and England has already made headway in the designation of certain hospitals as Burn Centers. This concept has meaning to the Massachusetts General Hospital. Not only would it facilitate the much-needed progress in burn therapy, but it would also supply relief to the personnel caring for these sick patients. Our experience has already shown that caring for them the year round is too much for anybody to stand — doctor, nurse, or dietitian. The year would be divided into three-month periods and four groups of the staff formed — each group taking one three-month turn in the Burn Center. By such sharing, the burned patient would win the enlightened care he is entitled to.

Oliver Cope, M.D.,
Visiting Surgeon

The Board of Trustees, at their meetings on February 6 and 21, voted:

That Fund 4920, General Hospital #6 Fund, be discontinued as a loan fund and that the General Director be authorized to spend the balance in the fund for redecoration of the surgeons' lounge;

To establish an additional assistant residency in Pathology to replace the assistant resident who will be rotating through the Department of Legal Medicine at Harvard Medical School, at no expense to the Hospital.

To reappoint:

Dr. Ira A. Ferguson, Jr. as Second Assistant Resident in Surgery, beginning February 1;

Dr. George D. Zuidema as Third Assistant Resident in Surgery, beginning February 1.

To appoint:

Dr. Fred B. Ballard, Jr. as Assistant Resident in Medicine for one year, beginning July 1;

Dr. John W. D. Garrett as Associate Anesthetist, effective as of March 1;

Dr. Herbert J. Levine as Assistant Resident in Medicine for one year, beginning July 1;

Dr. Charles V. Pryles as Assistant Physician to the Children's Medical Service;

Dr. Paul S. Russell as Assistant in Surgery, effective as of January 1, with the privilege of seeing a limited number of private patients at the Hospital;

Dr. Bruce J. Sams, Jr. as Resident in Medicine for one year, beginning July 1;

Dr. Barbara E. Waud as Assistant Resident in Anesthesia for one year, beginning July 1.

At their meetings on January 2 and during February, the General Executive Committee voted:

That Dr. Martin E. Etchart be given the title of Clinical Fellow in Pathology, for the period April 1 through June 30, in addition to his title of Graduate Student Assistant in Pathology which he now holds;

To extend the appointment of Dr. Jorge L. Litvak as Clinical and Research Fellow in Medicine from February 28 through June 30;

To accept the resignation of Dr. Charles V. Menendez from the position of Clinical Assistant in Surgery, effective April 15.

To change the titles of:

Dr. Robert J. Lifton from Clinical Assistant to that of Clinical and Research Fellow in Psychiatry;

Dr. Claus W. Reichle to that of Clinical and Research Fellow in Anesthesia, as of March 1.

To appoint:

Dr. Anthony M. Dawson as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Herbert A. Durfee, Jr. as Clinical Assistant in Surgery, assigned to Gynecology, effective as of February 7 through May 7, with the privilege of caring for the private patients of Dr. Meigs in the Baker Memorial and Phillips House;

Dr. Risto Eerola as Fellow in Anesthesia for one year, beginning April 1;

Dr. Stuart Q. Flerlage, Jr. as Clinical and Research Fellow on the Children's Medical Service for one year, beginning January 16;

Dr. Pablo E. Fletcher as Clinical Fellow in Medicine for one year, beginning March 1;

Dr. Hyman Gaylis as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. George W. Hanna as Graduate Student Assistant in Surgery, for the period February 4 through April 3;

Dr. Herbert R. Karp as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Robert F. Kibler as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Arthur Klein as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning April 1;

Eric H. Lenneberg, Ph.D. as Research Fellow in Psychology in the Department of Neurology, for the period February 1 through June 30;

Dr. Gian P. Novelli as Fellow in Anesthesia for one year, beginning August 1;

Dr. David C. Poskanzer as Clinical Fellow in Neurology for one year, beginning July 1, to act as Assistant Resident;

Dr. Clorinda J. Scarpa-Smith as Clinical and Research Fellow in Surgery, assigned to Gynecology, for one year, beginning February 13;

Dr. William H. Shafer as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. D. Albert Young as Clinical Fellow in Surgery, assigned to the Tumor Clinic, for one year, beginning July 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Anesthesia.
Scient. Am. 196:70-81.

Cardiology — Pediatric

Darling, R. C., Rothney, W. B., and Craig, J. M.
Total pulmonary venous drainage into the right side of the heart: Report of 17 autopsied cases not associated with other major cardiovascular anomalies.
Lab. Invest. 6:44-64.

General Medicine

Graham, J. R.
Headache.
Dis.-a-month, Jan.:3-47.

General Surgery

Benedict, E. B., and Nardi, G. L.
Peptic stenosis of the esophagus.
Am. J. Surg. 93:238-241.

BIOGLETS

Dr. Robert H. Hansen, Assistant Resident in Anesthesia—born in Hammond, Louisiana, January 31, 1918; B.S., Louisiana State University, 1938; M.D., Louisiana State University Medical School, 1942; Intern, Charity Hospital of Louisiana at New Orleans, 1943; general practice, Baton Rouge, Louisiana, 1943-53; Major, MC, U.S. Army, 1st Division, Stuttgart, Germany, 1953-55; Fellow in Anesthesia, Mayo Foundation, Rochester, Minnesota, 1955-56; married; home: Baton Rouge.

Dr. John A. Mills, Assistant Resident in Medicine—born in Montreal, Canada, June 5, 1929; B.A., McGill University, 1951; M.D., McGill University, 1954; Intern, Montreal General Hospital, 1954-55; Assistant Resident, Department of Pathology, New England Deaconess Hospital, 1955-56.

Dr. Arthur A. Sasahara, Assistant Resident in Medicine—born in Del Rey, California, May 11, 1927; U.S. Army, MC, Sergeant-in-charge, School of Laboratory Technology, Wakeman General Hospital, Camp Atterbury, Indiana, 1945-47; A.B., Oberlin College, Oberlin, Ohio, 1951; M.D., Western Reserve University School of Medicine, 1955; Intern in Medicine, Boston City Hospital, 1955-56; married; one daughter; permanent address: Cleveland, Ohio.

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

The Music Committee of the Staff Wives Association arranged for two concerts during April. On the afternoon of the 3d, a string quartette consisting of Lucy Nedzel, first violin, Gloria Kaufman, second violin, Walter Lob, viola, and Joseph Stein, cello, presented a Mozart program. At 3 P.M. on April 17, in the Chapel, a piano recital will be given by Natalie Matovinovic.

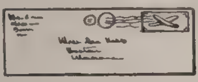
DISTAFF CLUB

Plans are now being completed for the fourth Annual Spring Formal Dance, organized by the Distaff Club and sponsored also by the Massachusetts General Hospital Trustees and General Director, and the MGH Staff Wives Association. Invitations are being mailed, but those living away from Boston who wish to attend the dance may get in touch with Mrs. Charles F. McKhann, 44 Aldrich Road, Watertown, Massachusetts.

The dance committee has engaged the Parker House Roof and Ruby Newman's orchestra for the evening of May 17, beginning at 9 o'clock.

Mrs. A. Erik Gundersen and Mrs. Charles E. Huggins are co-chairmen for the dance. Others on the committee are Mrs. H. Thomas Ballantine, Jr., Mrs. Robert L. Berg, Mrs. John D. Crawford, Mrs. James F. Donovan, Mrs. Daniel S. Ellis, Mrs. Charles S. Keevil, Jr., Mrs. William V. McDermott, Jr., Mrs. George L. Nardi, Mrs. Grant V. Rodkey, Mrs. Edwin W. Salzman, Mrs. J. Gordon Scannell, Mrs. Dagoberto Sosa, and Miss Leslie Stables.

Arrangements are being made for Distaff Club members and their husbands to visit the Museum of Fine Arts here in Boston on an evening in April. It is hoped that a guided tour through a section of the Museum can be arranged.



WE NEED YOUR HELP. Mail sent to several members of the MGH family has been returned to either the Office of The News or the Secretaries' Office, bearing such notations as "Unknown", "Unclaimed", etc. Ever since your editor took over the Directory section of the Annual Report in 1951, she has concentrated on trying to track down all such elusive individuals. If anyone can tell us anything concerning the address of any person listed below, such information sent to Cora F. Holbrook, Archivist and Editor of The News, will be most gratefully received. Here are the names, with last known addresses:

Austin, Grace L. (r.p. *D.* 1930), 25 Albert Ct., Kensington, S.W. 7, London, England
Barnett, Thomas B. (*M.* 1950), Strong Memorial Hospital, Rochester, N.Y.
Beeman, Carl B. (*Path.* 1934), 16 Monroe Ave., N.E., Grand Rapids, Mich.
Bennett, Warren (*M.* 1948), New England Center Hospital, Boston, Mass.
Bloomer, Earl (*E.S.* 1917), 22340 Michigan Ave., Dearborn, Mich.
Bridge, Edward M. (*C.M.* 1927), Johns Hopkins Hospital, Baltimore, Md.
Brindley, Clyde O. (*M.* 1950), Mayo Foundation, Rochester, Minn.
Brown, Ralph G. (*Path.* 1942), 722 Prospect Ave., Winnetka, Ill.
Charash, Leon I. (a.r.p. *C.M.* 1952), 87 Webster, Irvington, N.J.
Colpitts, Grant E. (r.p. *Path.* 1952), Dalhousie Medical School, Halifax, Nova Scotia, Canada
Coolidge, Thomas B. (*W.M.* 1929), Duke University, Durham, N.C.
Cozen, Lewis (*Or.* 1938), 2007 Wilshire Blvd., Los Angeles, Calif.
Edmonds, Henry W. (r.p. *Path.* 1942), 909 University, Seattle, Wash.
Fang, Harry C. H. (a.r.p. *Psychiat.* 1952), Boston City Hospital, Boston, Mass.
Franz, Elmer M. (a.r.s. *Or.* 1948), 85 Grant, Denver, Colo.
Glenn, William W. L. (a.r.s. 1946), 749 Millbrook Lane, Haverford, Pa.
Greene, Daniel C., Jr. (*C.M.* 1940), 263 South Ave., Weston, Mass.
Harting, Donald (*C.M.* 1947), 1625 Northern Pkwy., Baltimore, Md.
Haswell, Howard P. (a.r.p. *An.* 1949), 1403 E. Seneca, Tucson, Ariz.
Hatch, Floyd F. (*E.S.* 1916), 699 E. South Temple, Salt Lake City, Utah
Heath, Robert D. (a.r.s *Or.* 1950), 30 W. Bells Mill Rd., Chestnut Hill, Philadelphia, Pa.
Hills, Henry M, Jr. (*Or.* 1942), 524 Medical Arts Bldg., Charleston, W. Va.
Holt, William L., Jr. (r.p. *N.* 1937), Westboro State Hospital, Westboro, Mass.
Hopkins, Charles E. (a.r.p. *C.M.* 1948), Johns Hopkins Hospital, Baltimore, Md.
Kind, Henry A. (*C.M.* 1935), Tilton General Hospital, Fort Dix, N.J.
Kristjansson, Haukur (a.r. *Or.* 1946), Welch Emergency Hospital, Welch, W. Va.
Lawrence, George H. (*W.S.* 1947), Barnes Hospital, St. Louis, Mo.
Lee, John M. (*C.M.* 1916), 706 Church, Nashville, Tenn.
McCann, Samuel M. (*M.* 1949), Army Medical Service Graduate School, Washington, D.C.
McDowell, William P. (*C.M.* 1917), 142 W. York, Norfolk, Va.
Maisel, Bernard I. (r.p. *Path.* 1943), 103 E. 75th, New York, N. Y.
Makel, Harry P. (c.r.p. *An.* 1949), Fitzsimons General Hospital, Denver, Colo.
Mendelsohn, Mortimer L. (*M.* 1949), Memorial Hospital, New York, N.Y.
Miller, Milton L. (*E.M.* 1932), Veterans Administration Hospital, Brentwood, Los Angeles, Calif.
Ogden, Ralph T. (*C.M.* 1925), 179 Allyn, Hartford, Conn.
Putnam, Charles R. L. (*S.S.* 1895), 333 E. 68th, New York, N.Y.
Rauh, Albert E. (*C.M.* 1936), Lyons, N.Y.
Roth, James d'A. (*M.* 1945), Regional Hospital, SHAAF, Salvia, Kan.
Sabin, Hilbert S. (r.s. *U.* 1941), 1801 K. N.W., Washington, D.C.
Shaw, Henry A. (*W.S.* 1891), 121 E. 31st, New York, N.Y.
Shaw, John L. (r.s. *P.H.* 1935 & *U.* 1937), 899 Madison Ave., Memphis, Tenn.
Smith, Howard W. (*Dn.* 1946), 64 Trumbull, New Haven, Conn.
Stiff, Donald W. S. (r.p. *R.* 1950), Williston, Vt.
Teel, Charles E. (*W.S.* 1925), 1155 State, Bellingham, Wash.
Thompson, Vernon P. (*Or.* 1925), 1136 W. 6th, Los Angeles, Calif.
Ulick, Stanley C. (*C.M.* 1952), Memorial Hospital, New York, N.Y.
Watson, John L. (r.s. *U.* 1930), 4010 N.W. 7th Ave., Miami, Fla.
Weir, David R. (r.p. *Path.* 1938), 2186 Middlefield Rd., Cleveland Heights, Ohio
Wood, Edwin C. (*M.* 1951), Yale University School of Medicine, New Haven, Conn.
Young, Clark (*E.S.* 1923), Medical Arts Bldg., Salt Lake City, Utah

New addresses:—

Dr. Betty Q. Banker (a.r.p. *N.P.* 1954), Boston City Hospital, Boston, Mass.
Dr. Emerson H. Drake (a.r.s. 1945), 18 Branhall St., Portland 3, Maine
Dr. Howard S. English (a.r.p. *N.P.* 1948), 1611 Genesee St., Utica 3, N. Y.
Dr. Bernard M. Jacobson (assoc. p.), Massachusetts General Hospital, Boston 14, Mass.
Dr. David B. Murray (a.r.p. *Path.* 1956), New England Deaconess Hospital, Boston, Mass.
Dr. O. Rhett Talbert (r.p. *N.* 1953), Neurology Dept., Medical College of South Carolina, Charleston, S. C.

Brief bits:—

Dr. Mary A. B. Brazier was an invited speaker at the International Symposium on the Reticular Formation, held at the Henry Ford Hospital in Detroit, March 14-16. On April 6, Dr. Brazier will speak on "The effect of flickering light on human subjects" at a symposium in New Orleans sponsored by the U.S. Army.

Dr. Benjamin Castleman gave a series of lectures and clinico-pathological conferences in Havana, Cuba, during the week of February 18, under the auspices of the Colegio Medico Nacional. During this same period he conducted two microscopic slide seminars for the Sociedad Cubana de Anatomia Patologica, to which he was elected as an honorary member. Dr. and Mrs. Castleman were able to visit with old friends and former MGH Fellows. During their trip they were also able to visit the historic colonial city of Santiago de Cuba which includes San Juan Hill, made famous by Theodore Roosevelt during the Spanish-American War.

Dr. Wyland F. Leadbetter has been elected a member of the American Board of Urology. Dr. Leadbetter lectured at the Dallas Southern Clinical Society in Dallas, Texas, during the period March 17-21. On April 2 he spoke on "Pyelonephritis" before the Boston City Hospital Officers' Association; and during the period April 28 to May 1 he will deliver lectures before the California Medical Association on the subjects "Management of urinary calculi", "Bleeding problems", and "Problems of tissue and organ transplantation".

Dr. Fred A. Simmons has been awarded the Caleb Fiske Prize — the oldest medical essay award in the United States — by the Rhode Island Medical Society for his study of "Present day treatment of infertility".

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A TRIP TO CENTRAL AMERICA

Mrs. White and I embarked on our recent trip to Honduras and Guatemala for three principal reasons — the invitation of Mr. Claflin, a director of the United Fruit Company, to go with him to the banana plantations along the coast of Central America and visit their experimental laboratories and hospitals; a request from Dr. Fajardo, Dean of the Medical School in Guatemala, to give some neurosurgical lectures; and the chance to follow up 24 patients who have come to me in Boston for neurological examination and surgical treatment. In addition, this offered an unusual opportunity to see some particularly beautiful portions of Central America, its people, and out-of-the-way Mayan ruins.

Mr. and Mrs. Claflin, Mrs. White, and I sailed from Mobile on January 29 on a Honduran freighter that had just dis-

NO. 65 IN A SERIES OF STAFF PHOTOGRAPHS
DR. OLIVER COPE, VISITING SURGEON

charged its cargo of bananas. The two-day voyage across the Gulf of Mexico and down the coast of Yucatan on the *Toltec* was much like traveling on a private yacht. We had the freedom of the ship, and the only other passengers were a priest and an old-time adventurer who had fought in many of the revolutions of Central America.

From Cortes and Tela we visited the plantations, cattle ranches, and jungles along the hot coastal strip. Bananas have three principal ailments. The most difficult to control, Panama disease, results from a fungus that enters the roots and blocks the ducts that carry water up the soft stem, causing the leaves to turn yellow and wilt. This has wiped out entire plantations. Investigators at the research institute in La Lima have given some promise of controlling the disease in areas where the trees are cut down and the land flooded. Water kills the fungus from lack of oxygen after several months, except in the upper few inches of soil. This must then be ploughed under and the land flooded again. Fortunately, it takes only a year or two to replant the trees and have them bear. A second fungus, chicatoga, blackens the edges of the leaves, but is effectively controlled by spraying with copper sulphate. A third important disease is caused by a bacillus and can be spread from tree to tree if all cutting tools are not sterilized.

In addition to plant infections, the different pattern of human disease as seen in the United Fruit Company hospitals in Tela, La Lima, and Quirigua was of great interest. Parasites, tuberculosis, malnutrition, and trauma are the leading conditions that require hospital admission. In the hospital at La Lima there were two Indians with recent gunshot wounds of the spinal cord and another who had had the lower half of his nose cut away with a machete in a drunken brawl. His friends had brought along the amputated tip wrapped up in a banana leaf. As the patient insisted that it be sewn on, this had been done, with considerable misgivings in view of the heat and the time elapsed following amputation. When the dressing was removed for my benefit a week later, a good three-quarters of the grafted tissue appeared to be viable! These hospitals, run by the United Fruit, handle not only the injuries and sicknesses of its employees, but also most of the maternity cases and childhood diseases. In addition to these welfare services, the Company runs schools and a well-known agricultural college near Tegucigalpa, where promising young men are sent from all parts of Central America.

In leaving Honduras we were sent by the Company 200 miles overland across the mountains and forests to Tegucigalpa, with stop-offs to shoot the banana-eating wild muscovy ducks and catch seven-pound bass in the volcanic Lago de Yojoa.

Mrs. White and I then flew to Guatemala, where we were put up by Dr. Rudy Herrera (*E.S.* 1943 & a.r.s. 1946), and feted by many former patients who have made the long trek to Boston, and the families of Drs. Mora and Sosa of the Neurosurgery Service. We were taken out to the ruined Spanish capital of Antigua by a doctor who had a middle fossa meningioma removed six years ago in the Baker Memorial, and then fetched back by a charming young woman who had one resected from the parasagittal region two years later. Dr. Herrera made it possible for me to see many other former patients for follow-up examinations. He has collected an impressive group of men to work with him at the Centro Medico, and has built an unusually well-architected 40-bed hospital on a wooded hillside on the outskirts of Guatemala. At grand rounds they showed a young Indian woman with hindquarter duplication. The extra pair of legs articulated with the right ischium, pointed posteriorly, and reached below the knee of the normal extremities. After aortography, intravenous pyelography, and myelography had shown no serious contraindication, amputation had been carried out without serious difficulty.

The two neurosurgical lectures at the Medical School were at the Spanish hour of 9 to 11 P.M. Then followed the highlights of our trip: a visit to the colourful Quiché Indian city of Chichicastenango on market day, and flying over 400 miles of high mountain and jungle country in a single-engined Cessna plane. The ruins of Tikal, deep in the Mayan jungle and nearly untouched after 1200 years, are more than worth the expense and risk involved in getting there.

This was a never-to-be-forgotten trip, with the opportunity to study one of the biggest farming ventures in the Western Hemisphere, as well as to learn about its problems in plant biology, medicine, and sociology. In addition, we were living with and being entertained over the entire three-week period by a great variety of hospitable people, whose one concern seemed to be that we should become acquainted with the Central American way of life by enjoying their homes, gardens, and ranches. The beautiful scenery, unusual birds, animals, and brilliant flowers were an extraordinary contrast to Boston in midwinter.

James C. White, M.D.,
Chief of Neurosurgery Service

THE NEWS

No. 167 Boston, Mass May 1957

UNIVERSITY HEALTH SERVICES HARVARD UNIVERSITY AND RADCLIFFE COLLEGE

REVIEW AND PROSPECT

The Department of Hygiene at Harvard College had its period of greatest growth from 1935 to 1954, under the leadership of Dr. Arlie V. Bock, then a Physician at the Massachusetts General Hospital and now a member of its Board of Consultation. During Dr. Bock's tenure many improvements in the medical care of Harvard students were effected, and the general pattern of what a health service should be was established. Last year the name of the department was changed to the University Health Services, to signify that it serves not only Harvard College but all the other divisions of the University as well. On July 1, 1957, the newest member of the association of health services joins the central group when the Radcliffe College Health Service becomes a regular member.

More or less parallel with the change in name have come various improvements designed to develop a Harvard-Radcliffe Health Center which will serve the health needs of all members of the University community — not only the students, but the employees and members of the faculty as well. As soon as the new building, soon to be constructed on Mount Auburn Street between Holyoke and Dunster Streets, is ready, all members of the Harvard and Radcliffe communities will be eligible to use the new facilities and professional services. A student insurance plan has been developed and is now in its second year of successful operation. A more extensive plan for faculty and employees will go into action on July 1, 1957. To supplement the present services, the Harvard Corporation has recently approved the establishment of a Division of Environmental Health and Safety and the development of a long-term faculty and employee health survey.

WHAT A UNIVERSITY HEALTH SERVICE DOES

The functions of the University Health Services and a teaching hospital such as the Massachusetts General Hospital form an interesting contrast. The first is organized to care for the health needs of a community that is predominantly healthy. It emphasizes health promotion, the prevention of illness or injury, and the care of comparatively minor medical and surgical conditions. Emotional problems are frequent, but they are of the type that all busy sensitive persons of varying backgrounds are likely to encounter. The emphasis is on the threats to health — early symptoms or warnings that efficient functioning of the organism is threatened. In the other medical organization the emphasis is on the serious disease or injury — how to restore the individual to a state in which he can carry on his usual activities, and the relief of intense suffering. Emotional problems are frequently overshadowed in the physical threat posed by the illness, or in some instances the mental disorder has become so incapacitating that the individual must retire to the controlled environment of the hospital.

The University Health Services are thus designed, not to compete with the Harvard teaching hospitals and the other Boston hospitals, but to supplement their functions, extending the influence of modern health information further and further into the community. At the same time its staff members try to uncover those conditions or threats to health which may be present in the University, and utilize the hospitals for their detection when appropriate. Thus the new building is designed for easy consultation with doctors, group activities, conferences, health inventories, research programs, testing by laboratory and X-ray techniques, emergency diagnosis and treatment, and care of mild illnesses or convalescents. It will not have major operating rooms, nor will it be used for any serious condition that could be more adequately and safely cared for in a general hospital. The insurance programs are supplements to the total plan, making it possible for anyone connected with Harvard to get the best care Boston can offer without seriously endangering his standard of living.

ORGANIZATION

The organization is determined in considerable measure by local and historical conditions, but in general reflects an effort to achieve the advantages of a large unit without at the same time losing the benefits of smaller nearby personal services. The various branches, in addition to the Radcliffe College Health Service on Brattle Street, include the Law School Health Service in Austin Hall, the Business School Health Service in Glass Hall, the Medical Center Health Service in a wing of the Peter Bent Brigham Hospital, and the medical rooms in the Dillon Field House for the medical supervision of athletics and management of injuries. The Harvard Health Center (the new name for the Department of Hygiene building) is located at 15 Holyoke Street, the psychiatry and psychology services are housed temporarily at 78 Mount Auburn Street, and the Stillman Infirmary is still in its faraway location further up on Mount Auburn.

The professional services are divided into four main units. The Medical Service is headed by Dr. Andrew W. Contratto, the Surgical Service by Dr. Augustus Thorndike, the Psychiatry Service by Dr. Gaylord P. Coon, and the Dental Health Service by Dr. James M. Dunning. Stillman Infirmary, with Miss Reta Corbett, R.N., as its Superintendent, serves all parts of the University.

MEDICAL SERVICE

Of the numerous medical problems that confront the Harvard internists, infectious mononucleosis continues to be annoying and frustrating. Beginning with the keeping of detailed records in 1935, there have never been fewer than 20 cases recorded in a single year, 1936-37 and 1937-38 being the two lowest. Since that time there has been a tendency toward increased incidence, with a peak of 77 cases in 1946-47, 70 in 1947-48, a falling off to 40 by 1949-50, and then the highest peak of all in 1955-56, with 89 cases. Whoever develops an effective treatment for this disorder will earn the permanent gratitude of all college physicians.

Infectious hepatitis and virus pneumonia become serious threats to Harvard students intermittently. Hepatitis has been more prevalent since World War II. Tuberculosis is still a threat, and an active case-finding program turns up a few new cases each year.

The number of admissions to Stillman Infirmary each year since 1935 (leaving 1944-45 out of consideration because of war conditions) has varied from a high of 2,128 in 1938-39 to a low of 1,043 in 1955-56. The patient-days for those same years, also the highest and lowest in the series, were 9,560 and 4,330. The tendency toward less illness in college students requiring infirmary care that has been observed at Harvard has also been noted at many other college health services. Evidence as to the reasons for this improvement is lacking. Total clinic visits for all purposes have varied from 47,286 in 1945-46 to 82,413 in 1946-47, with the average during the last eight years being close to 70,000 yearly.

SURGICAL SERVICE

Surgical practice at Harvard tends strongly toward the care of injuries. In the last twenty-two years there have been 7,394 injuries sustained in athletic sports, most of them minor with respect to threats to life but of considerable importance to the individual both from loss of time and complications if treatment is not given promptly and expertly. The most vulnerable portions of the body are knees (1,137 injuries), thighs (911), and ankles (895).

Before participating in body-contact sports each student must have had a physical examination during that year. Strict regulations are enforced when disabilities are found. For example, surgical removal of one of the bilateral organs, extensive surgical scars, absent vision in one eye, or significant cardiovascular, respiratory, or central nervous system lesions would rule out athletic activity in which dangerous accidents are probable from time to time.

About 250 minor surgical operations are performed yearly. All major operations are done in hospitals, usually those in the Harvard teaching group. Appendicitis is common, 38 cases being operated upon in 1955-56. About 21% of all out-patient visits require the services of a surgeon, but 66% of evening and night calls in the emergency clinic are calls for a visiting staff surgeon.

Dental Service

The Dental Service is gradually changing its function from emphasis on restorative dentistry to that of diagnostic screening and dental health education. In the fall of 1955, 1,031 freshmen in Harvard College had bite-wing X-rays as part of their entering health inventory. In this group 754 (73%) were found to have dental defects, and of these 135 required prompt treatment if loss of teeth was to be avoided. All X-ray films were sent to students, with a letter stating whether or not treatment was needed and indicating the degree of urgency.

This service has cramped and inadequate quarters in the present Harvard Health Center, yet the director, his four part-time assistants, the dental hygienist, and the secretarial staff gave excellent service to about 1,300 persons (3,306 visits) last year in addition to their diagnostic examinations. A new activity that is quite worth while is the fitting of athletes who have particularly vulnerable teeth with pliable plastic mouth guards. The proposed new Health Center has adequate office and X-ray facilities, with a five-chair service unit.

Psychiatry Service

The Psychiatry Service has been expanded greatly in recent years. This has not come about because of an increase in the incidence of emotional disorders but rather from a recognition by the University that treatment of students handicapped by conflict and indecision produces favorable results. For each hour of treatment with an individual student the staff psychiatrists probably spend another hour working with parents, teachers, deans, and others who are also concerned with his welfare. Great care is taken to observe the necessary rules regarding the confidential nature of the relationship of a student with his psychiatrist. The student is free to divulge any information or make any statement he chooses to the psychiatrist, knowing it will not be reported to an administrative officer without the student's permission. Since the majority of student problems are of such a nature that collaborative efforts between the Psychiatry Service and the teaching or administrative staff are helpful to students, the desired permission is practically always obtained. Even under these conditions, only such general outlines of the problems under consideration are made known to persons outside the professional staff as will permit effective working together; intimate details are omitted.

Various anxiety states and depressions comprise the most frequent emotional disorders in students. More than 750 different students were seen last year. A considerable number of students obtain help from private psychiatrists in Boston, but the extent of such help is not known. Not until the size of the Psychiatry Service has become stabilized and certain studies now contemplated are completed will a reasonably accurate estimate of the true needs in this field be known.

The service now consists of five full-time and two part-time psychiatrists on the permanent staff, together with three full-time young psychiatrists in a training status. It has been accepted as a regular member of the Massachusetts Psychiatric Training Faculty. Funds for training fellowships now come only from the National Institutes of Mental Health, but additional private sources are being sought.

Associated with the Psychiatry Service are two full-time psychologists — one on the permanent staff, the other in a training capacity. They maintain a very busy schedule, meeting the requests of their psychiatry colleagues for consultations and testings of various kinds.

Research

A major research program is being planned and considerable investigation is already being done by various staff members, particularly by Dr. Charles McArthur, the Chief Psychologist. Adequate quarters for such a program will be developed in the new building. The Grant Study material will be one of the foundation structures in the continuous study of adult development now being projected. Research problems involving infectious mononucleosis, virus pneumonia, better prevention and treatment of athletic injuries, causes of academic failure, detection of students in need of special guidance, and dozens of others await intense study. Cooperative studies with other institutions are very valuable, and a few such possibilities are being explored.

Branch services

In many ways the University Health Services operate as a unit, but, since the University is spread over such a large area, partially separate services can give help more advantageously to many persons who need it than would be the case if all consultations were held in the Health Center itself. The Law School Health Service with Dr. Leo J. Cass as Director, the Medical Center Health Service with Dr. Donald A. Tucker as Director, and the Business School Health Service with Dr. Neil L. Crone as Director operate in various ways as separate services, and the customs and practices differ in these divisions depending upon local plans, needs, and desires. When Radcliffe College joins the group, its director will be a regular member of a council which meets twice monthly to decide matters of general departmental policy. This council is made up of the directors of separate services, the chiefs of professional services, the superintendent of Stillman Infirmary, together with the director of the University Health Services and his executive assistant.

Environmental Health and Safety

The new Division of Environmental Health and Safety will include the present Sanitary Inspection Service and will, in general terms, be responsible for establishing the standards of environmental health and safety desirable for the protection of students, employees, and faculty members while they are engaged in their work at the University. It will also develop a program of health education which will be likely to lead all members of the community to give active support to measures instituted to promote health and prevent illness. The division will be actively concerned with the sanitary condition of food, water, and ice; the disposal of wastes; lighting; ventilation; precautions needed in the handling of toxic materials; prevention of unnecessary injury by explosion or mechanical hazards; safety education; prevention of overexposure to radiation; and protection against loss of time from preventable illness.

In this division a health physicist, or radiological safety officer, will have a very important function. He will cooperate fully with his colleagues with similar duties in the Harvard teaching hospitals.

Appointments in the new division will usually be made jointly with the School of Public Health, thus carrying out one of the general policies of the University Health Services — namely, integrating its activities with those of other departments of the University when such collaboration is desirable.

The maintenance of health and safety standards will be the responsibility of the various departments or projects — members of this division acting only in a fact-finding or consultation capacity. Every effort will be made to be helpful to any research worker and not add to his problems by arbitrary restrictions. The general view that any experiment can be done safely if proper safeguards are set up is the one that will be held by the new division.

Faculty and Employee Health Survey

Routine medical care will not be available to faculty members until present facilities are improved, but in the interval before that is accomplished a survey of the health status of permanent staff members will be started. Each permanent member of the staff will be invited to come in for an annual health inventory, including a physical examination. From the preliminary information gained during this interim period the bases for sound development of a continuous health survey of employees and faculty will be determined. A program of the type envisaged could easily become so complicated that it would fail because of its size. By choosing the routine procedures with great care, and by placing the greatest reliance on the judgment of the examining physician as to what is needed for the protection of the patient, it is hoped to organize a program of preventive medicine and health promotion that will prolong life as well as reduce the costs of illness and injury.

HEALTH INSURANCE

The student insurance plan is devised to give protection to students against the costs of those illnesses which might otherwise result in their being forced to leave college because of lack of funds. They and their parents usually are under heavy financial strain to pay for their regular college expenses, and even a moderate extra outlay for illness is a grave handicap. A single student may insure himself against the cost of illness or injury up to $1,500 for each episode for $14 per academic year or $19 including the summer months. Since his health fee of $42.50 pays for any care which is given him by staff members of the University Health Services, together with unlimited time in Stillman Infirmary, it is very unusual that any illness or injury will result in much additional cost to him. Dependents of students may also be insured at moderate cost. This year more than 99% of Harvard College students are insured, and in the entire University more than 90% are thus protected.

A different plan has been developed for employees and faculty which will become effective July 1, 1957. It is hoped that its provisions will protect those with relatively low incomes by covering nearly the entire cost of such illness as appendicitis, other common operations, and short circumscribed diseases requiring a week or two of hospitalization. It will also serve as insurance against catastrophic illnesses or injuries up to a total of $10,000. About 80% of the entire cost of such major disorders will be paid by the plan, the remainder by the individual. Another feature is that a patient is not required to go to a hospital for treatment in order to obtain help on his medical bills. After a deduction of $25 every three months, medical bills for treatment at home are covered by the plan to the extent of 80% of the total.

This plan is financed in part by the University and in part by individual premiums. An individual will pay $36 and the head of a household $96 yearly for this protection. Although dependents are covered by insurance, they will not be eligible to use the University Health Services for routine medical care. Programs of health education and preventive medicine will affect them from time to time.

HEALTH IS EVERYONE'S BUSINESS

From this very brief description of the total health program at Harvard it can be seen that it is designed to keep Harvard students, employees, and faculty as healthy as possible, to prevent illness, to diagnose and treat diseases and injuries when they occur with as little loss of time and efficiency as is practicable, and when serious disorders do occur to see that patients be given the best care available in the Harvard teaching hospitals or elsewhere. Reinforcing the whole program is a system of insurance coverage which is adequate to prevent serious lowering of living standards due to costs of hospital and medical treatment and yet has enough built-in safeguards to prevent exploitation. Any individual is free at any time to choose whatever physician or group of physicians he wishes to care for him, and likewise he may use the hospital of his choice. At the same time, no one need deny himself medical care at the time he needs it because of lack of funds.

The more effective are the health-building and preventive activities, the less illness and the fewer injuries there will be. The more effective and prompt the treatment of minor symptoms and the more serious illnesses in their early stages, the less should be the demand on the insurance portion of the program. All persons at Harvard, and particularly the physicians, have a vested interest in the maintenance of a high standard of health in the community. The real winner in the program is the individual who pays his share of the cost regularly and gets only good health in return. He will have the satisfaction of knowing that when any one of his associates meets with tragedy in the form of serious illness or injury, his foresight has made that person's financial burden a relatively light one.

Dana L. Farnsworth, M.D.,
Physician
Director of University Health Services,
Harvard University and Radcliffe College

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The American Academy of Microbiology, Urbana, Illinois, has invited Dr. Louis Dienes and Dr. Fritz Lipmann to become charter Fellows. Notice of this honor has been released by the Executive Secretary of the Academy.

The Academy is to be made up of well-qualified microbiologists in all branches of the science throughout the United States and Canada. Invited charter Fellows are distinguished in the field of microbiology, with wide training and experience.

The purposes of the organization are:

1. To promote the highest professional standing of microbiologists.

2. To carry on professional activities on behalf of the science of microbiology.

3. To promote programs of recognition, certification and accreditation on microbiologists where needed to accomplish the above purposes.

The closing paragraph of the letter from G. I. Wallace, Executive Secretary of the Academy, giving us the above information, reads: "This information is brought to your attention since it is an honor to these persons and to your organization."

Dr. Russell M. Nelson (a.r.s. 1954), a full-time member of the staffs of the University of Utah College of Medicine and Salt Lake County General Hospital, Salt Lake City, was recently selected as Salt Lake City's "outstanding young man of the year" at a banquet sponsored by Salt Lake Junior Chamber of Commerce. He was cited for his work in developing a heart-lung machine.

The Board of Trustees, at their meetings on March 8 and 22, and April 5, voted:

To accept the resignation of Joseph D. Matarazzo, Ph.D. from the position of Associate Psychologist, effective June 30;

To accept with regret the resignation of Dr. George Saslow from the position of Psychiatrist, effective June 30.

To appoint:

Dr. Richard H. Aster as Intern in Medicine for one year, beginning July 1;

Dr. George P. Baker, Jr. as Intern in Medicine for one year, beginning July 1;

Dr. Richard F. Bedell as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Robert Chamberlin as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Roberto A. Cueva as Second Assistant Resident in Surgery, for the period April 1 through June 30;

Dr. Daniel Deykin as Intern in Medicine for one year, beginning July 1;

Dr. Harold T. Dillon, Jr. as Intern in Pathology for one year, beginning July 1;

Dr. Moses J. Folkman as Intern in Surgery for one year, beginning July 1;

Dr. Stanford B. Friedman as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Milton S. Grossman as Intern on the Children's Medical Service for one year, beginning January 1, 1958;

Dr. John B. Herrmann as Intern in Surgery for one year, beginning July 1;

Dr. Albert I. Holtz as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Mark M. Kartchner as Intern in Surgery for one year, beginning July 1;

Dr. William O. Kenan as an Exchange Assistant Resident on the Children's Medical Service, for the period April 1 through May 19;

Dr. Howard S. King as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Robert B. Layzer as Intern in Medicine for one year, beginning July 1;

Dr. John L. Lewis, Jr. as Intern in Surgery for one year, beginning July 1;

Dr. Betty J. McClellan as Intern in Pathology for one year, beginning July 1;

Dr. Arthur J. Moss as Intern in Medicine for one year, beginning July 1;

Dr. Gustave C. E. Mueller as Intern in Surgery for one year, beginning July 1;

Dr. John T. Potts as Intern in Medicine for one year, beginning July 1;

Dr. John P. Remensnyder, Jr. as Intern in Surgery for one year, beginning July 1;

Dr. Dwight R. Robinson as Intern in Medicine for one year, beginning July 1;

Dr. Patrick F. Rose as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Victor J. Rosen, Jr. as Intern in Surgery for one year, beginning July 1;

Dr. R. Neal Schneiderman as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. John W. Singleton as Intern in Medicine for one year, beginning July 1;

Dr. Richard H. Smith as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Donald W. Sutherland as Intern in Medicine for one year, beginning July 1;

Dr. David Van Buskirk as Intern in Medicine for one year, beginning July 1;

Dr. George M. Williams as Intern in Surgery for one year, beginning July 1;

Dr. Carl T. Wolff as Intern in Medicine for one year, beginning July 1;

Dr. Peter M. Yurchak as Intern in Medicine for one year, beginning July 1.

At their meetings on February 13, during March, and on April 3 and 10, the General Executive Committee voted:

To promote:

Dr. W. Hardy Hendren, III, to the position of Resident Surgeon on the East Surgical Service for one year, beginning January 1, 1958.

To reappoint:

Dr. Maxwell G. Potter as Clinical Assistant in Psychiatry for one year, beginning April 15.

To extend the appointments of:

Dr. Karl-Erik Aström as Clinical and Research Fellow in Neurology, for a period of four months, beginning March 1;

Dr. Fernando Rosas-Peña as Research Fellow in Neurology, for a period of three months, beginning April 1;

Dr. Taeko Sumi as Clinical and Research Fellow in Psychiatry, for the period March 1 through September 30.

To appoint:

Dr. Robert L. Bragg as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert B. Brendze as Clinical Assistant in Orthopedic Surgery for one year, beginning March 1;

Dr. John J. Calabro as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Ignacio Chavez, Jr. (Rivera) as Clinical Fellow in Medicine, assigned to Cardiology, if and when he obtains a temporary license;

Dr. Peggy J. Clark-Roberts as Clinical Fellow in Anesthesia for one year, beginning August 1;

Dr. Frederick McA. Davies as Clinical Assistant in Surgery, to work with Dr. Daland, for one year, beginning April 1;

Dr. Paul F. Gryska as Clinical Assistant in Surgery, to work with Dr. Linton, for one year, beginning March 15;

Dr. George Kaldor as Research Fellow in Medicine for one year, beginning March 15;

Dr. LeRoy H. Maffly as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Elliott L. Mancall as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Luz G. Palattao as Clinical Fellow on the Children's Medical Service, for the period of six months, beginning March 1;

Dr. Peter G. Robbins as Clinical Assistant in Surgery, assigned to Gynecology, for the period April 1 through July 31.

The General Executive Committee also voted:

That the appointment of Dr. Hugo W. Moser be advanced, to begin June 16 rather than July 1;

To rescind the appointment of Dr. Myron L. Stein, who was to have reported here as a Clinical and Research Fellow in Psychiatry.

Inasmuch as Dr. Robert J. Lifton has obtained a permanent Massachusetts license, his title will be Clinical Assistant in Psychiatry, effective as of March 14.

* * *

Dr. Edward P. Richardson, Jr. wishes us to report an omission and a correction concerning his article which appeared in the March issue of THE NEWS. Omission: In giving the long list of those who have been associated with the Neuropathology Laboratory in the past, the name of Dr. Lysia Saxe Forno, from Aarhus, Denmark, a Fellow in Neuropathology at M.G.H., 1951-52, now settled in San Francisco, California. Correction: Dr. John O. Strom, Resident in 1944-55, is now in Rochester, N. Y., on the teaching staff in Neurology at the University of Rochester School of Medicine and Dentistry.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiovascular Physiology

Salzman, E. W.
Reflex peripheral venoconstriction induced by carotid occlusion.
Circulation Research 5:149-152.

General Surgery

Bartlett, M. K., and McDermott, W. V., Jr.
Exploration of the pancreatic duct for pancreatitis.
Surg., Gynec. & Obst. 104:377-379.

Cope, O., and Nardi, G. L.
The parathyroid glands.
In Physiologic principles of surgery, L. Zimmerman and R. Levine, Editors, Philadelphia, W. B. Saunders Company, chap. 27.

McDermott, W. V., Jr.
Diversion of urine to the intestines as a factor in ammoniagenic coma.
New England J. Med. 256:460-462.

Neurology, Neurosurgery, and Psychiatry

White, J. C., Sweet, W. H., and Richardson, E. P., Jr.
Cysticercosis cerebri: A diagnostic and therapeutic problem of increasing importance.
New England J. Med. 256:479-486.

Orthopedic Surgery

Cave, E. F.
Treatment of ankle injuries.
G. P. 15:85-93.

Surgery — Reconstructive

Cannon, B., and Murray, J. E.
Transplantation of tissues.
In Physiologic principles of surgery, L. Zimmerman and R. Levine, Editors, Philadelphia, W. B. Saunders Company, chap. 4.

MASSACHUSETTS EYE & EAR INFIRMARY

At a meeting of the Executive Committee, held April 8, it was voted that:

Robert M. Brown, Department of Electrical Engineering, Massachusetts Institute of Technology, be appointed Research Assistant in Otology;

Nelson Yuan-sheng Kiang, Ph.D., Department of Electrical Engineering, Massachusetts Institute of Technology, be appointed Research Assistant in Otology;

Dr. Walter A. Rosenblith, Professor of Acoustical Engineering, Massachusetts Institute of Technology, be appointed Research Associate in Otology;

Dr. Francis L. Weille be appointed Coordinator of Basic Research in the Micro-circulatory Laboratory.

FRACTURE CLINIC

Previous reports to THE NEWS concerning the Fracture Clinic of the Massachusetts General Hospital were made in the February 1948 and May 1955 issues. In these two accounts the history of the Clinic was outlined and its activities were discussed. Since the last report in 1955 the Clinic has actually increased its activities, due largely to the fact that a greater number of accident cases have been received in the Emergency Ward and subsequently admitted to the Fracture Ward. This has come about largely as the result of the willingness of the Hospital to accept any injured person in the west end of the City of Boston who may be brought to the Emergency Ward by ambulance or other means. Two years ago the Hospital adopted a policy whereby no patient would be refused admission, regardless of his financial status. Approximately 25% of all admissions to the Emergency Ward are injured severely, necessitating transfer to the Fracture Ward in the Hospital. The new Emergency Ward policy serves to emphasize the fact that the M.G.H. is exercising its responsibility in the community more and more. This new arrangement has served, also, to keep the Fracture Ward filled and provide an increasing supply of teaching material for both the undergraduate and the postgraduate students. As a result of the increased activity of the Emergency Ward and the Fracture Ward, the Out-Patient Clinic carried a heavier load during the past two years. The OPD Fracture Clinic meets on Tuesday and Friday mornings. Grand Rounds for the Fracture Service have been changed from Friday mornings to Wednesday mornings, from 8 to 10. The yearly end-result Follow-up Clinic is held on Tuesdays at 12 noon. This Clinic includes the private Baker Memorial patients, as well as those patients treated in the Ward. A return of approximately 60% is being maintained. This percentage of follow-up visits is not as good as we would like, but it compares favorably with other clinics that carry out end-result studies of their fracture cases.

Teaching continues to be one of our very important functions, and following World War II the postgraduate course in "The management of fractures and other traumatic conditions" has been given every autumn, under the auspices of the Harvard Medical School, by members of the staff of the Massachusetts General Hospital. Since the inception of the course in 1928 (29 years ago), almost 1,500 students from every State and 10 foreign countries have attended. Panel discussions have replaced to some extent the formerly given didactic lectures. Our system of teaching has been copied almost to the letter by two clinics in other large cities. We accept the compliment. The teaching staff has been altered only slightly since our last report in 1955. The program for the course next autumn will be:

PANEL DISCUSSIONS BY THE STAFF OF THE FRACTURE CLINIC

	Moderators
The hip	Dr. Otto E. Aufranc
Injuries of the hand	Dr. Edward Hamlin, Jr.
Wrist and forearm fractures	Dr. Edwin F. Cave
Femoral shaft fractures	Dr. Edwin F. Cave
Fractures of the knee and leg	Dr. Joseph S. Barr
Fractures of the ankle and foot	Dr. Otto E. Aufranc
Injuries to the spine	Dr. William A. Rogers
The shoulder, humerus, and elbow	Dr. Carter R. Rowe
The patient with multiple injuries	Dr. Charles B. Burbank

LECTURES	*Lecturers*
The healing of fractures	Dr. William A. Rogers
Bone metabolism	Dr. Marian W. Ropes
Abdominal injuries	Dr. Claude E. Welch and Dr. Grant V. Rodkey
Blood vessel injuries and thrombophlebitis	Dr. Robert R. Linton
Burns and blood substitutes	Dr. Oliver Cope
Treatment of shock	Dr. Oliver Cope
Soft tissue plastic procedures associated with fractures	Dr. Bradford Cannon
X-ray, use and misuse in fractures	Dr. Stanley M. Wyman
Operative treatment of fractures	Dr. Edwin F. Cave and Dr. Carter R. Rowe
Head injuries	Dr. William H. Sweet
Epiphyseal injuries	Dr. Robert J. Joplin
Injuries of the knee	Dr. Edwin F. Cave
Open fractures	Dr. Carter R. Rowe and Dr. Lewis W. Kane
Post traumatic pain	Dr. William H. Sweet
Anesthesia for trauma	Dr. Henry K. Beecher
Nerve injuries	Dr. James C. White
Amputations	Dr. Eugene E. Record
Chest injuries	Dr. J. Gordon Scannell
Facial and jaw fractures	Dr. Edgar M. Holmes
Pathological fractures	Dr. Grantley W. Taylor and Dr. Eugene E. Record

Another very major effort of the Fracture Clinic during the past few years has been the writing of a textbook on *Fractures and other injuries.* This text and illustrations are now in the hands of The Year Book Publishers and it will be in print in the late autumn of 1957. The book is a successor to *Fractures and dislocations,* published in 1938 from the Clinic. The new text is not a revision of the previous one, but is an entirely new book on the management of trauma in general. It has been written by members of the MGH Fracture Clinic. Thirty-nine authors have contributed chapters on fractures and other types of trauma, such as abdominal, chest, vascular, neurological, and urological injuries. Drawings have been provided by the Medical Art Department, headed by Mrs. Muriel McLatchie Miller; and the photographic reproductions have been provided by the Department of Photography of the M.G.H., directed by Mr. Donald Withee. Generous donations from grateful patients and from friends of the Fracture Clinic have made possible the publication of this volume. The writing of the text has been a large undertaking. It has required perseverance on the part of all of us. We trust it will be a credit to the M.G.H. and that it will be revised and reprinted in future years to keep pace with the progress of fracture research and management of injuries.

What are some advances in the management of trauma?

(1) Transportation of the injured. More emphasis is being placed upon quick, efficient transportation of the injured, with the simplest and most effective form of splinting. Fractures of the knee and leg are adequately transported in the simple pillow splint. Fractures of the upper extremity are more comfortably immobilized by bandaging the arm to the chest. The patient with a fractured thigh or hip may be moved after the injured member is secured to the opposite leg, which acts as a splint. Except, possibly, for transportation of fractures of the thigh, elaborate forms of traction for transportation are being given up.

(2) Complete evaluation of the injured person is promptly carried out in the Emergency Ward and treatment of shock, if present, is initiated.

(3) Early treatment of the local fracture, by either manipulation or open operation. The more quickly the fracture is reduced and immobilized the easier it is handled and the more quickly will healing begin. Such reduction also prevents swelling and bleb formation, which formerly were contraindications to "reducing" a fracture.

(4) Better training of the fracture surgeon has permitted more accurate selection of the case to be treated by manipulation and the type of fracture which is best managed by open operation. Surgical techniques have been improved.

(5) Metals for stabilizing fractures. 18-8 SMo. stainless steel and vitallium continue to be used routinely in stabilization of fractures by open operation. There is still room for improvement in the design and manufacture of such metals, and in this connection the Joint Committee for the Study of Surgical Materials, organized by Dr. Joseph S. Barr, Chief of our Orthopedic Service, and made up of representatives from the American College of Surgeons, the American Academy of Orthopaedic Surgeons, the American Medical Association, and the American Hospital Association, promises to do much to standardize the manufacture of metals and other surgical materials to be imbedded in the human body. This Committee is backed financially by the above named organizations.

(6) Fractures of the aged. Many cases of fractures of the lower extremities in older patients are more effectively treated by the introduction of metal, as in the case of the hip nail, for fractures of the femoral neck. In the very elderly individual, or when the hip nail has failed, a replacement metal prosthesis may be used in selected cases of the same type of fracture. The medullary nail, driven down the shaft of the femur or tibia, also allows early mobilization with restoration of joint function, muscle control, and a shorter period of hospitalization.

(7) Fractures through diseased bone. Pathological fractures of the long bones are amenable to stabilization by a long steel rod, the "medullary nail". This form of internal fixation does not spread the disease, and by its rigid fixation allows comfort for the patient, early mobilization and ambulation, and an early discharge from the hospital.

The Fracture Clinic is indebted to the Hospital Administration, particularly for providing funds for follow-up studies of fracture patients. Were it not for our yearly end-result study, the teaching of fracture management would fall far below the standards which we have maintained for many years. The Clinic is also grateful to the House Staff, to the Visiting Staff, and, above all, to its patients, who wittingly or not contribute so much to our knowledge and allow us to *progress* in the study and treatment of all forms of injury.

Edwin F. Cave, M.D.,
Head of Fracture Clinic

New addresses:—

Dr. Tucker A. Barth (a.r.s. *Or.* 1957), Medico-Dental Bldg., Stockton, Calif.
Dr. David W. Compton (r.p. *An.* 1946), 905 E. Columbia St., Seattle, Wash.
Dr. Carl F. Essig, Jr. (clin. fel. *N.* 1953), USPHS Hospital, Lexington, Ky.
Dr. Richard W. Garrity (sr. r.s. *N.S.* 1950), 3300 6th Ave., San Diego 3, Calif.
Dr. Falls B. Hershey (*E.S.* 1947), 4960 Audubon St., St. Louis 10, Mo.
Capt. William J. James, MC, USN (r.s. *N.S.* 1949), U.S. Naval Hospital, San Diego, Calif.
Dr. Alexander Marble (r.p. *W.M.* 1930), 15 Joslin Rd., Boston 15, Mass.
Dr. Elliott B. Sweet (a.r.s. *Or.* 1954), 85 Jefferson St., Hartford, Conn.
Dr. Ellsworth H. Trowbridge, Jr. (a.r.p. *N.* 1940), 1440 Professional Bldg., Kansas City 6, Mo.
Dr. Frederick E. Whiskin (r.p. *Psychiat.* 1954), 270 Commonwealth Ave., Boston, Mass.
Dr. Philip D. Wilson (*E.S.* 1914), 535 E. 70th St., New York 21, N. Y.
Dr. Philip D. Wilson, Jr. (*E.S.* 1945), 535 E. 70th St., New York 21, N. Y.
Dr. James B. Wyngaarden (*M.* 1949), Duke Hospital, Durham, N. C.

Brief bits:—

Dr. Henry K. Beecher recently delivered the Hartmann Memorial Lecture at Basel, Switzerland, and the Gross Memorial Lecture at Montreal, Canada.

Dr. Bradford Cannon has recently returned

No. 66 in a series of Staff photographs
Dr. Dana L. Farnsworth, Physician

from a trip to the Marshall Islands, under the auspices of the Brookhaven National Laboratory, to re-examine the group of Marshallese who were exposed to radioactive fall-out in 1954. Among the members of the team was Dr. Edward L. Carter (*S.* 1954), who will return to the M.G.H. this summer.

Dr. Edwin M. Cole presented a paper on "Medical aspects of specific reading disabilities" and participated in a panel discussion in a postgraduate course in ophthalmology and laryngology offered by the School of Medicine of the University of Kansas, at the Medical Center in Kansas City, April 9-12.

Dr. James H. Currens was in Dublin, Ireland, recently, visiting Dr. Timothy Counihan (clin. & res. fel. *M.* 1950). Dr. Currens addressed the Royal Academy of Medicine of Ireland on Cheyne-Stokes breathing. His talk was based upon studies done at the Massachusetts General Hospital in association with Dr. Mandel E. Cohen and Dr Edward P. Richardson, Jr. He also visited the Meath Hospital, which was particularly interesting since both Drs. Cheyne and Stokes were active and teaching in the Meath Hospital 100-140 years ago. Dr. Counihan is well established in Dublin at the Martyr Hospital and is busy teaching and doing investigative work in heart disease at the hospital.

Dr. Arthur W. Allen has recently had a letter from Dr. John W. Smillie (*E.S.* 1944). The summary of the news which applies to him is that he is now Assistant Professor at the Department of Ophthalmic Surgery at the University of Michigan, in Ann Arbor. He was elected to membership in the Michigan Chapter of the Society of Sigma Xi last year, and has recently been elected to the executive committee of the Ann Arbor Figure Skating Club. He and his wife are well. They have three children, ages ranging from 12 to 2.

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VOLUNTEER GROUPS

MGH Staff Wives Association

On Wednesday, May 1, in the Chapel, a program of songs was given by Anne Talbot, mezzo-soprano, accompanied at the piano by John Woodworth.

On Wednesday, May 15, at 3 P.M., in the Chapel, Leonard Moss, a violinist in the Boston Symphony Orchestra, will give a concert, accompanied at the piano by Frances Moss.

On Wednesday, May 29, at 3 P.M., in the Chapel, the Boston Intimate Opera group, under the direction of Margo Warner, will perform.

Distaff Club

On April 22, the Distaff Club wives and their husbands gathered at the Museum of Fine Arts for an evening gallery talk on Far Eastern Art. Miss Alice Maginnis, who has conducted tours for us in the past, did a superb job of introducing the group to some of the Museum's most delightful collections.

Over eleven hundred invitations to the Spring Dance were addressed by the hard-working members of the Dance Committee. Distaff and Staff Wives worked together on the plans for this gala evening of dancing on May 17 at the Parker House Roof.

* * *

Mr. Ralph W. Burger, President of the John A. Hartford Foundation, and Dr. Dean A. Clark have jointly announced a gift of $178,009 from the Foundation to the Hospital for the Cardiovascular Research Laboratory.

Dr. Paul D. White, in commenting on the significance of this gift, said, "The unit that is planned is of vital importance to further advances in the research work at the Massachusetts General Hospital, which has always been a leader in medical investigation. This is a research grant for basic work in the most important problems of cardiovascular disease, including especially arteriosclerosis, as well as basic research in fluid and electrolyte balances as they relate to the circulation in health and disease."

Dr. Clark says that this generous gift from the John A. Hartford Foundation will support important investigations in the Cardiovascular Research Laboratory of two problems related to heart and kidney disease. To quote Dr. Clark: "In health, some 60% of the body weight is water present as salt solutions. Disturbances in both distribution and composition of the body fluids occur in association with heart and kidney diseases. In heart failure, as with certain kidney diseases, the patient may suffer from the accumulation of excessive quantities of fluid. In other conditions, the volumes of fluid fall below the normal amounts and result in different disturbances. Many conditions affecting the heart and kidneys cause alterations in the normal composition of the body fluids. As yet, we know very little about the basic mechanisms involved in water and salt movements in the body. Investigations are in progress to determine the mechanisms involved in maintaining the normal distribution and composition of these body constituents. With an understanding of the normal will follow a better understanding of the disease state.

"Coronary heart disease and arteriosclerosis are today the major disturbances affecting the heart and blood vessels. In these diseases there occurs an excessive deposition of a normally occurring fat, cholesterol, in the walls of blood vessels. A study of the production and fate of cholesterol in the body, as well as the factors causing its excessive deposition in the lining of blood vessels, will be undertaken. A rational approach to the prevention and treatment of these diseases should result from such knowledge."

The Hartford Foundation was established by the late John A. Hartford, who was president of the Great Atlantic and Pacific Tea Company for many years.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 168 Boston, Mass June 1957

THE OTHER HEART FAILURE

AN INTERNIST'S PSYCHIATRY

After I had finished my cardiac residency in 1928, Dr. Paul White suggested to me that I might concentrate my clinical studies on hypertension. He blithely added that if I covered hypertension, Dr. Sprague focused on coronary disease, and Drs. Jones and Bland concentrated on rheumatic disease, he himself could be a general practitioner of cardiology. A little later, having just started in private practice and still pondering the concentration on hypertension, Dr. Rackemann saw me unattached at a medical dinner and, willing to give a young man a boost with his betters, kindly asked me to join him and his friend, Dr. George Minot. Dr. Minot wanted to know who I was, where I came from, what I had been doing, and what I intended to do. I made my *curriculum vitae* as brief as my youth and self-interest allowed, and proceeded to my future.

"Dr. Minot," I asked, "at my age, starting in practice, would you advise specializing in cardiology and, more particularly, in hypertension?"

"By all means, Dr. Palmer. Certainly you or any young doctor should concentrate your interest — cover thoroughly even one corner of a medical field for these reasons: First, your patients with hypertension may have any of the other diseases. This will keep you on your toes diagnostically. Second, many of your patients (or their doctors) will be afraid they have the disease you are interested in. Fear is nearly universal, with or without accompanying disease. This never will cease to try your skill as a physician and as a person." Dr. Minot's advice confirmed and strengthened a decision already really made. His prediction that anxiety would be the constant patient problem in medical practice has proved correct.

At first, following and sharing Dr. White's interest in coronary disease, patients were seen and cases reported illustrating the variety of gastric and other symptoms which disguise actual coronary insufficiency and symptoms simulating angina pectoris though associated with duodenal ulcer and other gastrointestinal disorders which are mostly due to anxiety. The reference files and case records over the years are replete with examples of skeletal changes, varicose veins of the upper extremities, intrathoracic nodular goiter, mitral stenosis, esophageal and mediastinal disorders, all responsible for pain quite like angina pectoris due to coronary disease. But the common denominator of most chest consciousness or oppression, breathlessness and palpitation, is fear, discouragement, or lack of heart — the *other heart failure.* (Van Den Berg, J. H.: The phenomenological approach to psychiatry, Springfield, Illinois, Charles C. Thomas, 1955.) This is irrespective of the disease the patient may happen to have, and is about as frequent in patients with no recognizable disease. Actually, the other heart failure is even more distressing when there is no disease to account for it. It seems that conscious tension and anxiety, spontaneous or induced by a thoughtless remark or an over-interpreted electrocardiogram may cause pain in the chest hardly distinguishable from that due to insufficiency of the coronary circulation. It is frequently as disabling, because it is a failure or disorder at the center of the personality. The threat of death, as in angina pectoris, may be more tolerable. Those with the other heart failure suffer from failure in living, and often would settle gladly for sudden death.

Anxiety may seriously provoke, possibly fatally, coronary insufficiency. This places a heavy responsibility on the physician. The doctor, until Semmelweis and Holmes, the unwitting carrier of sepsis, still is the carrier of anxiety. Not only his presence, gestures, manner, word, but even the idea of calling the doctor bears the threat of disability unless he practises rigid psychological asepsis. Diagnosis, usually easy enough, is more important in the harm that the patient's knowledge of it may do. This does not mean the physician should evade the truth, if he is sure of it, but that he should assist the patient to his own truth about his living in view of whatever condition he may have, not anxiety free, for this nearly always is impossible, but at least with no added anxiety. At best, the physician may induce a strength of the other heart, namely courage, which desensitizes the person to inner tension.

Happily, I learned early from two masters of practical psychotherapy — Dr. Arlie Bock of this Hospital and Dr. John Sproule of Haverhill — that angina pectoris and other organic ills may be greatly relieved over many years by proper hygiene, proper choices by the patient, sufficient sedative, and enough of an interested physician's time for psychotherapy. Relief sometimes came spontaneously, sometimes by the patient's insight leading him to limit his desires rather than struggle to satisfy them, often from confidence in his doctor. The feature of improvement was abatement of anxiety or an increasing tolerance of it.

In studying patients with hypertension, I found the blood pressure level a delicate indicator of the other heart strain. Mental arithmetic, anger, fear, and deception long have been known to elevate the blood pressure. This is true in patients with and without hypertension. On seeing a patient for the first time, everything is done to avoid inducing or increasing anxiety. The second principle is to utilize every circumstance of history, physical and laboratory findings, for favorable suggestion. At the first visit and as early in the visit as possible, the examining situation with its threat of unfavorable findings is changed into the psychotherapeutic situation with its favorable suggestions. This is not to minimize the symptoms or to force blanket reassurance, but to throw doubt on the unfavorable significance of symptoms or findings and to emphasize the favorable points. The attitude is: what we do not know is how well the patient may do. As the relationship becomes more secure during the first or later visits, the blood pressure may be taken at intervals in the course of routine interviews, diet checking, medication, rest and activity, coming naturally to details of the patient's life situation. Repeated blood pressure determination as the patient unfolds his life situation is a lie detector of those lies he may tell himself. The difficulty at the office, which a man tries to say is a little thing, is very big. It is nothing less than his prestige status, the matter of others' opinions, giving him his opinion of himself. The "little" strain of the family wanting a new car, of his wife's desire to redo the living room or have a $5,000 modern kitchen may be a tremendous load of financial anxiety. In interviews with 100 hypertensive patients, upward variations in the blood pressure occurred in relation to conscious mental stress, anxiety, and emotion. The mean systolic variation was 30 mm. of mercury, the maximum 82; the mean diastolic variation was 18, the maximum 50. When the posture and cold tests and mental stress tests were superimposed, in some cases the mental stress test gave as high or sometimes higher peaks of blood pressure than the cold test. The relation of blood pressure rises to situational factors, when shown to the patient, demonstrates the evasions and bad faith he may have with himself, begets an inventory of his unfinished psychological business, and opens to him a selection of possible choices which are his, not the doctor's. When things go well, the patient becomes more decisive, is conscious of less strain and fearfulness, and, best of all, feels less dependant upon the doctor and more self-dependant. He is less worried about his future, accepts his past choices if irreversible, but mostly he lives more definitely and more confidently in the present. In short, he lives with more heart.

Assessment of personality and character traits as apparent to the physician-observer and consciously evident to the subject with hypertension appears no different from the pattern generally characteristic of average persons with other diseases or with no disease: practicality, objectivity, and adaptability, without particular originality or special skills other than their job or even special interests — in short, the mediocre predictability required by industry. But this docility, this trained or, from another point of view, enslaved mind, is at the price of conscious tension and anxiety. This is the strain of adaptability or obedience to the dictates of reality testing. It is the pinch of civilization's harness. It is the required uniformity at the expense of individuality. This much admired adjustment for many is "antagonistic cooperation" (Riesman: The lonely crowd, Yale University Press), the "second nature of man's own contriving more hostile than original nature herself."

Like other patients and other people, hypertensives are aware of tension and anxiety. Their particular anxiety, whether focused by us who advise them or by their experience of family and friends, is on the blood pressure and its consequences. Fantasies of disability from stroke or heart failure and of sudden death are common. Behind this is an unquiet conscience due to real or fancied sins, or quite often a feeling that they have not done as well as they should with their lives. Beyond this is an unsettled question of the meaning of their own life and of life in general. Basic to all of these inner experiences is a fear of fate, sometimes frankly of death but usually of disability, of not being able to work. This may be expressed as embarrassed jokes, in equivalents: "I am making repairs on my house only for my wife's second husband"; "I wake early in the morning and wonder when I am going to have another attack". A few frankly recognize and express the lonely terror or dread of the end of living. This anatomy of anxiety is not peculiar to hypertensive patients, is the normal experience of many in their own existence, the all-too-common life of "quiet desperation". Understanding this structure of existence helps many patients to acceptance, decisiveness, and consequent relief of tension and anxieties. Frequently the blood pressure is lower, more often the symptoms are relieved; as one patient said, "The idea of high blood pressure used to poison my life. Now I feel so well I don't care what my blood pressure is!" This patient, advised to have a sympathectomy fifteen years ago which she sensibly refused, now has a normal blood pressure at most of her annual visits, is only slightly restricted as to diet, takes only phenobarbital in small dosage.

The problem of blood pressure anxiety is a special case of anxiety in general in those who chance to have hypertension. The technique of sympathetic non-judging audition is as useful for patients with other complaints as for those with hypertension. Of 100 unselected patients, 80 percent aged 40 to 80, only one-third actually had heart disease or hypertension, but over 50 percent feared one of these diseases or its effects. Cancer was a fear in one-fourth. One-third were afraid of more than one disease, nearly one-fifth of mental disease. It was characteristic that most of these patients felt that something terrible was happening or might happen to them, but were equally aware that they themselves shared in causing their distress — a feeling that they were responsible in part for their troubles. The prevailing self-consciousness was of tension or anxiety (80 percent) in various degrees from mild to acute anxiety attacks, hyperventilation tetany, and acute anticipation of dying. Frequently this persisted in spite of accepted reassurance about heart disease, for instance. An unquiet conscience was apparent in the feeling that they had not made what they should have of themselves, had not got out of life what they might reasonably have expected, sometimes that circumstance had cheated them of their just deserts. About half felt that their lives and life in general were meaningless. Daytime phantasies of escape, just walking quietly away from their responsibilities, were quite common. A little more than 40 percent were aware of a vague dread of the future, some of a frank fear of death or a nameless acute panic at intervals. As one said, "My God, I am afraid of dying, I am even afraid to say it."

Common reactions to these inner experiences were distraction by overwork, multiple meaningless activities and time wasting in or out of the home, purchase of gadgets, spectator sports, and resort to that most reliable of tranquilizers — liquor. It is not unusual to find a family spending up to a thousand dollars per year for this traditional relief from tension, the anesthesia of care known as the cocktail hour, though the new tranquilizing drugs presently are serious competitors in the apathy market.

The wisdom of the body, which the late Dr. Walter B. Cannon studied and spoke about so eloquently, is physiological automation. The steady inward state of the individual vis-à-vis his world is maintained by a marvelous "closed loop feedback". This is nature's automatic calculator complete with circuits (nerves), transistors (ganglia and mid-brain centers), switches (synapses), and recording oscillographs (cerebral cortex). It precisely assays relative degrees of danger and safety, alerts or reassures accordingly, as reported by the only one who knows — the individual self-consciousness. Industrial automation is providing closer and closer parallels of physiology even to chemical switches, very similar to bodily neurotransmitters. These contrivances of the engineers, many of them described by Woodbury in *Let Erma do it* (New York, Harcourt Brace, 1956) allow a fresh diagrammatic look at the complicated physiology and psyche of our patients. The mid-brain is the automatic relay. External input is not only perception or sensation from sight, sound, and touch, but also memory, conscious or unconscious, held by the lag screen oscillograph of the cerebral cortex throughout life. The mid-brain relay transmits appropriate output to muscles and internal organs, all of which feed back internal sensations or impulses to the mid-brain relay while the brain or cerebral cortex records the processes. Most of these recordings are unconscious. When inner and outer affairs go well, there is a general climate of peace; if not so well, of tension or dread; if badly, a violent alerting with terror or panic.

This is how the tranquilizers tranquilize. Liquor, the barbitals, and general anesthesia blur or turn off the images and memories on the oscillograph or closed circuit T.V. screen of the brain and reduce or stop external and internal stimuli. Miltown or Equanil reduce the feedback stimuli from the muscles. Thorazine and its derivatives cut down feedback from hollow organs as Serpasil (snakeroot) does from blood vessels. Thorazine and Serpasil and other similar substances block input and output at the relay circuit in the mid-brain. Blockade of output by blood pressure lowering drugs at sympathetic ganglia, so reducing blood vessel tone and hence feedback, also results in some sedative effect. Tranquilization in this way, aside from the ordinary risks of drugs, reduces alerting and judgment and choice, which are conscious inhibition, substituting for it apathy. To many this seems desirable. I have had hints of hurried and harried doctors resorting to these medicines. An old lady said she preferred encountering a mad dog to consulting a tired doctor. I wonder if she would feel safer with an apathetic one. I ask myself the same question about my lawyer and financial man and think I may ask him the next time I see him whether or not he is on tranquilizers.

The most important theoretical implication, if tranquilizers tranquilize in this way, is the origin of the emotions. The Sherrington-Cannon theory was that bodily changes accompanied — really followed — changes in the mental state. The effect of drugs blocking transmission of input from internal organs and muscles and quieting the emotions favors William James's theory that bodily reactions are primary, i.e., we see the bear, run, and promptly feel frightened. This peripheral origin of the emotions with elaborate interpretations was revived by Kempf more than thirty years ago (Kempf, E. J.: The autonomic functions and the personality, Nervous and Mental Disease Monograph, Series No. 28, New York and Washington, Journal of Nervous and Mental Disease Publishing Co., 1921). The new psychiatric investigation and treatment by drugs supports the conclusion that we think with our body. The brain records what goes on and some of this, and I hold it is the most important part, is conscious — namely, how the person feels. I also hold that the patient's interpretations are as appropriate as anyone's. In actual practice patients are open to suggested interpretations, but experience teaches that such must be in accord with their inward dispositions, are valid as working interpretations only as chosen by the patient. The patient is the final judge.

The so-called phenomenological psychiatry of the internist which I have been describing is this common sense approach. It is simply open uncommitted auditing of the patient's ideas of his life. Depending on the experience, knowledge, and charity of the physician, he may learn to listen to his patient with the "third ear", a phrase which Theodore Reik borrowed from Nietzsche. This is communication without words, but by bodily posture, gesture, facial expression, the immediate situational setting. The Jewish mystic and philosopher Martin Buber describes it in *Between man and man* (Boston, Beacon Press, 1955, also Macmillan). Many generally unknown but successful salesmen who would resent being classed with the mystics have told me of their recognition of a client's unexpressed thoughts and their own seeming ability to share them and even guide them. This use of wordless communication as a sales technique is the precise opposite of the physician's role if he finds he and his patient may communicate other than by words. The psychotherapist has nothing to sell, above all not his own insights into his own problems, which would be as bad as to force the diagnosis of his own physical disease or the drugs which relieve him on all his patients. The physician's role is to invite the patient's attention to the patient's possible choices in accordance with the patient's inward disposition and outward circumstances as apparent to the patient himself.

Few of us or our patients can do without models in examining our bad faith with ourselves and settling our unfinished psychological business. Freud had childhood Maccabean dreams of being a military leader of his oppressed people. Later he once denied his people; even thought of becoming a Protestant to further his career. Nevertheless, he remained a good Jew and, as the Hebrew prophet Daniel did for Nebuchadnezzar, remembered his patients' dreams for them and then interpreted them, probably always identified himself with Moses but could not resist suggesting that he was Egyptian, not Jewish (Jones, Ernest: Freud, life and works, vols. I, II, New York, Basic Books, 1953, 1955). His knowledge, first of himself and then of his patients, has helped or in some way influences most of us. Jean-Paul Sartre is not the much talked of but little studied Left Bank odd-ball of cocktail party conversations. He was a thoroughly trained academic philosopher, then an underground fighter, a prisoner of war writing and producing plays for his fellows. Now he is an influential philosopher and psychologist abroad. He still may be in the stage of being considered absurd here, but just now he and other existentialists are entering the second stage of all new movements, namely, "it has all been said before". It has been said for the hundred years since Kierkegaard and not only by the philosophers. Much of it is the simple experience of countless common men, though there is a two-dollar word for it: the naive ontology of animal faith. Thanks to the suggestion of Dr. John E. Walker, an internist of Columbus, Georgia, who is interested in phenomenological psychiatry, I did some reading *of* Sartre rather than *about* him. Others may be interested in his existential psychoanalyses. Sartre thinks Freud did well to go as far as he did, but that he did not go far enough. The Freudian wish, he thinks, may be reduced still further to an impersonal unsubstantial lack or desire in nature.

Freud's hope was to find the substantial physics and chemistry of desire, the scientific basis of man's fate. Sartre has pursued his introspective labors as a pure psychologist. He establishes desire, value, choice, and individual freedom, but believes them to be completely impossible of fulfillment. There are other views of the abyss of being than those of Freud and Sartre. Old Martin Buber (Friedman: Chicago, Illinois, University of Chicago Press, 1955) by remembering and exploring the mystical experiences of the Galician Hasidic communities of his youth may have reached the limits of his own inner life and, in so doing, assisted countless others to approach the limits of their own. There are those who hold Buber among the wisest of living men. Miguel de Unamuno was a passionately religious man and a fiery political liberal. Called a heretic and revolutionary, he spent much of his 72 years in trouble with political loyalists and rebels as well as with the church of his native Spain. He concluded that to believe in God is to desire His existence; what is more, that though immortality of the soul is illogical, the only way to live on earth is to deserve to live forever. Many honest heretics from scientific, psychologic, and religious dogmas have thought that there may be many ways to so great a mystery as the meaning of their lives.

The phenomenologic approach to our anxious patients is not to propose any one way, least of all our own, but to help them find their ways and, however different from our own, accept other paths as right for them as we do Freud's or Sartre's, Buber's or Unamuno's for them, or any other way for anyone else, as long as they can keep out of jail and have their friends tolerate them.

If we do no more than prescribe tranquilizers, we may as well be horse doctors. If we cannot sympathetically hear from our patients and recognize the fortunately broad limits of irrational inner experience as described by existentialist psychology, we and our patients may do as well by confessing our troubles to the bartenders at the Eden Roc in Miami or the Chez Paree in Chicago and listen to Roberta Sherwood give with "Tears don't care who cries them", and "You're nobody till somebody loves you" — two of her most groovy chants, loaded, I am sure, with existential despair.

Robert S. Palmer, M.D.,
Physician

* * *

Dr. Joseph C. Aub has been elected a member of the National Academy of Sciences in Washington.

Dr. Joseph S. Barr was Visiting Professor of Orthopedic Surgery at the University of California Medical School, San Francisco, from April 29 through May 10, and delivered the Samuel Higby Camp Lecture at the University of California Hospital on May 8. His subject was "Arthroplasty of the hip".

Dr. Barr has been elected Robert Jones Lecturer for 1957 by the Royal College of Surgeons of England. He will deliver the lecture in London in late October.

Dr. Allan M. Butler has been invited, as a distinguished leader in child health, to participate in a California Conference on Child Health at Asilomar, California, held by the Department of Public Health for the State of California, June 13-15.

Dr. Stanley Cobb has been elected an Honorary Member of the Royal Society of Medicine of London.

The Board of Trustees, at their meetings on April 5 and 18, and May 3, voted:

To confirm the appointment of the following to the Advisory Council to the School of Nursing: Miss Sigrid Edge, Miss Alice F. Casey, Mrs. Penelope Hope, and Mrs. Ann Lyons Twomey;
To accept the resignation of Dr. William F. Ketchum as Clinical Associate in Children's Medicine;
To accept with regret the resignation of Dr. Alfred O. Ludwig from the position of Associate Psychiatrist.

To appoint:

Dr. William S. Beck as Assistant Physician, to be in charge of the Baker Laboratory;
Dr. Henry N. Claman as Assistant Resident in Medicine, for the period July 1, 1957 through December 31, 1957, and as Resident in Medicine, for the period January 1, 1958 through December 31, 1958;
Dr. John Q. Durfey as Assistant Resident in Anesthesia, for the period January 15, 1958 through May 31, 1958;
Dr. Francis C. Hersey as Assistant Attending Psychiatrist at McLean Hospital;
Dr. John E. Mazuzan, Jr. as Assistant Resident in Anesthesia, beginning September 1, 1957 instead of December 1, 1956;
Dr. David G. Millard as Second Assistant Resident in Radiology, beginning June 1;
Dr. Leonard H. Plotkin as Clinical Associate in Children's Medicine, beginning July 1;
Dr. Harold Simon as Second Assistant Resident in Radiology, beginning July 1, 1958;
Dr. Frederick E. Whiskin as Clinical Assistant in Psychiatry at McLean Hospital.

At their meetings on April 17 and 24, and May 1 and 8, the General Executive Committee voted:

To recommend to the Trustees the acceptance of the resignation of Dr. G. Douglas Krumbhaar as Associate Obstetrician, effective May 31.

To extend the appointment of:

Dr. Soren Jorgensen as Clinical Fellow in Anesthesia for an additional two months, through May 31.

To reappoint:

Furio D'Abramo, Ph.D. as Research Fellow in Biochemistry, for the period May 1 through August 31;
William S. Quigley, B.S. as Research Fellow in Physics (Medicine) for one year, beginning April 30.

To appoint:

- Dr. Milton S. Grossman as Clinical and Research Fellow on the Children's Medical Service, for the period July 1 through December 31;
- Dr. Henning Pontoppidan as Clinical and Research Fellow in Anesthesia, for a period of eight months, beginning May 3;
- Dr. Jan-Henrik Probst as Clinical and Research Fellow in Children's Medicine for one year, beginning July 1;
- Dr. Robert H. Richie, Jr. as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
- Dr. Steven Schenker as Clinical and Research Fellow in Neurology, for a period of six months, beginning January 1, 1958;
- Dr. Dorothy B. Villee as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
- Dr. Herman Wing as Clinical Fellow in Physical Medicine for one year, beginning September 1.

SALLY JOHNSON

Miss Sally Johnson, former Principal of the School of Nursing and Superintendent of Nurses for over twenty-five years at the Massachusetts General Hospital, died in the Phillips House on March 24.

Miss Johnson was graduated from the Massachusetts General Hospital School of Nursing in 1910. She came to the School as a trained and experienced teacher from the Connecticut school system. Upon graduation from nursing she taught in the St. Luke's Hospital Training School in New Bedford. From this time on Miss Johnson combined her interest in nursing education with her strong interest and ability in administration. She served as Assistant Superintendent of Nurses at the newly opened Peter Bent Brigham Hospital in Boston, and as Superintendent of Nurses at the Albany Hospital, Albany, N. Y. During World War I she was given leave of absence from the Albany Hospital to serve as Director of the Army School of Nursing at Walter Reed Hospital, Washington, D. C.

Miss Johnson returned to the Massachusetts General Hospital in 1920. A pioneer in both nursing and nursing education, she introduced new methods of administration to improve patient care and to enhance the utilization of nursing time and skills. Because of her foresight, Massachusetts General was among the first teaching hospitals to employ ward helpers, ward secretaries, and practical nurses. She spent 1931-32 at Teachers College, Columbia University, to complete her college study — not that she might hold a degree, but that she might expand her background and thus be able to serve nursing and the Massachusetts General Hospital even more efficiently. Her influence spread far beyond the walls of M.G.H. Over 1,930 young women graduated from the School of Nursing during her administration. Alumnae of the School have worked in every State in the Union and every continent on the globe. Many were prepared to assume leadership in nursing because of her constant efforts to discover and develop all latent possibilities in every student nurse who came under her supervision.

Miss Johnson played an active part in securing sound legislation for nursing in Massachusetts. She was active in local, state, and national nursing organizations, and was a member of the Board of Directors of the National League of Nursing Education, the *American Journal of Nursing*, and the American Nurses' Association. She was an honorary member of the Quota Club, and Chairman of its Committee on Defense.

The students and the alumnae who knew Miss Johnson enjoyed her teaching and respected her counseling. Her neverfailing sense of humor, her insight into an individual's needs and abilities, her uncommon common sense, were always available to help any student nurse who came to her; and many graduates of the School returned to her for advice because they knew they would always receive from Miss Johnson wise guidance, understanding, and encouragement.

[Ruth Sleeper] R. S.

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MASSACHUSETTS EYE & EAR INFIRMARY

At a meeting of the Executive Committee, held May 13, the following appointments were made:

- Sidney Futterman, Ph.D.—Biochemist, to work with the Retrolental Fibroplasia Research Study
- Dr. Baruch J. Sachs — Assistant in Ophthalmology
- Dr. John G. Sebestyen — Fellow in Ophthalmology in the Retina Service

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Dr. George Kelemen has been elected to membership in the American Otological Society.

REFRACTION AND SUBNORMAL VISION CLINIC

The Refraction Department continues to play its various roles in the Massachusetts Eye and Ear Infirmary. Some eight to nine thousand patients are examined for glasses during a year. The personnel is made up of one secretary, two full-time technicians, the house staff, and six visiting staff members. The clinic is in session six mornings and five afternoons per week. The activities of the department are:

1. SERVICES TO THE PATIENT

It is said, "Everyone will eventually have to be refracted." Certainly the need for glasses is felt by many, whether it be for reading, distant vision, relief from headaches or strabismus, or as revealed in a general check-up. Our patients are referred for refraction from the Eye Clinic, where ophthalmoscopy, external examination, and evaluation of symptoms are carried out.

2. TRAINING OF THE RESIDENTS

A considerable portion of the training of our young residents is spent in the refraction department. Our men are usually prepared for this work by taking the Harvard Postgraduate Courses in Optics and Fundamentals of Refraction, where the theory is learned. Then, during their residency they are schooled by actual practice, under the supervision of the staff members assigned to refraction. I am of the opinion that our residents get as much as or more than the personal teaching offered in any other eye training center.

EQUIPMENT

The geography of the refraction room was recently altered. With the approval of the Board of Surgeons and Management, six modern and attractive booths were erected, and so designed that they could, if ever necessary, be utilized for complete ophthalmological examinations. They are somewhat soundproof. The plans were the result of many consultations with office planning staffs of the American Optical Company, the Bausch and Lomb Optical Company, and our own personnel at the Infirmary.

We are equipped with the most modern optical instruments used in the field of refraction. These include two types of lensometers, trial lenses corrected for vertex refraction, spot and streak retinoscopes, and a keratometer. All the booths have projection devices for visual acuity measurements. We also have a considerable variety of testing charts. In fact, the history of refraction can be deduced by a study of the different tests we have. The names associated with many of these charts (i.e., Verhoeff, Lancaster, etc.) are constant reminders of the part this hospital has played in ophthalmological progress. We can also boast of the possession of three refractors and phoropters —instruments which combine the various lenses and many ocular muscle tests in single convenient units. One booth was completely equipped by the Boston Aid to the Blind.

SUBNORMAL VISION DEPARTMENT

This special division is dedicated to helping that group of people who have a small amount of vision, but cannot be helped with the conventional glasses. They are industrially blind, yet can see well enough to get around. They are not totally blind, yet cannot read or see precisely. They are a "forgotten group", in that too frequently they are told they cannot be helped and therefore resign themselves to this fate and either seek no further advice or fall into the hands of charlatans, grasping at any straw, no matter how expensive or futile. It is interesting to note that the number of such patients is on the increase. Three factors probably explain this growth in number:

1. Longer life expectancy, with the greater possibility of developing the associated degenerative retinopathies;

2. Greater incidence of literacy, and long-standing habits of reading of people over 50, as compared with previous generations;

3. Changes in attitude toward vision in older people — i.e., they no longer accept poor vision as an expected feature of getting old. (That is why we see such an increase in number of cataract operations.)

Telescopic lenses, ingenious magnifiers, projection apparatus, and many other gadgets comprise the equipment. Devices such as jewelers' loupes, photoengravers' magnifying lamps, and bird watchers' telescopes indicate the variable and unexpected sources of supply. The clinic was initiated with the financial help of the Boston Aid to the Blind—a dedicated group of women doing outstanding work with the visually handicapped in this area. (At the time of this writing an additional gift for continuance of this work has been received from this same organization.)

This department functions in three major capacities under one heading. It serves the limited-sighted patient:

1. Directly, through testing and providing the aids;

2. Indirectly, by training ophthalmologists to care for this group — thus, extending the service to the local "grass root" level;

3. Indirectly, by acting as a scientific testing and evaluation center for all new aids. We hope thus to eliminate the heartbreaking false hopes which have arisen among many patients in the past through distorted "cure" reports that so frequently appear in the press.

This clinic enjoys close cooperation with all the agencies for the blind, as well as with other centers and hospitals now doing this work. Thus, new discoveries are immediately available to all concerned. We also contribute to dissemination of information regarding these techniques to the national and international scene by regular lectures in the Harvard Postgraduate Courses in Ophthalmology, the Lancaster Postgraduate Courses in Ophthalmology, and Instructional Courses at the Annual Meeting of the American Academy of Ophthalmology.

Albert E. Sloane, M.D.,
Director, Department of Refraction

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

von Felsinger, J. M., Lasagna, L., and Beecher, H. K.
The response of normal men to lysergic acid derivatives (di- and mono-ethyl amides): Correlation of personality and drug reactions.
J. Clin. & Exper. Psychopath. & Quart. Rev. Psychiat. & Neurol. 17:414-428.

Cardiology

Bland, E. F., and Wheeler, E. O.
Severe aortic regurgitation in young people: A long-term perspective with reference to prognosis and prosthesis.
New England J. Med. 256:667-672.

General Surgery

Cope, O.
Thyroid, thymus and parathyroids.
In Surgery, J. G. Allen, H. N. Harkins, C. A. Moyer, and J. E. Rhoads, Editors, Philadelphia, J. B. Lippincott Company, chap. 26.

Nardi, G. L.
Surgical treatment of lye strictures of the esophagus by mediastinal colon transplant without resection.
New England J. Med. 256:777-780.

Randolph, J. G., and Gross, R. E.
Congenital chylothorax.
A.M.A. Arch. Surg. 74:405-419.

Oral Medicine

Trieger, N.
Cat-scratch fever: Case report of nonbacterial regional lymphadenitis.
Oral Surg., Oral Med., & Oral Path. 10: 383-387.

Surgery — Reconstructive

Cannon, B.
Open grafting of raw surfaces.
New England J. Med. 256:672-675.

New addresses:—

Dr. Lewis Cozen (*Or.* 1938), 6010 Wilshire Blvd., Los Angeles 36, Calif.
Dr. Thomas Frank (a.r.p. *C.M.* 1953), 22 Barberry Rd., Lexington, Mass.
Dr. Elmer M. Franz (a.r.s. *Or.* 1948), 1750 Race St., Denver 6, Colo.
Dr. Donald M. Glover (*W.S.* 1922), 10525 Carnegie Ave., Cleveland 6, Ohio
Dr. Robert D. Heath (a.r.s. *Or.* 1950), Lankenau Hospital Medical Bldg., Philadelphia 31, Pa.
Dr. Henry M. Hills, Jr. (*Or.* 1942), 1208 Kanawha Blvd., East, Charleston, W. Va.
Dr. John A. Malcolm (a.r.s.), 41 Ravensworth Rd., Bristol 6, England
Dr. Joseph D. Matarazzo (assoc. psychol. 1957), University of Oregon Medical School, Portland, Oreg.
Dr. Ralph T. Ogden (*C.M.* 1925), 85 Jefferson St., Hartford 14, Conn.
Dr. George Saslow (r.p. *Psychiat.* 1943), Dept. of Psychiatry, University of Oregon Medical School, Portland, Oreg.
Dr. Donald W. S. Stiff (r.p. *R.* 1950), Edward J. Meyer Memorial Hospital, 462 Grider St., Buffalo 15, N. Y.
Dr. Grantley W. Taylor (*W.S.* 1924), Taylor Medical Bldg., 101 River Rd., Weston, Mass.
Dr. Robert J. Tracy (*E.S.* 1943), 153 South St., Pittsfield, Mass.

Brief bits:—

At a meeting of the Geneva Academy of Medicine, held in Geneva, N. Y., on April 22, Dr. Bradford Cannon spoke on "Tissue and organ homotransplantation".

Dr. Edward D. Churchill delivered the Sigma Xi Lecture at the Bowman Gray School of Medicine in Winston-Salem, North Carolina, on April 15. His subject was "Wounds and wound healing". At this time Dr. Churchill was the guest of Dr. Howard H. Bradshaw, who is now professor of Surgery there. Dr. Bradshaw was a Research Fellow in Surgery (Maurice Howe Richardson Fellow) at Massachusetts General Hospital, 1932-33, and Anesthetist, 1933-36. Drs. "Bill" Peete (*S.* 1948) and "Ike" Manly (*E.S.* 1947) dropped in from Durham and Raleigh, respectively.

A most interesting article by Dr. George H. A. Clowes, Jr. (a.r.s. 1948) appeared in the May 4 issue of the *Harvard Alumni Bulletin.* It is titled "New way to the heart", but Dr. Clowes calls it "The development of an artificial heart-lung apparatus to permit surgical repair of defects within the heart". according to a note in the *Bulletin.* Dr. Clowes is Assistant Professor of Surgery at Western Reserve University and is associated with Dr. Fiorindo A. Simeone (*W.S.* 1936), Chief of Surgery at the Cleveland City Hospital. The article carries a picture of Dr. Clowes standing beside his membrane blood oxygenator.

Dr. Roger W. Jeanloz has recently returned from Europe. He delivered a paper at a Ciba Conference on Mucopolysaccharides, and lectured at the University of Geneva, Switzerland, and at the Max Planck Institute for Medical Research, in Heidelberg, Germany.

* * *

Twelve weeks of clinical pastoral training is being offered at Massachusetts General Hospital to twelve seminarians and ordained clergymen from June 3 through August 23, according to the Reverend William B. Spofford, Jr., our Protestant chaplain-supervisor. In the past, two groups of students have been accommodated for six weeks each during the summer months. The change in the program is necessitated for two reasons, says Mr. Spofford. First, the seminaries are now requiring twelve weeks, not six, of clinical training before a student can receive a B.D. degree; and, secondly, research studies indicate that a longer, intensive program is more beneficial to the student and the churches, since under this plan the student can more realistically and adequately discover the nature of human need in illness.

This year's students will come from local parishes, as well as from the Episcopal Theological School of Cambridge, Boston University School of Theology, the General Theological Seminary of New York City, Harvard Divinity School

No. 67 in a series of Staff photographs

Dr. Robert S. Palmer, Physician

of Cambridge, Berkeley Divinity School of New Haven, Connecticut, and the Moravian Seminary of Bethlehem, Pennsylvania. During their stay at Massachusetts General, the students will do some orderly work, serve as chaplain's assistants on selected floors, and attend the classes of a five-course curriculum, in which doctors, social workers, nurses, and all the Hospital disciplines will assist them in evaluating human need and the clergyman's role.

Mr. Spofford says he hopes that such training will not be confined to only the summer months in the future, but that shorter courses and practicums may be developed for the winter months, to meet the needs of parish clergy and older men.

* * *

"Careers that count" was our theme for the observance of National Hospital Week, May 12-18. Invitations were sent to college and high school students to visit the Massachusetts General Hospital on May 15 from 10 A.M. to 4 P.M. The program for the day included: tours of the Hospital; films on careers in the Hospital, shown every hour in the Lower O.P.D. Amphitheatre; and exhibits in the Brick Corridor throughout the week, which included information on the 20 educational programs in which 1,000 students are enrolled at M.G.H.

Members of the Ladies' Visiting Committee, the MGH Staff Wives Association, the Distaff Club, the Board of Managers of the Vincent Memorial Hospital, and the Ladies' Committee of the Bay State Medical Rehabilitation Clinic served on the various committees for the occasion.

* * *

VOLUNTEER GROUPS

Ladies' Visiting Committee

For the past year the Ladies' Visiting Committee has concentrated on special projects which deal directly with the patients, in addition to carrying on with its usual activities.

Assigned visiting on the wards continues as it has for the past 88 years. (This Committee was inaugurated in 1869.) As always, there are a surprising number of patients who enjoy unhurried visits with those who have the time to listen when they wish to talk. As a result, a visitor frequently discovers constructive and worth-while things that may be done for a patient.

In the Baker Memorial waiting room, during the hours when patients are being admitted, members of the Ladies' Visiting Committee greet these people and visit with them, when appropriate. There are questions to be answered, and a variety of thoughtfulnesses that can be shown them and their anxious families. Coffee is served to them, and frequently there are follow-up visits while they are hospitalized.

A traveling store cart from our General Store is conveyed periodically throughout the Hospital and into the wards. The emphasis in rendering this service is placed on friendly visiting with the patients and not primarily on selling for the Store.

The Chapel Committee takes complete responsibility for our lovely Chapel. This includes arranging and caring for the flowers on the altar, as well as the general supervising of this vital spot.

The Christmas Committee takes great pleasure in carrying out various assignments which cover so many of the activities during this holiday season. These include parties on all the wards and in the corridors, the mailing of the Christmas season programs, and the arrangements for holiday decorations throughout the Hospital — to mention but a few.

A new project this year has been the building up of the library of children's books in the Burnham. This idea was instigated and carried out primarily by one member of our Committee, who is to be congratulated on the success of this venture.

It was a great pleasure to have the Staff Wives meet with us recently in Bartlett Hall for a morning coffee party and a showing of the MGH polio film. There are several groups of volunteers working in the Hospital, and it is very helpful for all of us to meet each other. We hope that gatherings such as the above may be held more frequently in the future.

The Ladies' Visiting Committee is uniquely fortunate in that we are not a money-raising group. The profits from the General Store in the Moseley Building provide a fairly substantial amount of income, which, with the income from several funds left by or given in memory of past members, is sufficient to cover the undertakings of the Committee.

In the above we have touched on only a few of our many activities. If any department or service in the Hospital knows of any other assistance the Ladies' Visiting Committee might be able to render, we would be glad to receive such suggestions, for it is our sincere desire to help the Hospital in any way we can, within the limits of our resources.

V. B. A.,
Publicity Representative,
Ladies' Visiting Committee

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 169 Boston, Mass September 1957

ATHEROSCLEROSIS, ATARAXIA, AND THE MILLENNIUM

"Wee, sleeket, cowrin', tim'rous beastie,
O, what a panic's in thy breastie!"

When Burns wrote this "To a mouse" I am sure he never thought it might be applied to a critique of Western Civilization, nor did he know that the mouse, as a rodent, belonged to an order least likely to develop spontaneous atherosclerosis. At least the rat is an animal difficult to debauch into vascular disease, even though the rabbit, another rodent, may acquire atheroma if fed heavy doses of cholesterol to which he is unaccustomed. Malinow told me in Buenos Aires that a rat would rather starve to death than eat propyl thiouracil in his diet which might result in atherosclerosis by compromising his thyroid activity.

When I was a medical student, Richard Cabot used to tell us that, whenever anyone in his family was taken ill, he (or the sick member) could always remember something he had eaten which was undoubtedly responsible for his disease.

Later on, with Minot's discovery of the virtues of liver in pernicious anemia, and vitamins and trace elements in some other diseases, our thinking changed from blaming an illness on what the patient had eaten, to accusing him of *not* eating some beneficent substance.

In the history of research on atherosclerosis a rather similar course has been pursued. Long ago, the rabbit, later the chicken, the dog, the rat, and the monkey obligingly deposited cholesterol material in their arteries following the consumption of diets high in cholesterol — at times, however, only when combined with other appropriate procedures.

Next, and most compelling at the moment, came information from round the world that diets high in animal fat were dangerous, and what was demanded was less of these foods which every good cook knows make the tastiest dishes.

In turn, however, it began to look as if the "hardened" fats, those containing less unsaturated fatty acids, were the culprits. And this would include the hydrogenated vegetable fats or margarines. If cholesterol ideally esterifies with linoleic, rather than oleic acid, let us by all means eat plenty of linoleic and other polyethenoid fatty acids.

So that from an aversion to eating the fat on a lamb chop, and what our British friends call "beef drippings", we are now commanded to eat every day our preventive ration of corn oil, soy bean oil, soy flour, soy lecithin, whole grain cereal, peanuts, walnuts, peas, beans, and sunflower seeds.

But I really have wandered away from my text, bemused by the odors of Chinese cooking, and the lovely polyethenoid oils of the safflower and the sesame.

The point I was after in my original quotation was that the mouse was in a panic, or had a panic in him, because, rising insidiously above the more mundane facts about diet, obesity, and lack of physical exercise are the psychosomatic miasmata hinting that, after all, atherosclerosis and coronary artery disease are manifestations of emotional stress.

Now, as has been noted by others, "stress" has become a naughty word. At all costs, and they are considerable, it must be supplanted by ataraxia — "calmness untroubled by mental or emotional excitation; imperturbability". (Webster)

In the article by Dickel and Dixon (J.A.M.A. Feb. 9, 1957) on the dangers of tranquilizing drugs, the present day is described as "the age of anxiety", when mankind has suddenly discovered that "elements of tension exist in and are common to each race and geographical sector of the world" and our improved methods of communication permit us to learn about everybody's woes very rapidly. They state that some statistics show that anxiety affects 25-50 million people in the United States, which seems to me to put it in the class with halitosis and athlete's foot, with about the same mortality implications.

Anxiety and stress are hard to titrate, and have no meaning except in relation to the individual, and as Miles says "no one yet has demonstrated in humans that stress of a magnitude compatible with a 'normal life' can influence the deposition of cholesterol material in coronary vessel walls." Yet State Legislatures have decreed, as in Massachusetts, that, regardless of the evidence, it shall be presumed that heart disease or hypertension results from certain civic employment of a supposedly stressful nature.

I suggest that it might be admitted that suicide is often a manifestation of emotional strain, yet the incidences of coronary disease and suicide do not correspond in different countries. Japan, for example, has a high suicide rate, manifest hypertension, but a low rate of coronary disease.

It is an easy conversion from fancy to fact to attribute the rising rate of coronary occlusion to the promptings of conscience, ambition, hard work, and apprehension, and to believe that these fundamental human drives are peculiar to the present day. History tends to belie this, and a hundred years ago Thoreau wrote "the mass of men lead lives of quiet desperation."

Rage and frustration raise the blood pressures of certain people and perhaps the emotions may be implicated in some of the hypertensive problems of civilized countries, but this is by no means clear, and overweight correlates better with high blood pressure than does unhappiness. Significant also, in answer to our assumed increase in anxiety in the past ten years, is the fall of 18 percent in the death rate, in the United States, from hypertension with heart disease, between 1952 and 1955. Perhaps the 30 billion tablets of one tranquilizing drug sold to the American public from January to October 1956 show a therapeutic trend, but it seems unlikely that these drugs have been used extensively for a long enough time to show such an effect on the death rate from a chronic disease.

But back to our panicky mouse. Fox, from data collected from 10,000 autopsies at the Philadelphia Zoological Society, found no wild rodent to have arterial disease. "Animals that prance, jump, run, and climb the most are least affected, while those which are rather quiet exhibit the highest incidence of lesions. Those that best illustrate the most pronounced forms of arteriosclerosis — bovines, parrots, and ducks — are relatively placid animals."

With the exception of insects, the rodents, and especially the rats, mice, and (on Boston Common) the squirrels, present the greatest survival menace relative to man. These creatures are alert and active, they eat everything and they probably have that degree of anxiety which gives them their competitive ability. They are not victims of ataraxia nor of the welfare state which, in spite of its supposed security, has been held responsible for the striking rise in the suicide rate of Britain, and the growing problem of juvenile delinquency in Sweden.

The millennium, if we can recognize it when it arrives, will be neither atherosclerotic, nor ataractic, but I hope will be full of energy and a lot of fun.

Stress, to my mind, does have something to do with coronary atherosclerosis, but only by virtue of making the American male allocate less time for daily exercise and by forcing him to compulsive eating, drinking, and smoking as a defense against his frustrations.

But emotional tension and anxiety have some therapeutic virtues, and certainly are essential to any existence of significance. It is absurd to go through life worrying lest you get into some situation of anxiety, and taking pills to depress your reaction to stress.

The Boston Globe recently published an article on the success of tranquilizing drugs in mental disease. A woman was described who was paranoid and had auditory hallucinations, and who became calm and relaxed with this therapy. She was asked if she still heard voices and she replied: "Oh yes, the Devil still hollers at me, but I don't bother to holler back."

See what I mean? "The Devil", as my friend Dr. Hans-Lukas Teuber said to me when I told him this story, "was invented to be hollered back at." Physical and emotional responses to stimuli should remain vibrant. It will be the relentless decline into inertia that will degenerate our vascular systems and not the labor of our hands or minds or the protestations of our souls.

Howard B. Sprague, M.D.,
Member of the Board of Consultation

* * *

Dr. Henry K. Beecher is President-elect of the Association of University Anesthetists.

Dr. Bradford Cannon was elected President of the American Association of Plastic Surgeons at a recent meeting of the Association, held at Skytop, Pennsylvania.

Seven of the eight men who started their surgical training at the Massachusetts General Hospital on July 1 received their M.D. degrees from Harvard Medical School on June 13. Four of these degrees were *cum laude* and one *magna cum laude*. The group includes the winner of the Harvard Medical Alumni Association Prize, and the winner of the Boylston Prize and the Borden Undergraduate Research Award in Medicine.

The Board of Trustees, at their meetings on March 22 (report delayed in reaching THE NEWS office), during May and June, and on July 26, voted:

- To accept the resignation of Dr. Otto E. Aufranc from the Social Service Advisory Committee and to appoint Dr. William N. Jones to replace him;
- To accept with regret the resignation of Dr. Frederic M. Blodgett from the position of Physician to the Children's Medical Service;
- To accept with regret the resignation of John D. Gregory, Ph.D. from the position of Associate Biochemist, effective June 30;
- To accept the resignation of Dr. Gerald A. Kerrigan from the position of Assistant Physician to the Children's Medical Service;
- To accept with regret the resignation of Dr. John D. Leidholt from the position of Assistant in Orthopedic Surgery.

To change the title of:

- Dr. Edwin F. Cave to Consulting Visiting Orthopedic Surgeon, as of July 1.

To extend the appointment of:

- Dr. William P. Chapman as Assistant in Medicine, from July 1 through November 30.

To appoint:

- Dr. Irving P. Ackerman as Assistant in Medicine, beginning January 1, 1958;
- Dr. John S. Barlow as Assistant in Neurology for one year, beginning July 1;
- Dr. John C. Dalton as Assistant in Medicine, beginning July 1;
- Dr. Stanley H. Eldred as Associate Psychiatrist for one year, beginning September 1;
- Dr. Hugh D. Hall as Intern on the Dental Service for one year, beginning July 1;
- Dr. Timothy S. Harrison as Second Assistant Resident in Surgery, beginning July 1;
- Dr. Chester M. Jones as Acting Chief of the Medical Services during the absence of Dr. Bauer because of illness;
- Dr. Thomas J. Keenan as Assistant Resident on the Anesthesia Service for one year, beginning September 1;
- Dr. Edmund Klein as Assistant Resident in Dermatology for one year, beginning July 1;
- Dr. John B. Little as Second Assistant Resident in Radiology, beginning October 1, 1958;
- Dr. Robert B. McFarland as Third Assistant Resident in Pathology for one year, beginning July 1;
- Dr. J. Malcolm McNeill as Assistant in Radiology, beginning July 1;
- Dr. Donald P. Pederson as Assistant Anesthetist, effective April 1;
- Dr. Majic S. Potsaid as Assistant in Radiology, beginning July 1;
- Dr. Harrison L. Rogers, Jr. as Second Assistant Resident in Surgery, for one month, beginning July 1;
- Dr. Earle H. Rosenberg as Intern on the Dental Service for one year, beginning July 1;
- Dr. Guillermo C. Sanchez as Assistant in Medicine, beginning October 1;
- Dr. Stefan C. Schatzki as Acting Resident in the Department of Radiology, beginning July 1;
- Dr. Robert A. Schmidt as Assistant Resident in Anesthesia, beginning July 1;
- Dr. William L. Strickler as Third Assistant Resident in Surgery, beginning July 1;
- Dr. Clarence E. Thornton as Assistant Resident in Psychiatry for one year, beginning July 1;
- Dr. Giles D. Toll as Assistant Resident in Pathology for one year, beginning July 1;
- Dr. Alexander T. M. Wilson as Visiting Psychiatrist pro tempore, beginning May 27.

At their meetings on May 15 and 22, during June, and on July 2 and 10, the General Executive Committee voted:

To change the title of:

- Dr. Thomas J. Whitfield, III, from Chief Resident on the Children's Medical Service to Clinical Assistant and Acting Resident on the Children's Medical Service, for the period July 1 through December 31.

To promote, as of July 1:

- Dr. W. Gerald Austen to the position of Second Assistant Resident in Surgery;
- Dr. Alexander Breslow to the position of Second Assistant Resident in Pathology for one year;
- Dr. Bob Bullwinkel to the position of Third Assistant Resident in Surgery;
- Dr. Edwin L. Carter to the position of Second Assistant Resident in Surgery;
- Dr. John D. Constable to the position of First Assistant Resident in Surgery;
- Dr. Harry B. Ditmore, Jr. to the position of First Assistant Resident in Surgery;
- Dr. Louis H. Edmunds, Jr. to the position of Third Assistant Resident in Surgery;
- Dr. Robert P. Fornshell to the position of Senior Resident in Orthopedic Surgery;
- Dr. Donald J. Glotzer to the position of First Assistant Resident in Surgery;
- Dr. Jack J. Greenberg to the position of Third Assistant Resident in Surgery;
- Dr. John W. Grover to the position of Third Assistant Resident in Surgery;
- Dr. Robert S. Harper to the position of Second Assistant Resident in Pathology for one year;
- Dr. Stephen E. Hedberg to the position of Second Assistant Resident in Surgery;
- Dr. Charles E. Huggins to the position of First Assistant Resident in Surgery;
- Dr. Richard T. N. Hunt to the position of Third Assistant Resident in Pathology for one year;
- Dr. Dale G. Johnson to the position of Third Assistant Resident in Surgery;
- Dr. Alfred J. Luessenhop to the position of Resident in Neurosurgery, for the period July 1 through December 31;
- Dr. Donald M. McKee to the position of Third Assistant Resident in Surgery;
- Dr. Charles F. McKhann, III, to the position of Second Assistant Resident in Surgery;
- Dr. Alfred E. Miller to the position of Third Assistant Resident in Surgery;
- Dr. Anthony P. Monaco to the position of Third Assistant Resident in Surgery;
- Dr. Henning Pontoppidan to the position of Chief Resident in Anesthesia, beginning July 15;
- Dr. Judson G. Randolph to the position of First Assistant Resident in Surgery;
- Dr. Robert S. Richards to the position of Resident in Radiology;
- Dr. Sanford I. Roth to the position of Third Assistant Resident in Pathology for one year;
- Dr. Dagoberto Sosa to the position of First Assistant Resident in Neurosurgery, for the period July 1 through December 31;
- Dr. William M. Thurlbeck to the position of First Assistant Resident in Pathology for one year;
- Dr. Alfred L. Weber to the position of First Assistant Resident in Radiology;
- Dr. Sumner I. Zacks to the position of Second Assistant Resident in Pathology for one year.

To extend the appointments of:

- Dr. Sen-itiro Hakomori as Research Fellow in Medicine, through December 31;
- Dr. Benjamin B. Jackson as First Assistant Resident in Surgery, through August 31;
- Dr. George B. Murphy, Jr. as Second Assistant Resident in Surgery, through August 31;
- Dr. Reynout Donner as Assistant Resident in Pathology, through July 31;
- Dr. Hermann K. Schueler as Resident in Urology, through August 31;
- Dr. Shen K. Wang as Assistant Resident in Orthopedic Surgery, for the period July 1 through December 31.

To reappoint:

- Dr. John F. Bertles as Clinical and Research Fellow in Medicine for one year, beginning July 1;
- Dr. William R. Brewster, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning July 1;
- Dr. Rafael M. Casas as Clinical and Research Fellow in Surgery for one year, beginning July 1;
- Dr. Walter H. Caskey as Clinical Assistant in Medicine for one year, beginning May 1;
- Dr. Leo J. Cass as Clinical Assistant in Medicine for one year, beginning May 1;
- Dr. Chung Hyun Cho as Clinical Fellow in Anesthesia for one year, beginning July 5;
- Dr. Herbert S. Cline as Clinical Fellow in Psychiatry for one year, beginning July 1;
- Dr. Beverly W. Cobbs, Jr. as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
- Dr. Alan S. Cohen as Clinical and Research Fellow in Medicine for one year, beginning July 1;
- Dr. William P. Corvese as Clinical and Research Fellow in Surgery for one year, beginning July 1;
- Dr. John L. Decker as Research Fellow in Medicine for one year, beginning July 1;
- Dr. Elias C. Dow as Clinical and Research Fellow in Medicine for one year, beginning July 1;
- Dr. Ellis Dresner as Clinical Assistant in Medicine for one year, beginning July 1;
- Dr. Felix G. Freund as Clinical Fellow in Anesthesia for one year, beginning July 17;
- Dr. Joachim S. Gravenstein as Clinical and Research Fellow in Anesthesia for one year, beginning September 1;
- Elizabeth B. Keller, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;
- Dr. Guy W. Leadbetter, Jr. as Assistant Resident in Urology for one year, beginning July 1;
- Eric H. Lenneberg, Ph.D. as Research Fellow in Psychology, on the Neurology Service, for one year, beginning July 1;
- Dr. Edwin P. Maynard, III, as Clinical and Research Fellow in Medicine for one year, beginning July 1;
- Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery for one year, beginning July 1;
- Dr. Joseph D. Sabella as Clinical Fellow in Pathology for one year, beginning July 1;
- Dr. William Sharpe, Jr. as Clinical Fellow in

Psychiatry for one year, beginning July 1;

Dr. Sabino J. Sinesi as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. John H. Sisson as Clinical Assistant in Medicine for one year, beginning May 1;

Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;

Mary L. Stephenson, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Edward J. Welch as Clinical Assistant in Medicine for one year, beginning May 1.

To appoint:

Dr. Luis V. Amador as Clinical and Research Fellow in Neurosurgery, for a period of three months, beginning July 1;

Bronius Baskys, M.A. as Research Fellow in Dermatology for one year, beginning July 1;

Dr. Willi Burgi as Research Fellow in Medicine, beginning September 1;

Dr. Richard R. Curtin as Clinical Assistant in Surgery, assigned to Gynecology, beginning August 1, with the privilege of caring for the patients of Drs. Meigs, Ingersoll, and Green in Baker Memorial and Phillips House;

Dr. Robert P. L. des Floris as Clinical Fellow in Pathology, for the period October 15, 1957 through August 15, 1958;

Dr. G. Richard Dickersin as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. H. Robert Dudley, Jr. as Research Fellow in Pathology for one year, beginning July 1;

Dr. Joseph W. Ferrebee as Research Fellow in Pathology for one year, beginning June 1;

Dr. Lionel O. Garrote as Clinical and Research Fellow in Neurosurgery, for a period of six months, beginning September 1;

Dr. William A. Johnson as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. William M. Keynes as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. David M. Klein as Clinical and Research Fellow in Neurosurgery, for a period of six months, beginning July 1;

Dr. William E. Lassiter as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. William F. McNeely as Clinical Assistant in Medicine, beginning July 1;

Dr. Johannes C. Melchior as Clinical and Research Fellow in Psychiatry, beginning July 1;

Dr. Wayne C. Mercer as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Federico Mora as Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. William L. Morgan, Jr. as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Sholem Postel as Clinical Assistant in Medicine for one year, beginning July 15;

Dr. William R. Shelton as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. José R. Solis as Graduate Student Assistant in Pathology, for a period of six months, beginning May 13, with the additional title of Clinical Fellow in Pathology if and when he obtains a temporary license;

Dr. Juan F. Sotos as Clinical and Research Fellow on the Children's Medical Service, beginning July 1;

Anne M. Stoffyn, Ph.D. as Research Fellow in Medicine, on a part-time basis, effective as of May 13;

Dr. Theodore van Ravenswaay as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Alejandro H. Villegas as Clinical and Research Fellow in Surgery for one year, beginning September 1;

Dr. Laszlo O. Vincze as Research Fellow in Surgery, assigned to Gynecology, for one year, beginning July 1;

Benjamin E. Volcani, Ph.D. as Research Fellow in Biochemistry, for the period June 28 through July 31;

Dr. Yang Wang as Clinical Fellow in Medicine, assigned to Cardiology, beginning July 1;

Donald L. Weston, M.A. as Research Fellow in Psychology for one year, beginning September 1.

* * *

JAPAN AS I SAW IT

To try to communicate to others what one thinks and feels about such a fascinating country as Japan is a challenge, indeed. Let me begin by describing our arrival in Japan. We landed at Tokyo International Airport at 11 o'clock on a Sunday evening after a long, tedious trip across the Pacific — tired, but not too tired to be excited about finding ourselves in this "mysterious land of the Orient" which we had read about but never actually hoped to see. After the initial processing at the airport we were loaded onto a bus and soon found ourselves winding through the narrow streets of Tokyo on our way to the Air Base where we were to be stationed. By this time the streets were, for the most part, darkened, but occasionally we would pass a brilliantly lighted building where twenty or thirty men could be seen playing some kind of game which involved putting little steel balls into a machine and pulling a lever. I found out later that they were playing "Pachinko", the Japanese equivalent of our pinball game, roughly speaking. Thus our first glimpse of Japan was one which provided a contrast between darkened, peaceful streets and areas of brightly lighted activity. Little did one realize at that time that one would be able to compare so many of the contrasting facets of Japanese culture with the scene one saw from the bus window that night. To give a few examples: the contrast between the quiet dignity of the Japanese man in his home or at his place of business as compared with the laughter and cavorting and singing of the same man as he enjoys an evening out with his friends, drinking sake, singing, and reveling in the entertainment provided by his favorite geisha; the contrast between the relatively peaceful, simple type of life in Japan prior to the opening of its doors to foreign trade, particularly since the occupation by the forces of its conquerors after World War II, and the difficult, complicated type of life-adjustment which must be made by the Japanese people during this postwar era.

The Japanese are a confused race of people at the present time. They can no longer remain aloof from the world. The problems in their attempting to identify with Western powers are many. There is a seething unrest, even in their own government. The Emperor is still held in awe, but there are trends which make one suspect that in the not too many years he will be a mere figurehead. To my way of thinking, it would seem that the previously well-controlled "id" of the Japanese people is becoming not quite so well controlled, as is evidenced by the fact that incidence of major criminal acts in Japan is on the increase. From the point of view of world affairs, this loss of control can perhaps be considered beneficial, since now the Japanese will not have as great a need to engage in periodic wars in order to allow themselves expression of the tremendous hostility which is present in most of them — particularly in the males. Also, in the opinion of the writer, they will be much too busy for many years solving their internal problems to come to the point of thinking about war. When they do emerge from this period of internal struggle, as I feel confident they will because of their great energy and resourcefulness, they will be a power to be reckoned with. When and if they should have to choose whether to be on the side of Communism or on the side of the Western powers, I feel that their choice will not be made from the point of view of principles or affection for either the West or Russia. I would predict that they will make their decision by considering which country they hate the most and which country they owe the most to.

As for psychiatry in Japan, that would be too complicated a subject to go into at this time. It did seem to me, though, that the aim of successful therapy appeared to be to encourage the individual to "get better control of himself" and learn to respect the authority of his parents. In Japan, to be well adjusted seemed to mean the ability to conform. Individuality has not been considered an asset. Now, with the changing values and attempts to identify with the West, this therapeutic aim will have to be modified to allow for more freedom of self-expression and individuality and "ego-growth". Japanese psychiatry has a difficult task ahead of it in helping the Japanese people over the next few years, which probably will be more difficult than any they have yet experienced.

Frederick E. Whiskin, M.D.,
Clinical Assistant in Psychiatry,
McLean Hospital

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
The measurement of pain. Prototype for the quantitative study of subjective responses.
Pharmacol. Rev. 9:59-209.
Beecher, H. K.
On misunderstanding the opportunities of anesthesia. (Editorial)
Anesthesiology 18:498-500.
Gravenstein, J. S., and Beecher, H. K.
The effect of preoperative medication with morphine on postoperative analgesia with morphine.
J. Pharmacol. & Exper. Therap. 119:506-512.

Bacteriology

Blank, I. H., Moreland, M., and Dawes, R. K.
The antibacterial activity of aluminum salts.
Proc. Scient. Sec. Toilet Goods A. 27:24-28.

Dermatology

Blank, I. H.
Action of emollient creams and their additives.
J.A.M.A. 164:412-415.
Rosenthal, A. L., and Lever, W. F.
Involvement of the skin in renal carcinoma.
A.M.A. Arch. Dermat. 76:96-102.

General Surgery

Cope, O., Culver, P. J., Mixter, C. G., Jr., and Nardi G. L.
Pancreatitis, a diagnostic clue to hyperparathyroidism.
Ann. Surg. 145:857-863.
Waddell, W. R., and Bartlett, M. K.
Antral exclusion with vagotomy for duodenal ulcer. I. Acid secretory studies on 50 patients.
Ann. Surg. 146:3-11.
Waddell, W. R., and Scannell, J. G.
Anterior approach to carcinoma of the superior mediastinal and cervical segments of the esophagus.
J. Thoracic Surg. 33:663-669.
Zuidema, G. D., Clarke, N. P., and Smith, G. D.
A versatile anesthesia machine for experimental surgery.
Surgery 41:787-789.

Neurology, Neurosurgery, and Psychiatry

Blane, H. T., and Glud, E.
The psychologist and the psychiatric team in a respirator center.
J. Hillside Hosp. 6:24-33.
Cath, S. H., Glud, E., and Blane, H. T.
The role of the body-image in psychotherapy with the physically handicapped.
Psychoanalyt. Rev. 44:34-40.
Gellert, E.
Systematic observation: A method in child study.
Harvard Ed. Rev. 25:179-195.
Talland, G. A.
Do therapists and patients share norms on the content of group discussion?
Group Psychotherapy 10:10-21.
Talland, G. A.
Rate of speaking as a group norm.
Human Organization 15:8-10.
Waksman, B. H., and Adams, R. D.
Studies of the effect of the generalized Shwartzman reaction on the lesions of experimental allergic encephalomyelitis.
Am. J. Path. 33:131-153.
White, J. C.
Neurosurgical emergencies which the general surgeon must be prepared to treat. (Editorial)
Surgery 41:669-671.

Otolaryngology

Ingalls, T. H., Kelemen, G., and Curley, F. J.
Development of the inner ear after maternal hypoxia.
A.M.A. Arch. Otolaryng. 65:558-566.
Kelemen, G.
Embryonaler Ohrbefund nach operativer Entfernung wegen mütterlicher Nephritis.
Monatschr. f. Ohrenh. 91:136-145.

Physiological Chemistry

Klein, E., Garrett, J. V., and Lever, W. F.
Effects of intravenous administration of fat emulsions and their emulsifying agents. II. Effects of phosphatide preparations on the coagulation of the blood of dogs.
J. Invest. Dermat. 28:321-324.
Klein, E., and Lever, W. F.
Inhibition of lipemia clearing activity by serum of patients with hyperlipemia.
Proc. Soc. Exper. Biol. & Med. 95:565-567.
Lever, W. F., and Baskys, B.
Effects of intravenous administration of fat emulsions and their emulsifying agents. I. Effects on clearing factor activity, electrophoretic pattern and clotting time of blood of dogs.
J. Invest. Dermat. 28:317-320.

Physiology

Zuidema, G. D., Silverman, A. J., Cohen, S. I., and Goodall, McC.
Catechol amine and psychologic correlates of vascular responses.
New England J. Med. 256:976-979.

Surgery—Thoracic

Wilkins, E. W., Jr., and Sweet, R. H.
Medical progress: Carcinoma of the lung.
New England J. Med. 256:346-351.

Books

Meigs, J. V., and Sturgis, S. H.
Progress in gynecology, Vol. III.
New York, N. Y., Grune & Stratton.

* * *

VOLUNTEER DEPARTMENT √

The first meeting of a new standing Committee established by the Trustees, to be known as the Trustee Advisory Committee to the Volunteer Department, took place on May 21. The membership of the Committee, representing various departments and services associated with the Hospital, is as follows:

Trustees
- Dr. Arthur W. Allen, Chairman
- Mrs. Robert Homans
- Mr. John E. Lawrence

Ladies' Visiting Committee
- Mrs. Floyd H. Blackman
- Mrs. Reginald Jenney

Staff Wives Association
- Mrs. Charles B. Burbank
- Mrs. Robert S. Palmer

Board of Managers, Vincent Memorial Hospital
- Miss Dorothy Bartol

Boston Chapter, Red Cross
- Mrs. Amory Goddard

Medical Staff
- Dr. Edward F. Bland

Surgical Staff
- Dr. H. Thomas Ballantine, Jr.

Nursing Service
- Miss Edna S. Lepper

Social Service
- Miss Josephine C. Barbour

Administration
- Dr. Dean A. Clark

Director of Volunteer Department
- Miss Mary Ruth Wolf, Secretary

Dr. Allen, Chairman of the Committee, presided. He welcomed the members of the Committee and asked for discussion regarding the day and time of the next meeting, with the frequency of future meetings to be determined at a later date.

Dr. Allen called on Dr. Clark to explain the function of the Committee. Dr. Clark began by describing the two somewhat similar Trustee-appointed Committees in the Hospital — the Advisory Council to the School of Nursing and the Trustee Advisory Committee to the Social Service Department — as Committees which are most helpful to these services. He then explained that the function of this new Trustee Committee would be to consider all problems of recruitment and assignment of volunteers in the Massachusetts General Hospital and the Vincent Memorial Hospital, and to coordinate and interpret the purpose and program of the Volunteer Department to all concerned.

Dr. Allen then called on each representative to give a resumé of the function of his particular organization or service.

Mrs. Blackman said that the Ladies' Visiting Committee was enthusiastic about this new Advisory Committee and believes her group will be very helpful in assisting the members to meet their responsibilities. She explained that the Ladies' Visiting Committee was originally formed to visit patients who had emotional anxieties and discomforts — especially those who had come from a distance and, therefore, had few or no visitors. This function is still in effect. The second major function is to promote good will; and the third is to serve the Hospital, as a group or individually, in any emergency or special need as the occasion arises. She concluded by saying that the Ladies' Visiting Committee is always interested in examining and studying its service to the Hospital.

Mrs. Burbank explained that the Staff Wives Association was organized six years ago for the purpose of giving service to the Massachusetts General Hospital and extending hospitality to professional visitors and doctors from other countries. Since that time three teas a year have been given for these visitors, and out of these contacts has grown the Reception Center, which has been in operation for a year and a half. This Center is a referral center to help visitors get settled in Boston as rapidly as possible so that they may make the best use of their professional time at the Hospital. The Reception Center is staffed by approximately 50 volunteers. The Association also has a housing committee and a furniture exchange which loans furniture to the doctors and their families. A music committee arranges concerts in the Chapel for patients every other week from October through May. According to the bylaws of the Association, "membership is open to all wives of the Visiting Staff of the Massachusetts General Hospital and any other women in sympathy with our aims". There is a total membership of 533, but not all of these members are active.

Mrs. Goddard gave the following statistical report of the Red Cross Volunteer Services to the Massachusetts General

Hospital from May 1, 1956 to May 1, 1957: Volunteers teach arts and skills to the patients in special wards (such as the polio ward), textile painting, pottery, shellcraft, Swedish weaving, etc. Completed articles belong to the patients. Red Cross volunteers also set up looms for the occupational therapists. A monthly average of 6 volunteers gave 385 hours. Gray Ladies assisted with non-nursing duties in the clinics and as receptionists. A monthly average of 24 volunteers gave 3,046 hours. Members of the Volunteer Nurses' Aide Service work as aides to professional nurses. A monthly average of 17 volunteers gave 2,349 hours. Motor Service volunteers transport patients daily to and from the Hospital. During the year 397 trips were made, involving 159 patients. Production Service volunteers make pajama pants, half-sheets, masks, scultetus bandages, surgeons' gowns and caps, towels, slings, T-binders, and neuro sponges. Six hundred seventy-eight items were presented to the Hospital by the Junior Red Cross. These included tray favors, centerpieces, soft toys, checker and cribbage boards, and jig saw puzzles. Kindergarten boxes were donated for Easter. An exhibit of Junior Red Cross production articles of all kinds was on display in the Brick Corridor of the Hospital during the summer. Two classes in First Aid Service were given for student nurses by the Red Cross.

Miss Barbour told us that at present there are 30 social workers, 15 clerical workers, and 5 aides. The patients are referred to social workers by the doctors. A social worker's duties primarily are to help the patient adjust to severe illness and handicaps, to help him understand and accept changes in future work, and to help him and his family work together toward these ends. The social worker also assists in the placement of patients in nursing homes and helps them to make use of community resources. Sixty percent of this patient load falls into clinic grouping, which means service outside the Hospital. Volunteers are not assisting in this department, as it would be necessary for them to have a knowledge of human dynamics and considerable training to prepare them for service.

Dr. Bland spoke on behalf of the Medical Staff and expressed his interest in hearing the various speakers describe their services to the Hospital. He pointed out the importance of making the Staff more aware of these services. He emphasized the importance of training volunteers so that their services may be more effective, and the equally great importance of making volunteers feel that their services are appreciated.

Miss Lepper, speaking about nursing, said it is the largest department in the Hospital, with a staff of approximately 1,000. It is divided into two distinct sections — the School of Nursing, and the Nursing Service. She mentioned a number of departments which affect the Nursing Service and pointed out that, when these departments are well staffed and well organized, the nurse can devote herself to nursing care. She also spoke about the changing needs from day to day for volunteer service, due to the rapid turnover of patient load and staff. She expressed appreciation for all volunteer services.

Miss Wolf explained the development and the philosophy of hospital volunteer service today, and distributed packets containing printed material on the Volunteer Department for background information. She assured everyone that questions left unanswered at this meeting would be taken up at a future time.

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

With vacations over and the children back in school, the activities of the Staff Wives Association will move into high gear. Planning for the busy year ahead are the following officers for 1957-1958:

President: Mrs. Charles B. Burbank
Vice-President: Mrs. Alfred Kranes
Secretary: Mrs. C. Miller Fisher
Treasurer: Mrs. Francis G. Barnum, Jr.
Chairman of Special Projects: Mrs. Howard Ulfelder

Committee Chairmen

Teas: Mrs. Glenn E. Behringer
Mrs. Walter T. St. Goar
Flowers: Mrs. Frederic Tudor
Music: Mrs. John D. Crawford
Publicity: Mrs. Claude E. Welch
Furniture: Mrs. Paul M. Howard
Mrs. Vincent P. Perlo
Housing: Mrs. Benjamin Castleman
Mrs. Richard G. Whiting
Reception Center: Mrs. Perry J. Culver
Mrs. Byron H. Waksman

Community Chairmen

Arlington, Malden, Melrose, Stoneham, Wakefield, and Winchester: Mrs. Robert L. Berg
Auburndale, the Newtons, and Waban: Mrs. E. Wayne Wilkins, Jr.
Belmont: Mrs. Allan L. Friedlich
Boston: Mrs. Roy E. Mabrey
Braintree, Dedham, Milton, Needham, and Quincy: Mrs. H. Thomas Ballantine, Jr.
Brookline: Mrs. H. Dunster Howe
Cambridge: Mrs. Jerome L. Weinberger
Chestnut Hill: Mrs. Carter R. Rowe
Cochituate, Natick, and Wellesley: Mrs. Jackson M. Thomas
Concord, Lexington, Lincoln, Waltham, Watertown, Wayland, and Weston: Mrs. Robert S. Shaw
North Shore: Mrs. Joseph Stokes, III

DISTAFF CLUB

On July 25 Dr. and Mrs. Dean A. Clark and the Distaff Club entertained at a reception to welcome the new House Staff and their wives. It was a most pleasant beginning for the year's activities, in spite of the sudden shower which forced us to move indoors.

The Club held individual area meetings at members' homes during August. It is felt that this is a good way for the members to meet each other in smaller groups.

We are looking forward to the September meeting with special interest. This will be held on September 26 in the Penthouse. Dr. Clark will be the speaker. He will give an introduction to the Massachusetts General Hospital for the newcomers. His talk will be preceded by a tour of the Hospital conducted by Mrs. Soma Weiss, Consultant for Community Relations at the Massachusetts General. Both old and new members are welcome at this gathering.

Recently elected officers of the Distaff Club are:

President: Mrs. William L. Morgan, Jr.
Vice-President: Mrs. Robert S. Harper
Secretary: Mrs. John W. Grover
Treasurer: Mrs. William E. Karnes

MASSACHUSETTS EYE & EAR INFIRMARY

At a meeting of the Executive Committee, Massachusetts Eye and Ear Infirmary, held on June 10, the following votes were taken:

Dr. John J. Sullivan appointed Assistant in Ophthalmology;
Dr. Robert R. Trotter reappointed Assistant to the Chief of Ophthalmology for one year, beginning July 1;
Dr. Raffaele N. Vallesi appointed Fellow in Otolaryngology for six months;
Dr. Francis J. West, Assistant Surgeon in Ophthalmology, granted a four-month leave of absence because of illness.

At a meeting of the Board of Managers, Massachusetts Eye and Ear Infirmary, held on June 27, the following votes were taken:

Dr. Paul A. Chandler to be placed on the Consulting Staff, beginning July 1, and in addition to be given the title of Associate Director of Resident Training;
Dr. Mahlon T. Easton to be promoted from Associate Surgeon to Surgeon in Ophthalmology;
Dr. Paul G. Haire to be given courtesy staff privileges when he reaches retirement age from the active staff on June 30;
Dr. David H. Scott to be promoted from Assistant to Assistant Surgeon in Ophthalmology;
Dr. Taylor R. Smith to be promoted from Assistant to Assistant Surgeon in Ophthalmology;
Dr. William Stone, Jr. to be promoted from Assistant to Assistant Surgeon in Ophthalmology;
Dr. Garrett L. Sullivan to be promoted from Assistant Surgeon to Associate Surgeon in Ophthalmology.

In classes held at the Eye and Ear Infirmary, patients from hospitals all over New England learn how to speak with a new esophageal voice within a matter of weeks after their laryngectomy. They are taught how to control the intake and release of air so that it will vibrate on the muscles of the esophagus to produce a voice different from the normal voice only in a certain hoarseness of tone, such as is usually associated with laryngitis.

Rehabilitation of the cancer of the throat patient is begun as soon as the necessity for the operation has been established. When the surgeon explains the need to remove the vocal cords, he can assure the patient that this will not leave him speechless. A new voice is within the goal of every patient; no one is ever too old to learn to speak again.

Even before the operation, the patient is introduced to the esophageal voice teacher, Mrs. Paul A. Doehler—herself a laryngectomized patient of some years ago. Mrs. Doehler, a former teacher of remedial reading, stresses the importance of personal contact with the patient and his family before the operation. This interview supplements the conference with the physician and gives the prospective patient an opportunity to hear the new voice and to ask about speech training, his future life, and any other questions where the answers might help him face the future more optimistically.

Meeting with the family and the patient gives them some idea of what they are to expect. The family should be told that after the operation the patient should not be allowed to whisper. Instruction will begin as soon as the Levin tube has been removed. The family should also be reminded that they must always wait for the patient to finish speaking and not attempt to speak for him. The education of the family is in many respects as important as the teaching of the new voice to the patient.

By beginning instruction while the patient is still hospitalized, Mrs. Doehler is able to check any bad habits which might develop. She begins the lessons — individual instruction every day at first — in less than a week after the operation, if possible. Emphasis is on the development of speech and postoperative rehabilitation rather than on the actual operation that the patient has undergone. If the patient shows nervous tension, Mrs. Doehler can reassure him by reminding him that she, too, had the same operation and faced the same experience and so recognizes the strain he is undergoing.

After the patient understands the basic principle of taking in air and exhaling it, he begins with the easier sounds — vowels combined with consonants, such as ba-be-bi-bo, la-le-li-lo. As breath control is acquired, the drill is doubled to baba, bebe, bibi, bobo, etc. With sufficient practice there is no limit to the number of syllables or the length of a sentence a patient can say. With adequate training there will be no hesitation between words, nor will the intake of breath be always perceptible to the listener. Simple conversation is begun as soon as possible, so that the student will feel he is making real progress toward useful speech.

Although the value of using phonetics in speech and voice training has long been recognized, the esophageal voice program set up by Mrs. Doehler was the first where the basic training was devoted entirely to phonetics. From her knowledge of phonetics Mrs. Doehler shows how the lips and tongue are used to give tone and clearness of enunciation. Basic phonetic training is extremely valuable to a patient with a language handicap, and Mrs. Doehler points out that many of her patients now speak more clearly with their new knowledge of phonetics than they did with their regular voices.

At first, ginger ale is used to help with the exhaling of air from the stomach, but soon the student can dispense with this aid. When he has become sufficiently expert to no longer need a lesson each day, he may join the group classes that meet on Saturdays. These students should, however, be at the same stage in rehabilitation, since an excellent speaker or a beginner tends to distract the mental balance of the group and thus hinder its progress. Class instruction calls for more discipline and skill on the part of the teacher.

Mrs. Doehler feels it is necessary to uphold high standards at all times. She points out to the beginner that this is to be his own voice, through developing unused physical equipment and completely without the aid of artificial assistance. The patient must use his new speaking apparatus as easily as he did his original voice. Thus, he is trained to be ready to speak at all times and under any situation. His response should be clear-cut and spontaneous, and without delay. Every laryngectomized patient should be able to call "Fire" in a loud voice.

To instruct her pupils in the use of the telephone, Mrs. Doehler prepares them in advance by arranging a time when she will call them, and suggesting that when the telephone rings they are to answer "Yes." They are not to try to shout nor hold the receiver too close to their mouths. Later, Mrs. Doehler calls them frequently at unexpected times. Progress is noted, and steps are taken toward improvement wherever necessary.

It is very natural for every person to like to hear his own voice, and the laryngectomized pupil is no exception. There is a certain curiosity as to just how he sounds and whether or not he can be understood. Early in the program the pupil makes a recording of his voice, and, as he progresses, he makes additions to this record so that he can measure his achievements and improve weak spots.

Mrs. Doehler feels it is important that the pupil gain control and develop correct habits of articulation before concerning himself with volume. Once he has acquired adequate control and articulation, he is given counting exercises and a "ladder exercise" where each ascending sound is made in a louder tone. Since it is easier to control the voice in softer or descending tones, emphasis is placed on the ascending exercise.

Since reading aloud aids normal tone Mrs. Doehler trains her patients to do some reading. Selections from an editorial page of a newspaper offer a challenge to the pupil who is really interested in perfecting his voice. He must decide in advance just how much he thinks he can read in one breath, and he must remember to swallow before he begins. There should be only one beginning, not several starts and stops which will immediately destroy or disturb the continuity.

To further improve length and rhythm, Mrs. Doehler makes use of the Psalms. When necessary in the beginning stages she divides the lines into shorter phrases, then gradually doubles the phrases until the line can finally be read in its entirety.

The most significant advantage of teaching esophageal speech by basic exercise is that it gives the patient a pattern to fall back upon when he is confronted with a new and difficult word. At a time when he is facing so many new adjustments, he is saved the embarrassment of groping for words he has not yet mastered. Once he has gained control of his voice through phonetic drill, he will approach a word like "manipulate" with confidence, knowing that it falls into the same pattern as "babababa".

Conscientious drill and practice of the basic exercises will produce a voice which is more nearly normal than that developed by any other method of speech training. In the final analysis, the skill and success of the teacher is measured by the voice of the pupil.

Last December Mrs. Doehler started a new series of speech classes in Manchester, New Hampshire, for laryngectomy patients in that area. In addition to her daily classes at the Infirmary, she has also for the past seven years been conducting weekly courses in Providence, Rhode Island. Financial sponsorship in each case comes from the local Division of the American Cancer Society, and the classes are free to the student-patients.

To aid in establishing a high standard of esophageal voice teaching, Mrs. Doehler gave a teacher training course at the Infirmary in June 1955. The twenty persons from all over the country who attended the course not only received instruction in Mrs. Doehler's method of teaching esophageal speech, but also heard lectures on the pathologic effects of laryngectomy, basic speech formation and development, social service aspects and rehabilitation of patients, and, at the final sessions, received individual assistance in actual teaching.

The training course was sponsored by the American Cancer Society, Massachusetts Division. Recognizing the value of the course, the National Office of the Cancer Society recommended to its sixty divisions across the country that they give scholarships to qualified persons, and eight of the participants came on such scholarships.

A few years ago Mrs. Doehler wrote down her methods of instruction in esophageal speech, and they were published in a copyright manual under the auspices of the Cancer Society. This was the first time that a textbook had been published to be used by both teachers and student-patients.

The long-playing record that Mrs. Doehler made last year of her unique method of teaching esophageal speech is also the first of its type that has been available. Upon hearing Mrs. Doehler's voice, the patient acquires a feeling of self-confidence and a better understanding of the primary principles of esophageal speech. The esophageal speech record serves as a guide and inspiration for the patient to overcome his handicap.

A short 16-millimeter color-sound moving picture, "We speak again", was also made through the Cancer Society, with Mrs. Doehler and one of her pupils as its co-stars. The picture is constantly being lent to hospitals, health organizations, clubs, etc. all over the country, and always wins wide applause because of the tremendous human interest in this story of how a teacher, without the usual voice, teaches voiceless pupils to speak again.

Since Mrs. Doehler first began her esophageal voice teaching, she has addressed hundreds of groups on her method of rehabilitation for laryngectomy patients. Her "students" are continually featured in newspaper and magazine "success stories". So that more cancer of the throat patients may know about the rehabilitation classes, Mrs. Doehler has had many interviews on the radio and on television. At the opening of the Cancer Drive several years ago, she appeared on television with one of her pupils, a Boston lawyer, who had been operated upon in January of that year and at the time of his appearance, the last of March, had already been in court twice — and had won both of his cases.

Mrs. Doehler is President of the Cured Cancer Club — an organization originating from the group interest of her pupils, but now numbering among its 230 members patients who have recovered from other forms of cancer besides cancer of the throat. Last year the Club presented the Infirmary with $10,000 for its Free Bed Fund, which helps pay for medical treatment of needy cancer of the throat patients. It is now working toward another $10,000. The fund has been raised entirely by the combined efforts of the Club members, under Mrs. Doehler's leadership. Food sales, card parties, a concert, rather than solicitation for large gifts, have built the fund, dollar by dollar, since it was started in 1948. Recently, 100 Cured Cancer Club members gathered at the Statler Hotel to celebrate the Club's 10th anniversary of its founding.

Mrs. Doehler has been asked to give a course in "Organic disorders of speech" at Emerson College this year. In recognition of her professional achievement, Emerson's faculty and trustees voted to confer an honorary degree upon Mrs. Doehler, and at the commencement exercises of the College on June 9, she received the degree of Master of Arts.

Joan Temkin,
Public Relations Assistant
Massachusetts Eye & Ear Infirmary

New addresses:—

Dr. George Acs (res. fel. *Biochem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.
Dr. Dirk Baier (clin. fel. *An.* 1957), (136) Munich, Koniginstr 27, Germany
Dr. Richard M. Barry (a.r.p. 1957), 34 Martling Ave., Pleasantville, N. Y.
Dr. Robert D. Breer (a.r.p. *C.M.* 1957), 243 Division St., Amsterdam, N. Y.
Dr. Howard S. Cameron (sr. r.s. *Or.* 1957), 186 Worthy Rd., London, Ontario, Canada
Dr. Richard R. Curtin (*S.* 1953), 226 Marlborough St., Boston, Mass.
Furio D'Abramo, Ph.D. (res. fel. *Biochem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.
Dr. Benjamin F. Gill (a. *Psychiat.*), 270 Commonwealth Ave., Boston, Mass.
Dr. William W. L. Glenn (a.r.s. 1946), Yale University School of Medicine, 333 Cedar St., New Haven 11, Conn.
John D. Gregory, Ph.D. (assoc. biochem. *Res. Chem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.
Dr. Howard P. Haswell (a.r.p. *An.* 1949), 2217 Webster St., San Francisco, Calif.
Dr. John Homans, Jr. (*W.M.* 1942), 1776 Beacon St., Brookline 46, Mass.
Dr. Arnold M. Katz (*M.* 1957), National Institutes of Health, Bethesda, Md.
Dr. Kazuo K. Kimura (*C.M.* 1955), C. W. Laboratories, Bldg. 355, Army Chemical Center, Md.
Dr. Frederick S. McAlpine (c.r.p. *An.* 1957), U.S. Naval Hospital, Bethesda 14. Md.
Dr. Robert W. Mackie, MC, USNR (sr. r.s. *N.S.* 1954), U.S. Naval Hospital, Navy 3923, c/o Fleet Post Office, San Francisco, Calif.
Dr. Richard F. Mayer (a.r.p. *N.* 1957), National Hospital, Queen Square, London, England
Dr. Carol Meyers (clin. fel. *Or.* 1957), Reedsport, Oreg.
Dr. Milton L. Miller (*E.M.* 1932), 416 N. Bedford Drive, Beverly Hills, Calif.
Dr. Robert K. Osborne (*M.* 1957), Mallory Institute of Pathology, Boston City Hospital, Boston, Mass.
Harry D. Peck, Jr., Ph.D. (res. fel. *Biochem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.
Dr. Ernest H. Picard (a.r.p. *N.* 1957), 251 Cherry St., Fall River, Mass.
Dr. Leonard H. Plotkin (*C.M.* 1955), 38 Chestnut St., Springfield 3, Mass.
Dr. Murray Rabinowitz (a.r.p. 1955), Rockefeller Institute for Medical Research. 66th St. & York Ave., New York 21, N. Y.
Dr. Mitchell T. Rabkin (*M.* 1956), Apt. 5, 4926 Battery Lane, Bethesda 14. Md.
Phillips W. Robbins, Ph.D. (res. fel. *Biochem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21. N. Y.
Dr. Horatio Rogers (*E.S.* 1925), 580 Osgood St., North Andover, Mass.
Dr. William P. Rogers, Jr. (a. *S.*), Taylor Medical Bldg., 101 River Rd., Weston, Mass.
Dr. John C. Rowe (*M.* 1952), Suite 922, 490 Post St., San Francisco, Calif.
Dr. Robb H. Rutledge (*S.* 1950), 3318 Avondale Ave., Fort Worth, Tex.
Dr. Paul M. St. Aubin (*M.* 1948), c/o Atomic Bomb Casualty Commission, APO 354, San Francisco, Calif.
Dr. David B. Shurtleff (*C.M.* 1955), Children's Orthopedic Hospital, 1200 Sand Point Way, Seattle, Wash.
Dr. George G. Smith (*W.S.* 1909), 136 Myrtle St., Boston, Mass.
Dr. John B. Stetson (a.r.p. *An.* 1953), Hopital Albert Schweitzer, P.O. Box 4, St. Marc, Haiti
Dr. Albert J. Stunkard (*M.* 1946), Hospital of the University of Pennsylvania, Philadelphia 4, Pa.
Dr. Charles P. Summerall, III (*M.* 1956), 46 Centre Ave., Belmont, Mass.
Dr. Paul M. Veazey (*C.M.* 1956), Babies' and Children's Hospital, University Hospitals, Cleveland, Ohio
Dr. Jerome K. Walker (*Dn.* 1954), 29 Commonwealth Ave., Boston 16, Mass.
Dr. David Weisberger (c. *Dn.* and oral s.), 180 Longwood Ave., Boston, Mass.
Samuel B. Weiss, Ph.D. (res. fel. *Biochem.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.
Dr. Clark Young (*E.S.* 1923), 1848 Wilson Ave., Salt Lake City, Utah

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Brief bits:—

Dr. Edward B. Benedict attended several meetings during May. On May 4-7 he was present at the meetings of the American Association for Thoracic Surgery, held in Chicago; on May 15 he went to the Editorial Board meeting of *Gastroenterology,* in Denver; on May 16 he attended the meeting of the American Gastroscopic Society in Colorado Springs and took part in a panel discussion on "The evaluation of clinical methods for examination of the esophagus"; and on May 17 and 18 he attended the meetings of the American Gastroenterological Association in Colorado Springs.

Dr. Frederic M. Blodgett has become Assistant Professor of Pediatrics at Yale Medical School. His address is Grace-New Haven Hospital, New Haven, Conn.

Dr. Benjamin Castleman and Dr. Allan L. Friedlich were two of the principal speakers at the meeting of the New Mexico Heart Association, held in Santa Fe on May 18. The morning session was devoted to a symposium on coronary heart disease. In the afternoon, Dr. Castleman spoke on "Atheromatous emboli to the kidney following aortic surgery", and Dr. Friedlich was a member of the panel discussing "Open heart surgery".

Dr. Oliver Cope will participate in a panel discussion on "Hyperthyroidism" at the One Hundred Seventh Annual Session of the Medical Society of the State of Pennsylvania, held in Pittsburgh on September 17.

David M. Geller, Ph.D. (gr. stud. a. *Biochem. Res.* 1957) has gone to the University of Oxford in England to study biochemistry with Dr. H. A. Krebs.

Dr. Oscar Hirsch delivered a paper at the 78th Annual Meeting of the American Laryngological Association, held in Washington, D. C., last May. This was done at the invitation of the Association's president, Dr. LeRoy A. Schall. The title of the paper was "The role of rhinology in pituitary surgery". Dr. Hirsch and Dr. Hannibal Hamlin presented a paper at the 9th Annual Meeting of the American Academy of Neurology, held in Boston last April. The subject of their paper was "Pathogenesis of hypophyseal duct tumors".

Dr. Manucher Javid (r.s. *N.S.* 1952) was recently promoted to Associate Professor at the University Hospitals in Madison, Wis. He also was the recipient of "The Annual Regular Fellow Award" of 1957—a tribute conferred yearly by the medical students of the hospital.

Mary Ellen Jones, Ph.D. (assoc. biochem. *Res. Chem.* 1957) assumed the position of Assistant Professor of Biochemistry in the newly formed Department of Biochemistry at Brandeis University on September 1.

Dr. Jacob S. Mager (res. fel. *Biochem.* 1957) will join Dr. Boris Magasanik in the Department of Bacteriology at Harvard Medical School for a few months before returning to Israel, where he is Lecturer in Biochemistry at the Hebrew University-Hadassah Medical School.

Dr. Yoshitsugu Nose (res. fel. *Biochem.* 1957) has resumed his position as Assistant Professor of Biochemistry at Kyoto Prefectural University Medical School in Kyoto. Japan.

Dr. Carter R. Rowe was lecturer at the Law-Science Congress, held in Chicago last July. His subjects were "Medico-legal aspects of the low back", "Whip-lash injuries of the cervical spine", and "Orthopedic injuries in the aged".

Dr. Richard H. Sweet has fulfilled the following speaking engagements since his last report to us: At the Section on Surgery, New York Academy of Medicine meeting, held in New York City last February, his subject was "Surgery of the esophagus"; at the meeting of the Society of Head and Neck Surgeons, held in Boston in April, he spoke on "Carcinoma of the cervical esophagus"; and at the meeting of the Detroit Surgical Association on May 10, he gave a talk on "Some problems in the field of esophageal surgery".

Benjamin E. Volcani, Ph.D., who was here as a Research Fellow in Biochemistry for the month of July, has resumed his work in the Department of Biochemistry at the University of California in Berkeley.

We received the following note from a member of our staff: "I am enclosing some notes which I believe should go into THE NEWS. Dr. David Weisberger's activities have been many, and have gone largely unrecognized

No. 68 in a series of Staff photographs
Dr. Howard B. Sprague, member of the Board of Consultation

by his colleagues here at the Hospital. An article by Dr. Weisberger on 'Precancerous lesions' appeared in the *Journal of the American Dental Association* last April, as part of a symposium on oral malignancies. On May 3 he delivered a lecture at the Veterans Administration Hospital in Brooklyn, N. Y. He was the principal speaker at the Annual Meeting of the Northwest Academy of Dental Medicine, held in Sun Valley, Idaho, May 11-16, and later addressed the Idaho State Dental Society. On May 30 he was the recipient of Honorary Membership in the American Academy of Dental Medicine. And on June 14-15 he attended meetings of the Council on Dental Therapeutics, held in Chicago by the American Dental Association."

Dr. Claude E. Welch was guest speaker at the Dallas Southern Clinical Society Meeting on March 16, at the Southeastern Surgical Congress in St. Petersburg, Florida, on April 1, at the Sectional Meeting of the American College of Surgeons in St. Paul, Minnesota, on April 8, and at the Annual Meeting of the British Columbia Surgical Society in Vancouver on May 3.

* * *

We were delighted to receive this letter from Dr. Horace B. Frost (*E.S.* 1897), our "singleton" in Lavonia, Georgia:

> It is good to be classed as a big toad in a little puddle, but the real distinction is to be an MGH-er.
>
> You have the record of my 65th Harvard Commencement and the 61st from the Medical School. That leaves but little to report save the keen pleasure of recent reunions.
>
> Since January 1955 I have been in Lavonia, located in northeast Georgia. There is not much of special interest and no conflict of ideas in this little town. I am no longer professional—just plain "Doc" to the natives and Uncle Horace to my two nieces and two nephews.
>
> I hope that the above report finds "you all" well and happy.

This letter from the daughter of a past patient, addressed to the two physicians who were in charge of the case, speaks for itself. As one of the recipients commented: "I consider this a great compliment — exactly the sort of feeling we would like to achieve with *every* patient." The letter reads:

> So often since my mother passed away a year ago last May I've planned to sit down and write you a letter, but somehow time just never seemed right for it. So I'm very tardy in writing to thank you for the wonderful care and attention you gave her when she went into the clinic for treatment.
>
> I wonder if you realize how much your courtesies and advice meant to her during the past ten years or so. The fact that you took time to speak to her in the waiting room, tie her sneaker, or help her to the wheel chair—those things that took your time and probably seemed unimportant to you meant a great deal to her. You listened to her complaints and were thoughtful and not hurried; you did extra things you really didn't have to do—your medical advice was enough to give in itself—and I'm grateful to you beyond words. I guess you know how one feels about one's mother. Somehow you feel that people should be extra nice to her because she is your mother, and rudeness or thoughtlessness always seem worse when she is concerned.
>
> Words are really feeble messengers when you try to convey feelings, but if you and all the other doctors in your clinics could only be made fully aware of the great service they render by giving their attention and—yes, it sounds foolish, but—giving a measure of love in their association with clinic patients, I believe they would feel more rewarded than they must feel when they sit down and think that their time is going to patients who pay them nothing.
>
> You know, it must be easy for a doctor to be nice to an attractive young patient with something specially wrong that interests him. My mother was old and I suppose had the usual old age illnesses, yet you doctors gave her the kind of attention that brings the old-fashioned word "gentleman" to mind. There is something in the Bible about the heathen being nice to those they love, but the believer has the whole world for his neighbor.
>
> Again I say thank you. God will bless you for your unselfishness. If this letter can be passed along to those other doctors in the other clinics who were her friends also, I'd appreciate it. Perhaps something was found from my mother's autopsy examination that will help you with other patients. I certainly trust so. I echo mother's many-times-spoken gratitude when I write this letter to you.

This letter, dated August 15, 1957, has been sent to all members of the Visiting Staff, House Staff, and Department Heads:

VACCINATION AGAINST ASIAN INFLUENZA

> Following the advice of the Surgeon-General of the Public Health Service, the General Executive Committee has urged that all members of the Staff, House Staff, and all personnel be vaccinated against the Asian influenza as soon as vaccine is available. While the disease is mild, of short duration, and has few complications, vaccination is advised in order to prevent large simultaneous numbers of cases among hospital personnel with consequent interference with the vital functions of the Hospital.
>
> A Policy Committee on Vaccination has been formed, and Dr. Gerald S. Foster, 1106 Warren Building, has been appointed Hospital Coordinator for Vaccination.
>
> Department Heads, Chiefs of Service, Chief Residents, and Supervisors in various services and departments will be notified when and where their people may be vaccinated. Since the vaccine will be coming in only gradually, the vaccination program will necessarily extend over several weeks.
>
> Members of the Staff who have received an offer of anti-Asian influenza vaccine for themselves and their "nurses" are urged by the Policy Committee on Vaccination to accept the offer immediately, send for the vaccine and use it on themselves and any other person they wish. To the extent possible, it is requested that the second dose be used on some other person on the Hospital's staff or other personnel. A note should be made of the date, the names of the people vaccinated, and this should be sent to Dr. Foster.
>
> Any unused doses of vaccine will be gratefully accepted by the Pharmacy.
>
> **Dean A. Clark, M.D.,**
> *General Director*

THE NEWS

No. 170 Boston, Mass. October 1957

THE INTERNATIONAL ROLE OF THE M. G. H.

The world-wide influence of the Massachusetts General Hospital today is to its membership both a satisfaction and a constant challenge. Its tradition, its evolution, and its leadership have shown a steady growth ever since the Hospital opened its doors more than a century ago. Although signal events such as the introduction of surgical anesthesia have periodically brought the Hospital into the limelight, it has been only since the close of the Second World War that we ourselves of the staff have become cognizant of its real position in the world. To those of us who have had the opportunity to travel widely this position has become increasingly evident; but because it is not so well appreciated by everyone, whether working at the Hospital or not and whether or not New Englanders, it has seemed worth while to present a brief review of the history and current status of the international role of the M. G. H.

From the very beginning in the first quarter of the nineteenth century the founders of the Hospital and its staff members were familiar with the foreign medical literature and themselves made medical pilgrimages abroad. In the Hospital's earlier years and in fact right down to the turn of the century Paris, Vienna, and London were the meccas. MGH doctors walked the wards with the famous Louis in Paris. In fact, Oliver Wendell Holmes in his "Ballad of the stethoscope" poked fun at the smart young doctors coming back to Boston from Paris armed with the new stethoscopes of the first half of the nineteenth century. When Vienna became a popular medical center to visit later in that century it became the custom for many of the MGH graduates to live there in quarters which were passed on from one group to another. Edinburgh and Dublin were important places also for young doctors from this side of the water. In the 1880's my own father, after his medical school studies at the Massachusetts General Hospital, spent two years in Paris, Vienna, Edinburgh, and London. In London he walked the wards with Lister after convalescing from smallpox which he had acquired in the Pesthouse in Paris.* In Dublin in midcentury the Meath Hospital where Stokes was medical chief and the Rotunda of obstetric fame were world renowned; last June I had the pleasure of visiting these historic places which I hope may again be restored someday to their useful international role of years ago.

For a hundred years the Hospital grew quietly and steadily — a local landmark and increasingly a national one too. It was, for example, quite in order for the Massachusetts General Hospital to be asked, along with a small group of similar hospitals in the U. S. A., to furnish one of the first lot of Base Hospital Units for the American Expeditionary Force in the First World War, but it had not yet attained its present status as an international medical center. This came, however, very soon after. Two events, which were the result of pioneering by Richard C. Cabot and Ida M. Cannon in the early years of the twentieth century, did increase the national influence of the Massachusetts General Hospital even before the First World War and both have had since then an international importance. Those events were the introduction of hospital social service and the beginning of the publication of the Clinico-Pathologic Conferences.

During the first fourteen years of the twentieth century MGH graduates were still going abroad for postgraduate studies. Germany had become a popular center for such studies and again filled this role later (in the 1920's and 1930's) until Hitler took over. The older universities and clinics in Vienna, Paris, and London also still attracted a good many. Professors elsewhere too, in Switzerland, in the Low Countries, and in Scandinavia, taught our young doctors. In 1913 Dr. James Howard Means and I went to Europe after graduation from the Medical Services to prepare for our specialties — he under Krogh in Copenhagen and I under Lewis in London.

The First World War dealt a serious blow to the Old World in Europe and this fact plus the steady growth of our medical schools, hospitals, and research institutes resulted in a great change in the relative potentialities of medical science in the U. S. A. and Europe. This change went on steadily, hardly noticeable to us at first but more and more manifest with the rise of the fascist dictators. There were, to be sure, occasional visitors from abroad to walk our wards with us, to observe our researches, and even to work with us in our laboratories, but they were not numerous.

Then came the Second World War which abruptly changed the picture. The first effect was to retard advances in medical science the world over except for a few spectacular achievements like the introduction of the antibiotics and specialized traumatic surgery. We, however, suffered far less than those living in the Old World. There began during that period of some six years (from 1939 to 1945) the first of the stream of medical visitors, young and old, to the Massachusetts General Hospital as well as to many other hospitals in the country. This vanguard came from Latin America, which had in former years gone largely to Paris for postgraduate training. This new situation and the greater ease of travel to the U. S. A. established a habit that has persisted in our relations with all parts of Latin America, namely, Mexico, Central America, the West Indies, and South America. Several of us on the staff have developed close friendships with physicians from Latin America who have worked with us in clinics and laboratories. I myself had the good fortune to visit medically in Mexico City in 1938 and later to see in their home towns a considerable number of Latin-American friends during a medical tour of South America in 1952 and other visits to Mexico and the West Indies.

When World War II ended four things happened to our international medical relations. In the first place, doctors came to visit us from the Old World, some of them still in uniform during that first year of 1945 to 1946, and they told us what has since come true — that despite our first surprise to find that we were now a medical mecca, we must prepare ourselves at once for a great increase of graduate students, young and old, from the Old World. This prophecy became quickly true and almost overnight we found that our role over here had changed from students going east to teachers of those who came west. This, of course, has not meant that we ourselves should not continue to go abroad to study and work with stimulating masters of medical science anywhere — Latin America, Europe, Asia, Australasia, and Africa, but for most young American graduates the opportunities are greater here.

These doctors from overseas have formed a very appreciable proportion of the members of our graduate courses and of our research staffs. And the entire membership of the M.G.H. — doctors, nurses, social service workers, technicians, and employees — have cooperated magnificently to welcome and to help these foreign visitors of ours.

The second thing that happened to us during and after the Second World War was an abrupt increase in the number of patients who came to the Massachusetts General Hospital from foreign lands, mostly to the Baker Memorial or Phillips House but now and again even to the open wards. This was true of all departments of the Hospital — medical, surgi-

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*Boston Med. & Surg. Jour. *130*: 91, 1894.

cal, and special services. At first, before the war ended, they came largely from Latin America but soon they came also from Europe, Asia, Australasia, and Africa. There were, of course, two reasons for this: one was the growing world-wide fame of the institution and the other was the natural tendency for graduate students from overseas to send to us on their return home some of their more difficult cases. Among these patients there have been quite naturally men and women of national or indeed international renown in the arts and sciences, in business, and in the professions, as well as children of prominent families. Enduring friendships have resulted, linking the M.G.H. more closely still with leading citizens of many lands. This development is, of course, not unique with this Hospital, for it has been a part of the growth of a good many other institutions of the sort throughout the U. S. A., and I might add in Canada and Mexico too; but the Massachusetts General Hospital has always been one of the leaders in the acceptance of this privilege and responsibility.

The third opportunity following the Second World War that befell the M.G.H. in accentuating its international role in medicine came when members of the staff began to be invited to take part abroad in medical missions of all types and representing different specialties. These have included missions for relief, for teaching, for exchange of information, to improve diplomatic relations as in the case of Point 4, and to carry on researches often as members of international teams. Pioneering in these special missions was that of the Unitarian Service Committee Unit to Czechoslovakia in 1946. This consisted of fourteen professors in different medical fields, including Dr. Joseph Aub and me from the Massachusetts General Hospital. Later Unitarian missions included others of us, like Dr. Chester Jones. Point 4 sent me to Pakistan and India in 1952 and a somewhat similar plan to the Near East in May of 1957; an invitation from the U.S.S.R. Ministry of Health took five of us to Moscow in September of 1956 for a ten-day conference with the Russian physicians (the others in our group were Howard Rusk of New York City, Herman Hilleboe of Albany, New York State Commissioner of Health, Ancel Keys of the University of Minnesota, and James Watt, Director of the National Heart Institute of the U. S. Public Health Service).

One of the most satisfying of all my international experiences, and I am sure this can apply to others on the staff now or in the future, has been my membership in international teams carrying out medical research. For example, in 1954 I was privileged to join in a study in Naples in cardiovascular epidemiology with a few other Americans and with doctors from Sweden, Yugoslavia, and Italy; and in 1956 I was a member of a team comparing the southern Japanese living in Southern Japan with southern Japanese living in Hawaii. Such team work not only increases our medical knowledge but helps to spread it more rapidly and widely, and teaches us to speak the same language medically as well as linguistically. It also aids greatly in furthering international medical friendship.

A fourth large role internationally played by the M.G.H. has consisted of the travels abroad by many members of the staff to lecture, to advise, and to attend international and national congresses and other meetings of the medical sciences, both basic and clinical. A few of these are recorded in this NEWS sheet from time to time, but many of these contributions of our staff members are not even known to their colleagues. It would be of interest if there were a special column allocated to such international reporting which could, of course, be very brief. This would still further emphasize the current usefulness of the international role of the Hospital.

Let me cite some of these individual missions by the M.G.H. during the last decade. I would apologize herewith to senior members of our many staffs whose names may have inadvertantly been omitted.

In 1955 Dr. Nathaniel Faxon, our *Director Emeritus,* was called to Turkey to advise importantly about hospital construction and management. Dr. Dean Clark, our present General Director, went in 1954 to Alaska as member of a survey team to study health conditions, under the chairmanship of Dr. Thomas Parran; in January 1957 he was sent to Budapest by the Rockefeller Foundation, along with Dean Rusk and Dr. John Maier, to study the medical situation at the University of Budapest.

Dr. Howard Means went to Japan in 1955 to aid in the rehabilitation of St. Luke's Hospital in Tokyo. Dr. Joseph Aub has not only been a member of medical missions to Czechoslovakia and India, but he has lectured abroad in other countries. Dr. Walter Bauer served as consultant in Sweden during World War II and also served as guest professor in medicine in England recently. Dr. Chester Jones, in addition to his service as a member of Unitarian Service Committee missions in Europe in 1947 and 1948, participated in the International Congress of Internal Medicine in London in 1954, and in 1956 took part in the 10th anniversary celebration of the Hospital for Nutritional Disease of the University of Mexico. Dr. Fuller Albright in 1950 attended the Physiological Conference in Copenhagen, Denmark; in 1954 he was a guest of honor and gave the final paper at the American Endocrinological Society in Chile; he also was made Honorary Professor by the San Marcos University in Lima, Peru. Dr. Howard Sprague has addressed several world and continental congresses of cardiology in Europe and Latin America since the first one in Mexico ten years ago. Dr. Edward F. Bland was Overseas Consultant for the Surgeon General of the U. S. Army in the European Theatre in June 1949 and again in February 1952; he was co-author of a paper presented at the First International Cardiac Congress in Paris in September 1950; he presented a paper at the First International Conference on Thrombosis and Embolism in Basel, Switzerland, in July of 1954, and in September of that year he presented papers at the Second International Cardiac Congress in Washington, D.C.; in May of 1956 he was an invited guest and a participant in the First International Symposium on Rheumatic Fever at the National Institute of Cardiology in Mexico City. Dr. Bland has sent me the following note: "In the over-all cardiac training program at the Massachusetts General Hospital since 1946 there have been 162 trainees, research fellows, and graduate students, of whom 76 have been from the United States and 86 from abroad. Latin America is represented by 18, Canada 12, India and Pakistan 8, Middle East and Turkey 8, Great Britain and Ireland 8, Thailand 5, Philippines 4, China 4, Formosa 2, Austria 3, Italy 3, France 2, and one each from Belgium, Switzerland, Portugal, Germany, Czechoslovakia, Greece, Iceland, New Zealand, and South Africa. This represents an impressive group and includes 5 professors of medicine from 5 different countries, 7 associate and 7 assistant professors, and a director of health (Syria). The strong bond of friendship fostered by this common interest and association has been, we hope, a source of ties which may serve to further international good will and understanding." Dr. John Stanbury gave talks in 1954 in Santiago before the Third International Endocrinological Society and also talks in Montevideo at meetings of the local Endocrine Societies; he spent most of 1955 in Europe speaking in a number of places, particularly Leiden, Brussels, Glasgow, and Helsinki, and this year in June he spoke in Leiden and Edinburgh.

Dr. Arthur Allen, in 1947 and 1950, addressed the Royal College of Surgeons of England, of which he was made an Honorary Fellow ten years ago. Dr. E. D. Churchill has on many occasions gone abroad to lecture and advise. Dr. Oliver Cope, in 1948, was representative to the International Research Council in Germany, investigating the needs of medical scientific laboratories there, and also that year he acted abroad as civilian consultant in surgery for the Surgeon General and was visiting Professor of Surgery at the Swiss universities; in 1950 he attended the Endocrine Conference at Toulouse, France, and received the degree of Doctor *honoris causa* at the University of Toulouse. Dr. Richard Sweet gave several lectures in 1954 in England. Dr. Joe Meigs also has traveled widely to give addresses in various countries in Europe and Latin America. Dr. Grantley Taylor has given lectures before the Puerto Rico Medical Society, the Academy of Surgery in Paris, the Morocco Medical Society in Casablanca, and the International Society of Surgery in Copenhagen. Dr. Robert Linton in 1953 was guest speaker before the Spanish Gastroenterological Society in Madrid, Spain;

in 1956 he addressed the Pan-American Congress of Gastroenterology in Havana, Cuba.

Dr. Raymond Adams gave a series of lectures at the National University Medical School in Bogotá, Colombia, in 1953; in 1954 he visited various neurological centers in Europe; and recently, in 1957, he has been giving a series of lectures in Rio de Janeiro. Dr. Robert Schwab has made six trips abroad during the last decade, beginning with a meeting in London in 1947 of the Federation of International Electroencephalographic Societies and continuing in later years with visits to France, Jamaica, Mexico City, Uruguay, and most recently (1957) to Germany and Belgium. Dr. James White in 1950 gave the Rutherford-Morison Lecture at the University of Durham, England, the MacArthur Lecture at the University of Edinburgh, Scotland, and also lectures at the meeting of the British Neurological Surgeons and the Société de Chirurgie in Lyon, France; in 1953 he lectured at the International Neurological Society in Lisbon. Dr. William Sweet has visited England on several occasions; he went to Geneva as official delegate to the Atoms for Peace Conference in 1955 and lectured at seven German universities in that same field; he received the degree of Doctor of Science from Oxford University in June of this year, and was a member of the First International Congress of Neurological Sciences and Neurological Surgeons in Brussels last July. Dr. L. L. Robbins presented a paper at the 7th International Congress of Radiology in 1953 in Copenhagen. Dr. Joseph Hanelin presented an exhibit at the 4th International Neuroradiology Symposium in London in 1955. Dr. Stanley Wyman made a medical visit to the Scandinavian countries in 1954. Dr. M. Schulz spent the winter and summer of 1953 and also 1955 visiting and lecturing at the principal radiotherapy centers in the Scandinavian countries, and in 1956 presented a paper before the International Club of Radiotherapists in Mexico City.

Dr. Lindemann has also made a number of visits abroad—to Copenhagen in 1948 and again in 1952, to Toronto in 1954, and to Holland, where he gave a major address at the International Congress of Psychosomatic Medicine, in 1957. Dr. F. M. Rackemann presented a paper in French at the Second European Congress of Allergy in Paris in 1950; in 1951 he attended the organizational meeting of the International Association of Allergology in Zurich, followed by addresses in Copenhagen and London; in 1956 he made medical visits to London, Paris, Holland, and Copenhagen. Dr. Chester Frazier gave lectures to the Swedish Dermatological Society in 1951, and also addressed the Tenth International Congress of Dermatology in London in 1952. Dr. Walter Lever lectured in England in 1952 at the International Congress of Dermatology, gave lectures in a postgraduate course in Munich and Berlin in 1954, and lectured in Istanbul, Beirut, and Athens in 1955; in 1956 he spoke at the Saint Louis Hospital in Paris, and in 1957 in Scandinavia.

In 1946 Dr. M. N. Smith-Petersen spent a month in Norway demonstrating his techniques in surgical operations on the hip; also in 1946 the King of Norway awarded to him the Order of Commander of St. Olav and in 1947 the Norwegian Senate conferred upon him an honorary degree; in 1949 he lectured in Brussels and in 1951 he and Dr. Otto Aufranc spoke in London at a combined meeting of orthopedic surgeons. In 1953 Dr. Aufranc visited, spoke, and demonstrated at the American University of Beirut in Lebanon and at Dhahran on the Persian Gulf; he has made a number of medical trips to various parts of Canada also. Dr. Joseph Barr in 1954 went as a member of the WHO Medical Commission to inspect hospital and medical school facilities in the Far East, particularly in Indonesia, and at present is on a medical tour to attend the meeting of the International Society of Orthopedic Surgeons in Barcelona, to visit hospitals and universities in Athens, and to give the Robert Jones Memorial Lecture before the Royal College of Surgeons in England. Dr. William A. Rogers, as Editor-in-Chief of the *Journal of Bone and Joint Surgery*, made several trips to England for conferences of the Editorial Board with representatives from many countries. Dr. Cave in 1952 and 1954 presented papers in London at joint meetings of the orthopedic surgeons and in 1956 conducted a two-day fracture course in Montreal; in 1957 he presented a paper in Honolulu. Dr. Robert Joplin in 1952 lectured at the London Hospital, and at the Royal Infirmary in Edinburgh; in 1956 he lectured at Peterborough, Ontario. Dr. Castleman has given courses in pathology in various parts of Latin America. Dr. Fritz Lipmann, our renowned biochemist, went in 1953 to Stockholm to receive the Nobel Prize.

Dr. Henry Beecher has made many lecture trips abroad in the last decade to England, Ireland, France, Scandinavia, Russia, Switzerland, and Argentina. Dr. Harriet Hardy presented papers on beryllium poisoning at the Royal Society of Medicine in London in 1950 and on lead poisoning in Naples in 1954, and in 1956 she went abroad for six months to visit various parts of Europe, Africa, and South America, largely to study the lung diseases of industry. And many others, including junior members of the staff, have gone north, south, east, and west — in fact all over the world — to attend meetings where they have read and discussed papers or have carried out some other useful errand.

The MGH nursing staff has participated in seminars on teaching and nursing service administration with the American Hospital Association, under the International Cooperation Administration. Miss Ruth Sleeper in 1955 went to Brazil, Peru, and Colombia, and in 1957 to Mexico and Cuba; she was appointed a member of the WHO Expert Panel in Nursing in 1952 and still serves on the panel, having attended conferences in Geneva in 1952 and London in 1955; she also served as Nurse Advisor to the U. S. delegation to the WHO Assembly in 1953, and since 1947 has been a member of the International Council of Nurses as Chairman of the Committee on Education. Miss Edna Lepper in 1956 was sent to Guatemala and Chile, under the International Cooperation Administration. Miss Katherine Hardiman, Supervisor of Clinical Instructions in Nursing at the M.G.H., was loaned to the Pakistan Ministry of Health from 1955 to 1957 to establish a course for "sister tutors" in Karachi.

Although the Social Service staff have not themselves traveled abroad during the last 10 years, they have been intensively busy instructing many students from other lands — especially from England, Germany, and Sweden — in the methods used at the M.G.H.

The future international role of the Massachusetts General Hospital in the further advancement of the medical sciences, in the more rapid dissemination of medical knowledge, and in the firmer establishment of medical friendships will undoubtedly surpass that of the past and of the present. The need is evident and the opportunity and obligation will continue to challenge us.

Paul D. White, M.D.,
Member of the Board of Consultation

The Board of Trustees, at their meetings on July 26 and August 16, voted:

To promote:

Howard T. Blane, Ph.D. from the position of Research Fellow in Psychiatry to that of Assistant Psychologist.

To appoint:

Dr. Roy J. Barry as Assistant in Radiology, effective January 1, 1958;

Dr. Ronald S. Cowie as Assistant Resident in Orthopedic Surgery for one year, beginning September 26;

Dr. Melvin J. Glimcher as Assistant in Orthopedic Surgery;

Dr. John H. Knowles as Chief Resident on the Medical Service for one year, beginning January 1, 1958;

Dr. Sholem Postel as Assistant in Medicine, effective July 15;

Irving Wolf, Ph.D. as Assistant Psychologist in the Department of Psychiatry for one year, beginning August 1.

At their meetings on March 20 (report delayed in reaching THE NEWS office), July 25, and August 14, the General Executive Committee voted:

To promote:

Dr. Howard S. King to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1958;

Dr. George B. Murphy, Jr., retroactively, to the position of First Assistant Resident in Surgery, as of September 1, 1956.

To change the titles of:

Dr. Alan C. Aisenberg to Clinical Assistant in Medicine, effective when he obtains a permanent Massachusetts license;

Dr. J. Malcolm McNeill from Assistant in Radiology to Clinical Fellow in Radiology until such time as he obtains his permanent license;

Dr. James F. Patterson from Clinical Associate to that of Clinical and Research Fellow in Dermatology, effective as of July 1.

To reappoint:

- James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;
- Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;
- Dr. Arthur E. Brown as Clinical Fellow in Medicine for one year, beginning August 8;
- John H. Fessler, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
- Heinz Kohler, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
- Dr. Bernhard Laukenmann as Clinical Fellow in Anesthesia for one year, beginning September 7;
- Dr. Charles I. Levene as Research Fellow in Medicine for one year, beginning September 1;
- Dr. Eugene R. Nobles, Jr. as Second Assistant Resident in Surgery for one year, beginning July 1;
- Dr. Joseph R. Petranek as Clinical and Research Fellow in Medicine for one year, beginning September 1;
- Dr. Edward S. Rendall as Clinical Assistant in Medicine for one year, beginning August 1;
- Dr. Farrokh Saidi as Second Assistant Resident in Surgery for one year, beginning July 1;
- Nathan Sharon, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
- Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;
- Pierre J. J. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
- Dr. Taeko Sumi as Clinical and Research Fellow in Psychiatry for one year, beginning October 1;
- Zofia Tarasiejska, Ph.D. as Research Fellow in Medicine for one year, beginning September 1.

To appoint:

- Dr. Arthur F. Amick as Assistant Resident in Medicine, beginning July 1;
- Dr. Niels E. Brandstrup as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
- Dr. Martin R. Coles as Clinical and Research Fellow in Psychiatry for one year, beginning August 1;
- Edwin H. Eylar, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
- Dr. Adamandia J. Kottaki as Fellow in Anesthesia for one year, beginning January 1, 1958;
- Dr. Paul S. Kraus as Clinical Assistant in Psychiatry for one year, beginning September 1;
- Dr. Myron B. Laver as Fellow in Anesthesia, beginning July 1, 1958;
- Dr. Pierre A. Maurice as Clinical and Research Fellow in Medicine for one year, beginning September 15;
- Thomas Nussbaumer, Ph.D. as Research Fellow in Medicine for one year, beginning September 15;
- Dr. Tsutomu Oyama as Clinical and Research Fellow in Anesthesia, beginning January 1, 1958;
- Dr. Carlos Pantoja as Clinical Fellow in Medicine, beginning July 15;
- Dr. Henry J. Powsner as Research Fellow in Neurosurgery, beginning July 11;
- Dr. Adalbert F. Schubart as Clinical and Research Fellow in Medicine for one year, beginning October 1;
- Dr. Lionel A. Schwartz as Clinical Assistant in Psychiatry for one year, beginning September 1;
- Dr. George B. D. Scott as Research Fellow in Pathology for one year, beginning October 1;
- Alvin J. Simmons, Ph.D. as Research Fellow in Psychiatry for one year, beginning August 1;
- John L. Sloanaker, M.A. as Research Fellow in Psychology for one year, beginning September 1;
- Dr. Elsa W. R. Wahren as Clinical and Research Fellow in Psychiatry for one year, beginning September 1;
- Dr. Mark McN. Walter, Jr. as Clinical and Research Fellow in Psychiatry for one year, beginning August 1.

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THE WILLIAM HARVEY TERCENTENARY CONGRESS

When Dr. Means accompanied me to visit you in April we accepted his suggestion that The News should have a special reporter of the William Harvey Tercentenary Congress of 1957, June 3 to June 9, in London and Folkestone. It is ten days since your reporter returned home; this account therefore lacks that very "hot-off-the-griddle" quality, but gains perhaps by the perspective of time. This delay fits appropriately with one aspect of Harvey's most important achievement — the period of about twelve or more years that elapsed between his discovery of the circulation of blood and the publication of the first printed announcement of his work in 1628. He did not know it at the time but, as he lived to the age of 79, he could afford this long delay in the prime of his life between the ages of 34 and 46. Nor was this like my delay — a mere shelving of the task. During those years he developed his theme, polished its description, benefited from friendly and unfriendly criticism at home before publishing his work in Latin for all the world to read. Nor was the delay entirely voluntary; at that time a revolutionary idea could cause its author much trouble. Galileo narrowly escaped burning at the stake for such a thing.

In 1878 the William Harvey Tercentenary Congress celebrated our hero's birth and in 1928 another William Harvey Tercentenary Congress was jubilant over the publication of *De motu cordis*. Few men who lived three hundred years ago now have homage paid to their memory with the reverence shown at this year's William Harvey Tercentenary Congress which marked his death in 1657.

The main meeting place was the Great Hall of the Royal College of Surgeons, newly reconstructed — the old building was damaged by bombs during World War II. On the first morning, June 3, sharp at 9:30, dignitaries of the Congress, attired in colourful academic robes, walked solemnly the length of the long hall to the platform where they sat for the duration of the first few papers. These dealt with historical subjects related to Harvey. Most appropriately, the first contribution was by Professor Kenneth J. Franklin of Saint Bartholomew's, and the second by Professor John Fulton of Yale University. About two years ago Fulton strongly suggested that the 1957 Tercentenary should be adorned by a new English translation of *De motu cordis*. The last had been made by Willis, the anatomist, in 1847. Sir Russel Brain, President of the Royal College of Physicians, lent a sympathetic ear, and so it came about that the College invited Kenneth Franklin to perform the task. Working at considerable sacrifice to his other activities, he finished the translation and the book appeared just before the Congress opened. The Harveian Society of London, under whose auspices the Congress was held, bought 500 copies, had them numbered, and presented each member of the Congress with a copy as a souvenir which was distributed at the official banquet. The book, which is now on sale, should find its way into the conscious mental process of every medical student in the first or second year of his course, and should be studied acutely by all men interested in the scientific method as one of the foundations of modern philosophy of science. The new translation makes better reading at present than that of 1847, and the book includes the original Latin text.

For the 1928 Tercentenary Sir Thomas Lewis and Sir Henry Dale brought out a silent, black and white film based on *De motu cordis*. For our Congress a new film was made under the auspices of the Royal College of Physicians, in colour and with sound. Sir Henry Dale appears at the beginning to give a charming and scholarly introduction. This film, though excellent, should not serve as a substitute for reading the book, but as dessert for those who have done the reading or as an appetizer for those who have not yet read *De motu cordis*. While seeing and hearing Sir Henry Dale it is interesting to have in mind that all three congresses took place during his lifetime; the 1878 Tercentenary happened when Sir Henry was plain Henry, aged 3. Sir Henry was the outstanding personality of the 1957 Tercentenary.

The main body of the program consisted of daily scientific sessions at which papers were read by eminent authorities from all parts of the world. These were grouped under general titles, "The role of the heart in the circulation"; Haemodynamics"; "Coronary circulation"; "Pulmonary circulation"; "Results of cardiac surgery"; "Cerebral circulation"; "Splanchnic circulation"; "Peripheral circulation". In addition, on one day, a second ring was added: The Cardiac Society of Great Britain and Northern Ireland held a one-day meeting at which twelve interesting papers, mainly on Clinical Cardiology, were presented. A "first" in medical history took place on the afternoon of June 5, when, by trans-Atlantic telephone, a British-American panel discussed the results of cardiac surgery. In New York, at a session of the American Medical Association, de Bakey, Blalock, Gibson, Gerode, and Burch faced an audience of perhaps 3,000 and in the Great Hall of the Royal College of Surgeons in London, Sir Clement Price Thomas, Sir Russel Brock, Maurice Campbell, and Professor d'Allaines of Paris had an audience of about 300. The reception of voices was as clear as though they all came from our own platform. The substance of the discussion reflected the progress of cardiac surgery during the past ten or fifteen years and revealed the close personal relationships and marked agreement of the surgeons on both sides of the Atlantic. The Smith, Kline and French Company supplied the cost of the physical facilities for this interesting event.

The London libraries and museums are rich in memorabilia of Harvey and his times; excellently designed and arranged exhibits were on view. The exceptionally fine exhibit of the Wellcome Museum included a series of editions of *De motu cordis* and also various objects which reflected the manners and methods of a physician's life in the 16th and 17th centuries. Your reporter learned that Harvey was renowned as an authority on obstetrics and gynaecology. A bivalve vaginal speculum made of iron was on view.

Unfortunately, for personal reasons I had to forego the interesting excursion to Folkestone on Saturday and Sunday in order to get home on June 7. The mayor of Folkestone entertained the Congress, and this included a dinner at which plate of Harvey's time was used. Fortunately, I had arranged to spend a few days in England before the Congress and had the pleasure of a day in Cambridge as the guest of Dr. and Mrs. Kenneth Harris of University College, London. Harris, like Harvey, had been a student at Gonville and Caius (pronounced "Keys") College, and we walked the same halls and footpaths that Harvey trod from 1593 to 1597. As coincidence would have it, Harvey graduated from Cambridge just 300 years before I was born — thus another, a personal Tercentenary.

Harold N. Segall, M.D.,
Assistant in Medicine, 1923-1924

[Dr. Segall was a Henry P. Walcott Fellow, 1922-1923, studying with Dr. Means in the Thyroid Clinic, and a Dalton Scholar, 1923-1924, studying cardiology with Dr. Paul D. White. He is now Assistant Professor of Medicine, McGill University Faculty of Medicine, Montreal, Canada.—*Editor*]

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Anesthesia

Beecher, H. K.
The Anaesthesia Laboratory of the Harvard Medical School at the Massachusetts General Hospital.
Brit. J. Anaesth. 29:261-273.

Sweet, W. H.
Cerebral studies during local and general hypothermia.
In Cold injury: Transactions of the Fourth Conference, November 7, 8, and 9, 1955, Princeton, N. J., M. I. Ferrer, M.D., Editor, New York, N. Y., Josiah Macy, Jr. Foundation, pp. 329-339.

Laboratory Science

Bencze, W. L., and Schmid, K.
Determination of tyrosine and tryptophan in proteins.
Analytic. Chem. 29:1193.

Neurology, Neurosurgery, and Psychiatry

Sweet, W. H.
Formation, absorption and flow of cerebrospinal fluid.
In Modern trends in neurology, 2d series, D. Williams, Editor, London, Butterworth & Co., Ltd., pp. 29-43.

Sweet, W. H.
Surgery of the nervous system.
In Surgery: Principles and practice, J. G. Allen, H. N. Harkins, C. A. Moyer, and J. E. Rhoads, Editors, Philadelphia, J. B. Lippincott Company, pp. 1396-1445.

Sweet, W. H., and Koons, R. A.
Hypothermia and hibernation in neurosurgery.
In Clinical neurosurgery (Proceedings of the Congress of Neurological Surgeons, vol. 3, Los Angeles, California, 1955), Baltimore, The Williams & Wilkins Company, pp. 224-239.

Sweet, W. H., and McQueen, J. D.
Introduction and discussion re hypothermia and hibernation in neurosurgery.
Ibid. pp. 239-248.

Talland, G. A.
Criteria in conceptual transposition.
Am. J. Psychol. 70:263-267.

Peripheral Vascular Disease

Brown, A. E., and Learner, N.
Analysis of blood flows in digital plethysmographs.
Angiology 8:109-128.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

This new listing is to appear in THE NEWS from now on. The library call number is given, within parentheses, for each item.

Ciba Foundation Colloquia on Aging, vol. 3.
Methodology of the study of aging.
Boston, Little, Brown and Company, 1957.
(13Po)

Crosse, V. M.
The premature baby, ed. 4.
Boston, Little, Brown and Company, 1957.
(26E)

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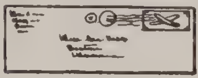
* * *

VOLUNTEER GROUPS

MGH Staff Wives Association

The first tea of the season to be given by the Staff Wives Association is planned for October 24. At that time, in addition to the foreign professional visitors to the Hospital, the Ladies' Visiting Committee will be the specially invited guests. The past presidents, Mrs. Walter Bauer, Mrs. Edward D. Churchill, and Mrs. Oliver Cope have been invited to pour.

In January a morning coffee will be held for the benefit of those members who are never free to attend the afternoon teas. The exact date will be announced later.



This letter from Dr. Wilder Tileston (*E.M.* 1900), our "singleton" in Carmel Valley, California, is much appreciated:

> Carmel Valley is a small rural community, twelve miles inland from Carmel-by-the-Sea. It has an almost perfect climate, so that one can live outdoors the year round. We have one physician, but for six months were without any. I do not practise here.
>
> I left Boston in 1909 to join the staff of the Yale Medical School, and taught there part-time till 1946. In 1952 I retired and, with my wife, traveled around the world for a year.
>
> Here in Carmel Valley my time is occupied with gardening and social activities. We have many friends, retired like myself, including Army and Navy officers, diplomats, engineers, and others. I belong to the local Kiwanis Club, of which I am secretary.

Dr. Means received this letter from Dr. Isaac M. Taylor (*M.* 1946), written from the University of North Carolina School of Medicine last June:

> We departed from the Antarctic in the middle of February; went to Auckland, New Zealand, for 4 days; then to Sydney, Australia, for 4 days; and from Sydney straight across the Pacific in a 19-day passage to San Diego. The long trip was pleasant enough but, of course, all of us who had spent the winter in the Antarctic were anxious to get home and were somewhat unappreciative of the extended cruise and route.
>
> Two days after arriving in San Diego I was discharged from the Navy and flew to Washington, where Trudie met me. We came on home and arrived in Chapel Hill the next morning, where the children, if not recognizing me, at least acknowledged me and completed our reunion. You can't imagine the joy it

No. 69 in a series of Staff photographs
Dr. Paul D. White, member of the Board of Consultation — with Dr. Yang Wang, the first Paul D. White Clinical Fellow in Cardiology at M.G.H., sponsored by the Massachusetts Heart Association

is to be at home again. Trudie and I took a number of short trips during the month of April, and I went back to work here at the hospital on the 1st of May. I started visiting on the wards right away and have learned a good deal already. At first the only thing I was able to do was to comment on the presence or absence of frostbite in the patients I saw. I have been in considerable local demand as an after-dinner speaker, giving an illustrated travel log of my journeys.

All your old friends here seem well and happy. I am impressed with the amount of progress our school and hospital have made during the two years I have been away. We have a going concern now, with many patients and much research activity. Chuck [Charles H. Burnett, c.r.p. 1946] has been wonderful to me and is letting me get accustomed to civilian hospital work at my own pace. I expect to make application for some research funds soon, and hope by the first of the year to be back at work investigating the exchange of ions, particularly potassium, across cell membranes.

Brief bits:—

Dr. Norman W. Andrew (r.p. *An.* 1956) became Anesthesiologist-in-Chief at the Mary Imogene Bassett Hospital in Cooperstown, N. Y., on August 1.

Dr. Mary A. B. Brazier was an invited speaker at two international meetings in Europe this summer. The first was a Symposium on the History and Philosophy of Knowledge of the Brain and its Functions, held in London. Her subject was "Development of the concepts relating to the electrical activity of the nervous system". The second was the International Congress of Neurological Sciences held in Brussels, where her subject was "Some advances in basic neurophysiology, and their implications for studies of the anesthetic state". At the First International Congress of Neurological Sciences, Dr. Brazier was elected Secretary-General of the International Federation of Societies for Electroencephalography and Clinical Neurophysiology.

Dr. Earle M. Chapman represented the Harvard Medical School at the Conference on Experiments in Medical Education as they Pertain to Cardiovascular Disease, sponsored by the U.S.P.H.S., in Sun Valley, Idaho, on June 8 and 9. At the Inter-American Symposium on the Peaceful Application of Nuclear Energy, held at Brookhaven, Long Island, May 13-17, he presented a paper on "The use of I^{131}" before the group and took part in group discussions. Dr. Chapman has been appointed Chairman of the Isotopes Committee at the Hospital for 1957-1958.

Dr. Erich Lindemann attended the meetings of the International Congress on Psychiatry, held in Zurich, Switzerland, September 1-9.

New addresses:—

Dr. Hedda Acs (res. fel. *C.M.* 1957), Rockefeller Institute for Medical Research, 66th St. & York Ave., New York 21, N. Y.

Dr. William R. Buchanan, Jr. (*C.M.* 1955), 56 High St., Greenfield, Mass.

Dr. Walter C. Cotter (r.s. *N.S.* 1956 & r.p. *N.P.* 1957), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Reynout Donner (a.r.p. *Path.* 1957), Dept. of Pathology, Pr. Hendriklaan 27, Amsterdam, Holland

Dr. Alfred L. Duncombe (*E.M.* 1934), 336 Pleasant St., Brockton, Mass.

Dr. Felix G. Freund (clin. fel. *An.* 1957), Barnes Hospital, 600 S. Kingshighway, St. Louis, Mo.

Dr. Lester H. Grant (a.r.p. 1957), Veterans Administration Hospital, W. Roxbury, Mass.

Dr. John M. Head (*S.* 1951), c/o Dr. Richard H. Sweet, 87 Chestnut St., Boston, Mass.

Dr. Herbert E. Kaufman (*M.* 1957), National Institutes of Health, Bethesda, Md.

Dr. Herbert L. Kraut (a.r.p. *D.* 1957), St. Luke's Hospital, 421 W. 113th St., New York 25, N. Y.

Dr. Philip H. Leiderman (r.p. *Psychiat.* 1957), Boston City Hospital, Boston, Mass.

Dr. Harold L. May (*S.* 1954), Massachusetts General Hospital, Fruit St., Boston 14, Mass.

Dr. George B. Murphy, Jr. (*S.* 1952), Gundersen Clinic, La Crosse, Wis.

Dr. Austin F. O'Malley (a.r.s. *U.* 1957), Veterans Administration Hospital, 150 S. Huntington Ave., Jamaica Plain, Mass.

Dr. Renée B. O'Sullivan (*C.M.* 1957), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Geraldine M. Peiffer (a.r.p. *An.* 1957), St. Margaret Hospital, Hammond, Ind.

Dr. James A. Pittman, Jr. (*M.* 1953), University of Alabama Medical Center, Birmingham 3, Ala.

Dr. Guillermo C. Sanchez (*M.* 1950), 330 Dartmouth St., Boston, Mass.

Dr. Arthur A. Sasahara (a.r.p. 1957), Veterans Administration Hospital, W. Roxbury, Mass.

Dr. Samuel J. Sunnenblick (gr. stud. a. *S.* 1956), 19 Pleasant St., Portsmouth, N. H.

Benjamin E. Volcani, Ph.D. (res. fel. *Biochem.* 1957), Dept. of Chemistry, University of California, Berkeley, Calif.

This letter has come to Dr. Clark from a recent patient who lives in Cambridge. He writes:

From May 26 to June 8 I occupied a room in the Phillips House. On May 27 Dr. Grantley Taylor operated on my mouth to remove a cancer. As you know, this operation results in several days of pain for the patient.

I write to thank you warmly for the splendid care I received from everyone for the whole time of my visit to your Hospital. Mrs. Moran and her staff did everything possible to help me and, in spite of being hard worked, they managed to make it seem as though each thing was a pleasure to do.

Eating is particularly tiresome after this operation. Your Dietary Department took no end of trouble to contrive food that I could swallow and which was also pleasant to eat. In spite of the pain, my dominant impression is of the skill and kindness of everyone concerned.

I would like to comment on one excellent feature of my treatment in Phillips House. I arrived in the afternoon of the day before the operation. Everyone involved came to call on me to make himself known—Dr. Judson G. Randolph (the resident), Dr. William P. Rogers, Jr. (Dr. Taylor's assistant), and several nurses; also, the doctor who gave the anesthetic. Each one gave me a careful description of exactly what was to be done with me in the way of tests, etc., just *when* each thing would be done, and the process involved. Dr. Taylor had already described the nature of the operation and the job of recovery afterward.

The result was that I was never left guessing for an instant. I knew exactly when and how each procedure was to take place. I think this contributed greatly to a relaxed frame of mind during the hours before the operation.

THE MASSACHUSETTS GENERAL HOSPITAL 1811 NEWS

No. 171 Boston, Mass November 1957

PORTRAIT OF AN OPHTHALMOLOGIST:

FREDERICK HERMAN VERHOEFF, M.D.

Among the best known of the world's ophthalmologists is the *doyen* of the ophthalmic staff of the Massachusetts Eye & Ear Infirmary — a positive and productive man who, for 57 of his 83 years, has been intent on utilizing his every experience in the laboratory and clinic for the benefit of his specialty. A criterion of his success and influence is the national recognition that has been given to him. In 1922 the Section on Ophthalmology of the American Medical Association awarded him the Hermann Knapp Medal, and in 1930 the American Medical Association again honored him with its Ophthalmic Research Medal. In 1932 he received the Lucien Howe Medal of the American Ophthalmological Society. A fellow ophthalmologist, Professor *Emeritus* Alan C. Woods, M.D. of Johns Hopkins's Wilmer Institute, said of him ". . . he was much of a lone voice crying in the wilderness, but the example of his small laboratory, and the research contributions therefrom, made their mark on American ophthalmology and awakened ophthalmologists. . . ."

In 1900, when Frederick Verhoeff accepted the post of resident pathologist at the Eye and Ear, he was truly a "lone voice". No other special hospital in America had such a position and there were many in conservative Boston who did not welcome the idea. Nor was the man himself universally welcomed. It seemed to many that he often deliberately complicated his position by his uncompromising and undiplomatic attitude toward his hospital superiors. At the root of this pattern of behavior was a vision of having a fully equipped, liberally endowed, and professionally staffed ophthalmic research laboratory. No one shared this vision. He had to wait for over 30 years for the dream to come true.

The first work area assigned to him in the Infirmary was a single room on the top floor. He was expected to do all the pathologic and bacteriologic work, perform autopsies, and even do the urinalyses for the 160-bed hospital. For an assistant he had a part-time orderly. His major laboratory equipment consisted of an inferior microscope, a microtome, autopsy instruments, an incubator, and an oven. His total salary was $650 — $400 a year from the Infirmary and $250 a year from Harvard as an instructor.

But the citadel of Boston conservatism slowly crumbled under the stubborn assaults of this third generation Dutchman from Kentucky. He more than proved his worth to the hospital, for 7 years after his arrival in Boston the Infirmary built to his plans a pathology building and a year later he was assigned his first technician. From this laboratory the papers and reports began to pour out. Often there were as many as 6, 7, or 8 papers a year bearing the name of Frederick H. Verhoeff as author or co-author and the Massachusetts Eye & Ear Infirmary as the sponsoring institution.

The total literary production of his professional life to date is 216 papers. There is little in these papers that can be termed repetitious. True, he does deal with the same subject in several different papers over the years, but each paper reflects a growth in his thought on a problem rather than a rehash of old material. By beginning with the first of his 39 papers on optics and vision, and reading through to the last, it is possible to watch the development and enlargement of a unique mind—a mind capable of accepting, rejecting, and utilizing the fruits of experience. There has never been anything static in the mental make-up of Frederick Herman Verhoeff.

Had he been content to concern himself with only optics and vision he would have been assured more than just a small measure of fame. However, his interests were broader and included all aspects of ophthalmology. A classified list of his writings proves this point. In addition to the 39 papers on optics and vision, he has been the author or co-author of 24 papers on bacteriology of the eye, 37 papers on ocular surgery, 35 papers on diseases of and injuries to the eye, 75 papers on ocular pathology, and 6 papers of general or historical nature. At present he is at work on his 217th paper. He has never written a textbook, but his collected reprints fill 5 volumes.

The influence Verhoeff effects on ophthalmology by his writings is great, but still greater is the influence he has had on his colleagues and students. He is a member of all the national ophthalmological societies, and regularly attends their meetings. Frequently he presents a paper. Always he has some comment to make on the papers presented by others. He never argues for the sake of argument nor deals in empty platitudes and compliments for the sake of politeness. However, his words are always to the point and sharp — often so sharp that he wounds the sensibilities of the speaker. To Verhoeff a paper presented before a meeting is something almost sacrosanct; it is never an excuse for parading an ego. That his anticipated presence at a meeting might cause some shallow soul to withdraw a paper is a fair guess to make. If so, the meetings of the various societies are the better for it.

To have been a co-worker with or student of Verhoeff is an experience never to be forgotten. The investigator — and there have been many, many of them since 1900 — learns more than just a few facts concerning ophthalmology. He learns to question and then question again his findings, because if he doesn't Verhoeff will. He learns to read and read again all the literature on the subject, because if he doesn't Verhoeff will demand it of him. He learns to write succinctly, because that is the way Verhoeff wants it done. And he learns he is capable of great anger, because Verhoeff brings it out of him. When these red clouds pass away the student or co-worker finds that he has gained in wisdom and is a better ophthalmologist, because Verhoeff made him so. It is no exaggeration to say that the work of Verhoeff-trained men can always be detected. Somehow, the lessons learned by them in the Old Path Lab and in the new Howe Lab under Verhoeff's tutelage have never been forgotten.

It is something of a ritual among the staff and alumni of the Eye & Ear to tell tall tales about "Freddie". When all these tales are told — all the tales of his alleged vanity, of his reputed testiness, of his prolific output, of his fabulous memory, of his fights for his principles and ideas, of his personal habits, and of how he has mellowed with the years — when all these are told, there is invariably a truthful summing up of the man. This can be briefly stated. Frederick Herman Verhoeff is a genuinely modest and generous man. Generously has he enriched the professional lives of the men he has come in contact with, generously has he enriched the institution he has been devoted to for 57 years, and generously has he enriched his chosen specialty — perhaps more than any other man of his generation.

Anon.

* * *

Dr. Milford D. Schulz was named President-elect of the American Radium Society at its 39th annual meeting, held in Quebec, Canada, last June.

Contributions to The News in the amount of $594.60, over and above subscription fees, were received during the fiscal year 1956-1957. This exceeds any previous yearly contribution figure by several dollars. A note of appreciation is always sent to each contributor, but The News takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

GRACE WHITING MYERS

My acquaintance with Mrs. Grace Whiting Myers began in 1905, when, as a newly appointed House Officer to the South Surgical Service of the Massachusetts General Hospital, I had to go to the Record Room to abstract the record of a patient who had re-entered the Hospital. Records were then kept in bound volumes in the Treadwell Library, which occupied the entire second floor of the central section of the Bulfinch Building — now the Medical Staff Room with its adjoining classrooms. In the center of the main room was a large mahogany table, with chairs formally grouped around it. A small room on the north side was the Record Room, where Mrs. Myers had her desk; and alcoves, also to the north, held the stacks for books and records.

I had been warned that Mrs. Myers was an exacting person regarding records, that she allowed no frivolity, required correct deportment, and was, if these amenities were observed, a very pleasant person. My entry into the Treadwell under these restrictions was made with some trepidation, but it marked the beginning of a friendship that lasted for 52 years and my acquaintance with one of the finest women it has been my good fortune to know.

Mrs. Myers was always neatly dressed, always polite. She was meticulous and orderly in her work, exacting of others and of herself, intolerant of poor work or procrastination, proud of her records and of her Hospital — a lady of the old school, beloved and respected by all who knew her. Her handwriting was neat, with every letter perfectly formed and as legible as if typed — an example to all, but followed by few Staff members or House Officers. In spite of her desire for more legible records, when it was suggested that typewriters be furnished to the House Officers, Mrs. Myers was alarmed because, as she said, "they spell so horribly."

On one occasion a jovial Staff member ventured to tell her a story which he thought was innocuous, although it did have a slight *double entendre,* whereupon he was banished from Treadwell Library and was told, "Don't you ever come back until you have apologized." He fled in haste, but finally mustered courage to return and say he was sorry, intended no wrong, and was forgiven.

Grace Whiting Myers was born in Worcester, Massachusetts, on November 14, 1859, and died at McLean Hospital on August 20, 1957, at the age of 97. She has told the story of her life in a delightful autobiography published in 1948, so I shall set down here only the part that deals with the Massachusetts General Hospital and our records.

Mrs. Myers was appointed Assistant Librarian to the Treadwell Library in 1897 and a few weeks later was told that, as "Keeper of the Records", the care of records was also part of her responsibility. Although the Staff of the M.G.H. had been particular about records and had preserved a perfect file from the opening of the Hospital, the registering, cataloguing, and filing of records and other statistics were elementary compared with what is now required. Therefore, Mrs. Myers had to feel her way and to play her part in the development of a modern Record Room. It is hard to believe that her first compilation of medical and surgical statistics prepared two months after her appointment was, according to her own statement, pronounced by the Record Committee as "too bad to be published."

Mrs. Myers's work was her life, and she was always seeking ways to improve the Library and the Records. Up to the time of her appointment, there had been only a disease catalogue. Mrs. Myers started a diagnosis catalogue and a name catalogue. She notes that: "Previously the only means of locating a re-entry was through the Admission File in the General Office [kept in a huge book, one line to each patient], then going to the Record Room and hunting it up by Service and date."

Only the members of the Medical Staff were allowed to enter the Treadwell Library in the morning. House Officers were privileged to read in the Library during the afternoon and evening, but on no account to remove a book or journal from the room. The Staff often held an evening meeting, following which a supper was served in the Library. Mrs. Myers's sense of order and neatness was upset by the litter that was usually left. One morning, after finding several leather-bound books badly soiled by salad dressing, she wrathfully demanded of Dr. Howard, Director of M.G.H. at that time, that there be no more suppers in the Library. And that was that. This was typical. She had perfect timing.

In 1909 she became Librarian and Record Librarian with 7 assistants. After 12 years, the importance of records had grown so that 8 people were required, instead of the 1 in 1897, to handle the work in the Department. Other hospitals were having Record trouble, so in 1912 the Record Clerks of the Boston hospitals began to hold informal meetings to discuss their problems — meetings which ultimately led to the formation of the American Association of Medical Record Librarians in 1928. One of the results of these meetings was the compilation and publication of the *Boston hospitals nomenclature of diseases,* later to become the *Massachusetts General Hospital classification,* which was widely used by hospitals throughout the country. After going through 9 editions, it was replaced by the present *Standard nomenclature.* Mrs. Myers superintended the compilation of the 9 editions of the MGH classification.

When World War I came, Mrs. Myers, prepared by her experience in the Spanish-American War with Government requirements for soldiers' records, was ready with duplicate cards bearing all the necessary data. Her bulletins on "The medical and surgical aspects of the war", compiled from periodicals current at the time, came to the attention of the Surgeon General of the United States Army, who requested that copies be sent to Red Cross Headquarters, there to be mimeographed and distributed to all camps and cantonments.

In 1916 the Treadwell Library and the House Records were moved to the new Moseley Building.

The first Record Librarian pupil came to Mrs. Myers in 1917, thus initiating instruction of Medical Record Librarians. The efforts of the American College of Surgeons to improve hospital records through its program of inspection and accreditation, begun in 1918, received full support and assistance from Mrs. Myers.

In 1925, after 27 years of service, Mrs. Myers resigned. She was then 66 years old. Miss Carrie L. Williams became Treadwell Librarian and Mrs. Genevieve Chase was appointed Record Librarian, separating the positions previously held by Mrs. Myers which had become too arduous for one person to carry.

Retirement did not mean inactivity for Mrs. Myers. By 1928 she had completed her *History of the Massachusetts General Hospital, 1872-1900,* a continuation of the previous histories. Then in 1928 came the meeting of the American College of Surgeons in Boston which featured a special Section on Records, with demonstrations and papers. This culminated in the formation of the American Association of Medical Record Librarians and the election of Mrs. Myers as its first president. With the inauguration of the Massachusetts State Association of Record Librarians she was elected president and served for 37 years. Other forces helped to make Records important, but Mrs. Myers by her personality, ability, energy, and example was instrumental in raising a neglected and formerly insignificant clerical job to a position of standing and respectability. As long as her health permitted she attended various meetings and was always the recipient of respect and admiration.

From 1930 to 1948 she buried herself in church work and in the writing of numerous short books and articles. *Notes of triumph,* planned to be given to members of the 6th General Hospital (the Massachusetts General Unit in World War II), was later published by Congregational House of New York and over 5,000 copies were distributed. Her hands were as busy as her mind, and during the war years she knitted 58 pairs of long sea boot stockings.

Troubled with failing eyesight, she nevertheless retained her interest in world and local affairs with a buoyant spirit, and cheerfully received her friends in her pleasant room in a nursing home in Newton Highlands. Slowly both physical and mental powers grew dim and on October 10, 1952 she entered McLean, where a grateful Hospital cared for her until her death on August 20, 1957.

N. W. F.

[Nathaniel W. Faxon, M.D

The Board of Trustees, at their meetings on September 6 and 20, voted:

That Dr. Mahlon B. Hoagland be granted leave of absence for one year, beginning September 1;

To accept the resignation of Dr. John J. Lorentz from the position of Assistant in

Physical Medicine, effective September 30;
To accept with regret the resignation of Dr. A. Gedeon Matoltsy from the position of Associate Biologist;
To accept with regret the resignation of Dr. Victor A. Politano from the position of Assistant Urologist, effective September 30.

To change the titles of:

Dr. Jacob Christ from Clinical Assistant to Assistant in Psychiatry at McLean Hospital;
Dr. Stephen L. Washburn from Resident to Assistant in Psychiatry at McLean Hospital.

To appoint:

Dr. Fairfield Goodale, Jr. as Assistant in Pathology, effective July 21;
Dr. Clement A. Hiebert as Resident in Surgery, beginning September 1;
Dr. John W. Raker as Assistant Surgeon, effective as of August 21, and to allot him space in the Warren Building;
Dr. Norman T. Smith as Assistant Resident in Anesthesia, beginning July 1, 1958.

At their meetings during September, the General Executive Committee voted:

To conclude the appointments of:

Dr. Edgar L. Gasteiger, Jr. as Associate Physiologist in Neurosurgery, as of August 31;
Renee G. Naves, Ph.D. as Research Fellow in Medicine, as of September 15;
William S. Quigley, B. S. as Research Fellow in Physics (Medicine), as of September 20.

To promote:

Dr. Ralph C. Darling, Jr. from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;
Dr. John A. Mannick from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning October 1;
Dr. Edwin W. Salzman from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning October 1;
Dr. George D. Zuidema from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning November 1.

To reappoint:

Dr. Luis L. de Mola as Graduate Student Assistant and Clinical Fellow in Pathology, for the period November 1, 1957 through June 30, 1958;
Dr. Susanne J. Lamdin as Assistant Resident in Anesthesia for one year, beginning September 20;
Dr. Ingrid Sondergaard as Clinical and Research Fellow in Psychiatry for one year, beginning October 1;
Dr. James L. Vanderveen as Clinical Fellow in Anesthesia for one year, beginning October 1.

To extend the appointment of:

Dr. Gilles G. C. Lyon as Clinical and Research Fellow in Neurology, from October 1, 1957 through March 31, 1958.

To appoint:

Dr. Jean N. Angelo as Research Fellow in Neurology for one year, beginning January 1, 1958;
Fred E. Bell, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
Dr. Margit M. Bellman as Clinical Fellow in Psychiatry for one year, beginning September 3;
Dr. Clive B. Cameron as Research Fellow in Medicine for one year, beginning September 1;
Dr. Hans J. Eberlein as Fellow in Anesthesia for one year, beginning October 1;
Dr. Frank R. Ervin as Clinical Fellow in Psychiatry for one year, beginning September 15;
Dr. Edward Gitsch as Clinical Fellow in Surgery, assigned to Gynecology, for the period August 21 through December 21;
Dr. Derek S. Gordon as Clinical and Research Fellow in Neurosurgery for one year, beginning October 1;
Dr. John M. Head as Clinical Assistant in Surgery;
Sylvia F. Jackson, Ph.D. as Research Fellow in Medicine, beginning October 1;
Gillray Kandel, B.S. as Research Fellow in Psychology, in the Department of Anesthesia, beginning October 1;
Richard R. Kelley, B.A. as Research Fellow in Pathology for one year, beginning September 1;
Dr. Betty S. Roof as Clinical and Research Fellow in Pathology for one year, beginning September 1, to work with Dr. Aub;
Leslie F. Smith, Ph.D. as Research Fellow in Medicine for one year, beginning October 1;
Elizabeth M. Sparrow, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
Dr. Henry deF. Webster as Clinical and Research Fellow in Neurology for one year, beginning October 1.

* * *

In the summer of 1955 the late Professor of Neurology at the University of California, Robert Wartenburg, asked me to write a review article on myasthenia gravis, which he published. At his suggestion the *Deutsche Medizinische Wochenschrift* was given a direct translation of this and it appeared in November of that year. This resulted in an invitation from the Editor-in-Chief, Professor Heinz Kobcke of the University of Munich, to come there and give a lecture or two on this subject. Following this invitation, which was supplemented by one from the Chief of the Neurological Department, Professor Kurt Kolle, a Fulbright lectureship as a Visiting Professor for 4 months in 1957 was secured. I was strongly advised to give these lectures in German, if possible, and planned to have them written out first in straight short English sentences and to have a German secretary in Boston translate them literally into German sentences of equal brevity and clarity. By doing this the long cumbersome elaborate German sentences, with a couple of verbs tacked on at the end, would be avoided and, with my limited German, I would have a reasonable chance of reading them in an intelligent way before the students and staff of the University of Munich. The lectures were prepared in this manner, covering problems in the treatment and diagnosis of epilepsy, Parkinson's disease, and myasthenia gravis, and were sent to Professors Kobcke and Kolle.

We arrived in Munich in the early part of April of this year, at a time when the Medical School was on vacation. I was cheerfully informed that my lectures were excellent but the style of the German was not good enough for presentation and that they were being *"slightly"* modified to conform with better German habit. When I received them I was saddened to see that my short, carefully planned German sentences had been transformed into beautifully long, elaborate ones with the collection of verbs at the ends. I had nothing to do but to struggle with this arrangement.

The first lecture on Parkinson's disease was called for as an emergency measure by Professor Kolle when he was unable to give his lecture before the 400 students because of an acute laryngitis. The necessary rehearsals were not possible since the order of the presentations was changed. In the middle of this lecture I found a very brief sentence that had for some reason been spared by the professorial editing and I was able to say in German that this kind of German I liked more than anything else. This brought a loud burst of laughter from the student body and a stamping of feet that indicated approval. Nine lectures were given in German and one was given in English. During the last lecture there occurred a breakdown in the projection equipment and a considerable amount of freewheeling away from the text was necessary. This was really not too bad, because words I did not know were covered by English and a certain amount of gesticulation was permissible. The next day one of the staff members delicately commented that the extemporaneous part of the lecture, with the full use of my expressive abilities, was clearer to him and to his fellows than the formal and proper German text, which was frequently mispronounced and delivered without much expression.

We were most fortunate in living with a family whose Labrador retriever "Dusty" had whelped 7 puppies the day before we arrived. These puppies, since they lived in the garage, required the central heating for their welfare until almost the end of May. This meant that our own quarters were cozy and warm during that entire period, whereas in most houses central heating is specifically turned off about the middle of April. Our affection for these puppies was rewarded by the presentation of one of them as a farewell present which we brought back with us.

On May 6 we were invited to Berlin as guests for the "Rickfest" for the very modern international Benjamin Franklin Congress Hall built by American funds and whose architect, Hugh Stubbins of Lexington, is a friend and neighbor of mine. The trip was accomplished comfortably by air, since motor travel through the East Zone is rather hazardous for Americans. This "Rickfest" was different from any ceremony we had ever attended and explained the presence on half-built houses in Germany of small Christmas trees. When a building has had its roof completed (which used to be done by skilled ships' carpenters from seaports) the owner gives a special party for all of the workmen, their wives, and many friends. This begins with a speech by the chief carpenter, which is usually in the form of a poem, then a bottle of beer or champagne is broken on the highest beam of the building, i.e., the building is launched in a semi-nautical way, and a small Christmas tree or evergreen crown is hoisted solemnly to the highest point of the building and remains there until the building is completed. After the ceremony everyone goes to a nearby restaurant and feasts and drinks, with more speeches and entertainment, all on the owner, for several hours. Mr. Stubbins thought it would be nice to introduce this delightful custom to this country.

In addition to this interesting "Rickfest" we were most impressed by the sincere admiration of all the West Berlin people we met for the American airlift that kept this huge city supplied with every necessity for 18 months. This admiration extended over all West Germany and was one of the most powerful sources of cordial respect and affection toward the United States that we encountered.

Among the charms of the city of Munich to a visitor are the beautiful and clean blue streetcars. Not only are they pleasant to look at because of this light color, but both my wife and I were astounded by their quietness in operation. Several inquiries to my medical friends regarding this produced such absurd explanations that I realized further investigation was necessary. Furthermore, as these quiet cars went around curves it was obvious that the 3 single pairs of wheels articulated in some mysterious manner. Again, my medical friends had no satisfactory explanations, and indeed one suggested that it was an optical illusion. The matter came to a head about 10 days before we left in July, when a single streetcar was coming down the track with its nose definitely down as if it were sniffing the rails. As it came close one could see that the front platform contained about 20 uniformed motormen. There was no one else in the car and it carried a big sign reading "Fahrschule" (School Car). When we commented on this to our Munich hostess with whom we lived, she suggested that since her late husband had been an important member of the civil government, she could arrange for an interview with the head of the streetcar company where I could discuss details of this fascinating School. The appointment was made for 2 P.M. on one of the hottest days of the heat wave. First, the silence of the streetcars was explained by the consulting engineer, who was most pleased to have a visit from an American professor. The silence was due to the presence of 1½ inches of rubber tire between the two middle parts of the wheels. The other factor was that of the articulation of single wheels by means of a patented hinge arrangement under the car which the engineer demonstrated neatly on a model which was on his office desk. Then I was escorted to the School where motormen were being instructed in how to drive and operate the streetcars. He explained that in 33 days of schooling the pupils could be taught enough to take the streetcars into the maze of automobiles and bicycle traffic. They had a whole series of very interesting tests that such candidates had to pass before they were allowed to operate the cars. One of these, running for 7 minutes, involved the control of a model streetcar on a track while all sorts of traffic approached it from both sides. In my own effort (perhaps because of the heat) I had 9 collisions in 2 minutes and I was permanently disqualified from ever becoming a motorman in Munich. The second test involved a series of reaction times to 4 lights on the wall involving keys under each hand and each foot, all of which was worked on a moving paper for 7 minutes. It was so beautifully suited to our clinical investigation of Parkinson's disease that I made arrangements for the neurological associate in charge of the Nervenklinik in Munich to come over to the streetcar company to test his patients. We are planning to build such a unit in our own laboratory for such purposes.

The Professor in saying farewell to me commented on the fact that his clinic had never before been aware of this careful examination of the streetcar motormen in the School across the river, and he felt that one of the successes of the Fulbright lectureship was to bring this to his attention.

We brought back from Munich the Volkswagen which we used over there and this enabled us to attend the International Congress of the Neurological Sciences in Brussels — a 6-ring circus: Neurology, Electroencephalography, Neuropathology, Neuroroentgenology, and Neurosurgery, as well as the League against Epilepsy. Everybody in the neurological world seemed to be there in Brussels, and I did not meet many who were there, due to the fact that some 3,000 members were present at the Congress. My trouble with projection equipment followed me to Brussels. I completed my 10-minute official discussion of Professor Granit's paper on the control of voluntary movement with special reference to Parkinson's disease in the specified 9 minutes, and then during the last minute, when a single lantern slide was requested, the bulb blew out. Since that was not my fault, the chairman let me stand and the audience waited patiently while a new bulb was obtained and inserted in the lantern. It is doubtful whether any congress of this size, with so many disciplines combined, will ever be attempted again.

One of the most interesting hospitals that I visited on my trip from Munich to Brussels was the Königin-Elena Klinik at Kassel, Germany. This 110-bed private hospital, founded by the Queen of Italy in 1933 in a large private home on lovely grounds, is devoted entirely to the treatment of patients with Parkinson's disease. It is, therefore, a unique hospital. The present director is Dr. H. P. Schulz. He stated that patients remained there about 8 weeks and every minute of their days was spent in exercise, physiotherapy, and group efforts to improve speech, motor function, walking, etc. All modern medications were used in addition, and some 70 percent of the patients there were objectively much improved when they went back to their homes. The difficulty over here is in keeping what improvement is so achieved when patients are back in their old surroundings. I was surprised when Dr. Schulz stated that about 60 percent of his patients maintained this improvement and kept in close correspondence with the clinic. Of course, the exceedingly great embarrassment that most patients with Parkinson's disease have in the presence of normals is eliminated there since everyone is in the same situation.

In conclusion, both my wife and I feel that the people of Munich were most friendly and hospitable toward Americans. The medical groups were as helpful as they could be to me with my lectures, my awkwardness with German, and in making our stay very happy and pleasant. Finally, it seemed very worth while to make the effort in giving the lectures in the native language, as judged by the favorable comments of appreciation that were received.

Robert S. Schwab, M.D.,
Neurologist

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CARDIOVASCULAR RESEARCH LABORATORY

The last report from this Laboratory appeared in The News in April 1953. Since then, important changes have taken place in the Laboratory. Dr. Ivan D. Frantz, Jr., who wrote the last report, was subsequently called to the University of Minnesota as Research Professor of Medicine. This recognition is a just reward for the very excellent work Dr. Frantz was doing here, and has continued to do in Minneapolis, on the problem of atherosclerosis. Regrettably, however, it left the Hospital without a chief cardiovascular investigator, and the Laboratory was closed during 1955-56. The Laboratory site during this period was used as temporary quarters for the Dermatology Laboratories.

Last fall, when the Dermatology Laboratories moved into their present new quarters in the Warren Building, the space on the first floor of the Research Building again became available for the Cardiovascular Research Laboratory. Reestablishment of the Laboratory commenced at that time and its reorganization still continues.

With its reopening, the orientation of the Laboratory has shifted its emphasis. Our primary goal now is the elucidation of active ion transport by cells and tissues.

The major constituent of the body is water. It comprises about 60% of the weight of a normal individual, so that in an adult weighing 150 pounds it amounts to some 40 quarts or 10 gallons of water. This volume of water is distributed so that about 2/3 is contained within the cells and 1/3 makes up the fluid environment which bathes the cells — the extracellular fluid. The extracellular fluid is further compartmentalized so that about 1/3 is contained within the blood vessels and the remaining 2/3 is the immediate environment of the cells — the watery bridge which connects the cells of the body with their adjacent blood supply.

The function of the heart is to keep the extracellular fluids in continuous circulation so that the actual environment of the cells is constantly replenished. Oxygen, food stuffs, cellular building blocks, and hormones are carried to the cells in this circulating fluid which maintains a continuous shuttle system from lungs, gastrointestinal tract, liver, and endocrine glands to even the remotest cells of the body. Waste products leaving the cells are picked up by this circulating extracellular fluid and removed by the kidneys which, in addition, maintain within narrow limits the amount of water and salts in the body.

One of the problems which has intrigued investigators for many years is the curious distribution of salts between the fluid inside the cells and the fluid bathing the cells. The intracellular fluids contain largely salts of potassium, while the extracellular fluids contain almost exclusively sodium salts. How this separation is maintained is the central problem of our present investigation.

When a cell dies it loses its ability to accumulate potassium and exclude sodium so that these two ions then distribute themselves equally on either side of the cell membrane. Thus this ion distribution is closely related to the life process. We know that cells maintain their volumes by means of these ion distributions. We know that the energy stored in this distribution of salts is utilized for nervous conduction. We know that several enzyme systems within the cells are dependent for their normal function upon the presence of critical concentrations of ions. We know that major functions of the kidney, stomach, and gut are related to their ability to selectively transport ions.

It is not surprising, perhaps, that in disease such a ubiquitous and important function of cells may become disturbed. Abnormal distributions and concentrations occur in some illnesses and these abnormalities further disturb cellular function and health. We know that certain specific disturbances in renal handling of sodium can produce hypertension, and some workers feel that all types of hypertension have a disturbance in sodium distribution as their basis. With failure of the heart, excessive quantities of water are retained, resulting in edema or dropsy. This fluid accumulation is secondary to retention of sodium by the kidney. Abnormalities of sodium and potassium distribution occur in the failing heart muscle itself, and the beneficial action of digitalis and other heart medicines is related to their ability to correct this abnormal distribution of salts. It was, in fact, the disturbances in salt distribution associated with heart failure that stimulated our present interest in how the normal distribution of ions is maintained.

At the present time we know that energy liberated by the cells in the metabolism of food stuffs is utilized to operate the ion pumps. This energy is first stored in that ubiquitous cellular currency of energy — adenosine triphosphate, ATP. What we seek to learn is the nature of the ion pump and how the energy stored in ATP is used to make the pump work.

In this first year of reorganization the work in the Laboratory has been greatly aided by the association of Drs. John Anderson and Lot B. Page. Dr. LeRoy Maffly has just arrived to replace Dr. Anderson, who is returning to Newcastle-upon-Tyne, England, where he will continue to pursue his interest in ions at the medical school there.

To broaden the base of research in this Laboratory we are currently seeking a suitable investigator with a primary interest in atherosclerosis research to add to the group. This is the field of study seeking to learn the causes and prevention of arteriosclerosis. My predecessor, Dr. Frantz, worked here in that field, and because of its great importance we hope to continue work in this direction in the Laboratory.

In the past year a very generous gift was made to the Hospital by the John A. Hartford Foundation, Inc. for the support of the Cardiovascular Research Laboratory. We are indebted also to the American Heart Association and the United States Public Health Service for assistance.

The Cardiovascular Research Laboratory is very much a youngster in the illustrious laboratory family of the Massachusetts General Hospital. We hope it will grow rapidly, nurtured in such a favorable environment, to contribute significantly to the knowledge and teaching of medicine.

Alexander Leaf, M.D.,
Assistant Physician
and *Chief Cardiovascular Investigator*

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VOLUNTEER GROUPS

MGH Staff Wives Association

Of particular enjoyment to MGH patients are the Chapel concerts, sponsored by the Staff Wives Association, at which a member of the Hospital family is the performing artist. At the first concert this season, held on October 23, Miss Adele Khoury, secretary in the Anesthesia Department, was the contralto soloist; and Mrs. Milford D. Schulz, wife of our well-known radiologist, gave an organ recital on November 6. At the third concert two young students from the New England Conservatory — Miss Elizabeth Sheerin, soprano, and Miss Mary Macauley Monks (daughter of the late Dr. John P. Monks and Mrs. Monks), alto, will provide pleasure for the patients with a program of duets and solos.

As we report these concerts which add so much to the trying days of some of our long-term patients, we wish to enter a plea which we hope may reach the eyes or ears of some generous person. The Chapel piano is in a hopeless condition, and a GOOD UPRIGHT, worthy of our concert pianists, *must* be found. If anyone can assist the Staff Wives Association in this project, please call or write Mrs. John D. Crawford, Old Concord Road, Lincoln (telephone number CL9-8323), or the Staff Wives Reception Center, Extension 2366.

Distaff Club

Our first official meeting of the year was held on September 26 in the Penthouse. It was a most enjoyable get-together. The highlights of the meeting were a talk by Dr. Dean Clark, orienting us to the Hospital, and a tour of the institution conducted by Mrs. Soma Weiss. The program was particularly helpful to the newcomers and provided a pleasant review for the other members. The hostess for this meeting was Mrs. Bob Bullwinkel.

Our next affair was a Barn Dance, held in Concord on October 26. Plans were under the supervision of Mrs. Alfred Miller. The dance was open not only to Distaff members and their husbands, but also to all their friends. There was an admission charge for members, but guests were admitted free. It was a most enjoyable evening for all who came.

Preliminary work for the annual Massachusetts General Dance is already under way by the co-chairmen: Mrs. John Lewis, Jr. and Mrs. Bruce Sams, Jr. In order to make this major undertaking a success, it is essential to begin planning now. Committee members are being chosen from the Staff Wives Association and the Distaff Club to work on the many details that such a gala event involves.

Ladies' Visiting Committee

More than 80 members of the Hospital family and Ladies' Visiting Committee attended a morning coffee party in Baker on October 1. The event was in honor of Mrs. Alice Burnell who has retired after 15 years as manager of the General Store, which is under the auspices of the Ladies' Visiting Committee for the benefit of the Hospital. Mrs. Burnell is leaving Boston to make her home in Florida.

Mrs. Carl Warton, who has also been with the Store for many years, will replace Mrs. Burnell; and Miss Margaret Powers, a former ward secretary, will assist her.

The Committee is delighted to announce that the General Store is to be drastically renovated, with a new decorative scheme and equipped with more modern fixtures. During its existence, the Store has made a real place for itself, not only on account of the variety of its "small wares" but also on account of its cheerful atmosphere. It is most grateful for its loyal customers who, it is hoped, will be pleased with the improvements.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of The News, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora

F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Children's Medical Service

Crawford, J. D., Gribetz, D., Diner, W. C., Hurst, P., and Castleman, B.
The influence of vitamin D on parathyroid activity and the metabolism of calcium and citrate during calcium deprivation.
Endocrinology 61:59-71.

Heeley, A. H., and Talbot, N. B.
Apparatus for collection of urine from female infants.
Pediat. 19:127-128.

Hillman, D. A., Crawford, J. D., and Talbot, N. B.
Observations on the etiology of dwarfism in congenital telangiectatic erythema.
Pediat. 20:268-271.

Laron, Z., and Crawford, J. D.
Skin turgor as a quantitative index of dehydration in rats.
Pediat. 19:810-815.

Talbot, N. B., Crawford, J. D., and Cook, C. D.
Application of homeostatic principles to the management of nephrotic patients.
New England J. Med. 256:1080-1084.

Endocrinology

Benedict, P. H.
Hormone assays as tests of endocrine function, and some endocrine products currently available.
Prog. in Gynec. 3:77-85.

General Medicine

Harwood, R.
Severe diabetes with remission: Report of a case and review of the literature.
New England J. Med. 257:257-261.

General Surgery

Barnes, B. A., Gordon, E. B., and Cope, O.
Skeletal muscle analyses in health and in certain metabolic disorders. I. The method and analysis and the values in normal muscle.
J. Clin. Investigation 36:1239-1248.

Benedict, E. B., and Nardi, G. L.
Peptic stenosis of esophagus.
Am. J. Surg. 93:238-241.

Laboratory Science

Matoltsy, A. G., and Sinesi, S. J.
A study of the mechanism of keratinization of human epidermal cells.
Anat. Rec. 128:55-68.

Neurology, Neurosurgery, and Psychiatry

White, J. C.
Painful postoperative scars. (Editorial)
Surg., Gynec. & Obst. 105:105-106.

Williams, V. P.
The neuroses in general practice.
In M. Clin. North America, vol. 41, no. 5. Philadelphia, W. B. Saunders Company, pp. 1429-1438.

Ophthalmology

Dunphy, E. B.
Radioactive isotopes in ophthalmology.
Am. J. Ophth. 43:857-865.

Dunphy, E. B., Dowling, J. L., Jr., and Scott, A.
Experience with radioactive phosphorus in tumor detection.
A.M.A. Arch. Ophth. 57:485-490.

Pharmacology

Darby, T. D., Goldberg, L. I., Gazes, P. C., and Arbeit, S. R.
Effects of sympathomimetic amines and nitroglycerin on the acceleration ballistocardiogram of the dog.
J. Pharmacol. & Exper. Therap. 119:248-254.

Books

Beck, W. S.
Modern science and the nature of life. (Foreword by Homer W. Smith)
New York, N.Y., Harcourt, Brace and Company.

* * *

Here are a few notes on the International Congress of Dermatology which you might find interesting.

The Congress was held in Stockholm, Sweden, from July 31 to August 6, 1957, and was attended by 1200 dermatologists from 51 countries. Despite violent differences over various theories in Dermatology, the arguments were always friendly, and we often remarked that we wished our countries could settle their differences as reasonably. There were scheduled to be 50 Russian dermatologists at the Congress, but at the last minute only 1 appeared. Everyone tried to pump him for information, of course, but he merely smiled and talked of other things.

The opening ceremony was held at the Konserthuset, where the Nobel Prize Awards are made. It is a beautiful building, somewhat reminiscent of Boston Symphony Hall, and was very colorful with the flags of the countries represented suitably draped. The sessions were held in various auditoriums at the Royal Institute of Technology on Valhalla Way (which address all the Nordic members took as a matter of course). The buildings were relatively new, with a simple, modern type of architecture, but not extreme. The acoustics of the auditoriums, of course, were perfect, and every single public address system worked perfectly, always! My paper was given in an auditorium seating 500, with earphones at each desk, so I had to keep one eye on my audience in front of me, one eye on the men in the translation booths behind me, to see that I was not going too fast, and one eye on the slides which were projected on the wall over my head. This required, as you can see, only three eyes.

My paper was entitled "Treatment of various types of depressed scars by fibrin foam injection". During the past two and one-half years I have been treating acne, smallpox, and traumatic scars by injecting a suspension of fibrin foam beneath the scars. This raises the scar to skin level and, since a shadow is no longer cast by its walls, it is much less conspicuous. The fibrin foam is gradually absorbed, and replaced by normal, soft fibrous tissue.

One of the most rewarding facets of the Congress was one day spent in studying 100 clinical cases, which were very well presented, at one of the hospitals.

The Swedish hospitality justified its reputation. There were trips by boat to Drothingholm Palace, where we enjoyed an opera performance by members of the Royal Opera Company, in a theatre which has remained unchanged for over 150 years. There was also a trip to the University town of Upsala. Membership in the fraternities or clubs at the University is not based on social stratum or even prowess on the football field, but on geographical district alone. However, one may choose either one's own home or the district from which one's father or mother came originally. There was, of course, the usual healthy competition among the various clubs, with remarks of both admiration and horror about one club which had rented part of its ground floor to shops.

The Swedes are very proud of their social security program as applied to medicine. In contrast to the English system, in which a general practitioner is paid a certain amount to look after all the ills of a specified number of people, the Swedish system pays a certain amount — say, two dollars for each office visit — and the doctor is expected to charge whatever he desires above that. The patient always expects to pay some additional fee, and the doctor may set whatever amount he thinks is just. If a patient is really unable to afford anything extra, he may receive free medical care at any of the clinics of the hospitals. One important feature is that the government pays for all medications needed in chronic diseases, such as tuberculosis or cancer.

The highlight of the European trip was an almost "state dinner" in the home of Professor Joseph Hoët of the University of Louvain in Belgium. Dr. Hoët addressed the New England Diabetes Association in 1956 on "Metabolic stress of pregnancy: Its relation to diabetes and to congenital malformation", and he visited Dr. Bauer and the Massachusetts General Hospital at that time. The excellence of the food (the lobster had just been flown from Norway that day, the salad was a work of art, etc., etc.) and the number and rarity of the wines impressed even my wife (who thinks she can cook a good meal). I also met Dr. Eduardo Braun-Menendez of Buenos Aires, Argentina, who is well known in Boston for his work on hypertension. The conversation was most stimulating. The young ladies of the family entertained by singing songs in French, Spanish, German, and, in our honor, Negro spirituals which they had memorized from a Harry Belafonte record!

Arthur S. Spangler, M.D.,
Assistant in Dermatology

New addresses:—

Dr. David W. Barrow (*E.S.* 1937), Milwaukee County Hospital, Milwaukee 13, Wis.

Dr. Austin M. Brues (*E.M.* 1932), Argonne National Laboratory, Lemont, Ill.

Dr. Robert E. Carroll (*E. S.* 1943), Columbia-Presbyterian Medical Center, 180 Fort Washington Ave., New York 32, N. Y.

Dr. Adolfo C. Coussirat (clin. fel. *An.* 1957), Beverly Hospital, Beverly, Mass.

Dr. Willard Dalrymple (*M.* 1947), Harvard

University Health Service, Cambridge 38, Mass.
Dr. Trygve Gundersen (s. *Oph.*), Hotel Fensgate, 534 Beacon St., Boston, Mass.
Dr. Reed Harwood (*W.M.* 1936), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Jimmie Brockman Holland (r.p. *Psychiat.* 1955), 302 Crosby Blvd., Buffalo 26, N. Y.
Dr. Benjamin B. Jackson (*S.* 1953), 1425 St. James Court, Louisville, Ky.
Dr. Mervyn Jeffries (clin. fel. *An.* 1957), Children's Medical Center, Boston, Mass.
Dr. Donald S. King (*E.M.* 1920), 4 Downing Rd., Hanover, N. H.
Dr. Richard N. Kleaveland (*S.* 1952), Paulsen Medical and Dental Bldg., Spokane 4, Wash.
Dr. James G. Miller (*E.M.* 1943), Mental Health Research Institute, University of Michigan, Ann Arbor, Mich.
Dr. Duane H. Mitchel (*M.* 1943), Belcaro Medical Bldg., 915 S. Colorado Blvd., Denver 22, Colo.
Dr. Robb H. Rutledge (*S.* 1950), 800 5th Ave., Fort Worth, Tex.
Dr. Katharine E. Spreng (*M.* 1955), 10210 Edgewater Drive, Cleveland, Ohio
Dr. Joseph M. Stolman (*Dn.* 1956), 305 Summit Ave., Brighton, Mass.
Dr. Marcy L. Sussman (r.p. *R.* 1930), Diagnostic Laboratory, 1130 E. McDowell Rd., Phoenix, Ariz.
Dr. Jack E. Tetirick (*S.* 1952), 105 Indian Springs Drive, Columbus, Ohio
Dr. Jerome Waldman (a.r.s. *Or.* 1949), 1893 Sheridan Rd., Highland Park, Ill.; 217 Water St., Waukegan, Ill.
Dr. LeMoyne White (*E.M.* 1942), 82 Marlborough St., Boston 16, Mass.

Brief bits:—

Dr. Joseph S. Barr has been named medical adviser to the claims department of Liberty Mutual Insurance Company.

Dr. Henry K. Beecher was one of four anesthetists who were designated as leaders in conjunction with the Centennial Celebration of the Danish Medical Society this past summer. The others were Sir Robert Macintosh of Oxford, Dr. Ralph M. Waters, Professor *Emeritus* of Wisconsin, and Dr. John Gillies of Edinburgh, who was at one time a Visiting Lecturer at this Hospital.

Dr. Oliver Cope was the opening speaker at the meeting of the Hartford Medical Society, held in Hartford, Connecticut, on October 7. His subject was "What I have learned from Cushing's syndrome". On October 17 he was a participant on a panel on "Diagnosis and management of surgical lesions of the adrenals" at the 43rd Clinical Congress of the American College of Surgeons, held in Atlantic City. On October 31 he addressed the Central New York Surgical Society at Syracuse, N. Y., on the subject "Surgery of the adrenal gland".

Dr. Erich Lindemann will deliver an address at the November meeting of the World Health Organization in Geneva, Switzerland, on the subject "The effect of tranquilizing drugs".

Dr. Robert R. Linton was invited to participate in the Sommer Memorial Lectureship sponsored by the St. Vincent's Hospital of Portland, Oregon, during the first week in May. This consisted of lectures and conferences with the staff on surgical subjects, with special reference to some of the vascular diseases and the newer advances in this field. The following week was spent as a visiting surgeon at St. Vincent's Hospital, attending clinics, making ward rounds, and operating on a few patients. It was an interesting two weeks. "The pleasantest part of the trip followed these rather strenuous activities, and this consisted of a day's fishing and running the rapids of the Mackenzie River with Dr. Allen M. Boyden (*W.S.* 1934) and Mrs. Boyden of Portland, in which Mrs. Linton accompanied us. The climax of the trip came when Dr. Gordon E. Jones (*E.S.* 1939) of Olympia, Washington, flew me in his Cessna "180" plane up to Stuart Island in British Columbia for some excellent salmon fishing." In the middle of July, Dr. Linton took part in the Postgraduate Medical Assembly of Southwest Texas, held at Houston, where he spoke on bleeding esophageal varices, the postthrombotic syndrome with ulceration, and varicose veins.

Dr. George M. Noss attended the 12th International Dental Congress held in Rome, Italy, from September 7 to 14, and presented a clinic on "Apicoectomy and periapical curettage".

We have received this new address for Dr. Alfred Yankauer (*C.M.* 1941): Professor of Paediatrics, Madras Medical College, Madras, India. Dr. Yankauer, Director of the Bureau of Maternal and Child Health of the New York State Department of Health since 1952, has been granted a one-year leave of absence to accept a position as medical officer with the World Health Organization. Dr. Yankauer will become Visiting Professor of Social Paediatrics at the University of Madras Medical College. The assignment is part of a World Health Organization project which seeks to create a center for teaching and research in paediatrics in Madras.

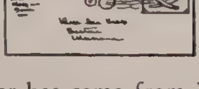
BIOGLETS

Dr. Robert E. Key, Assistant Resident in Orthopedic Surgery — born in Fort Worth, Texas, December 27, 1928; B.S. (combination), Texas Christian University, Fort Worth, 1948; M.D., Texas University Medical Branch at Galveston, 1951; Intern, rotating, and General Surgery, Cleveland City Hospital, Cleveland, Ohio, 1952; U.S. Army: Lieutenant, U.S. Army Hospital, Fort Belvoir, Virginia, 1953-55; Assistant Resident in Orthopedics, Children's Medical Center, Boston, Massachusetts, 1955-56; married; one child.

Dr. Douglas G. Tompkins, Assistant Resident in Orthopedic Surgery—born in New York City, December 23, 1926; A.B., Yale College, 1946; M.D., College of Physicians and Surgeons, New York City, 1950; Intern in Surgery, Presbyterian Hospital, New York City, 1950-52; Lieutenant, MC, USNR, U.S. Naval Hospital, Newport, Rhode Island, 1952-54; Assistant Resident in General Surgery, Millard Fillmore Hospital, Buffalo, N. Y., 1954-55; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1955-56; married; two sons; present address: Chestnut Hill, Massachusetts.

Dr. John D. Turner, Assistant Resident in Medicine—born in Pasadena, California, October 2, 1930; B.A., University of California, Berkeley, 1952; M.D. and C.M., Faculty of Medicine, McGill University, Montreal, Canada, 1956.

Dr. Alfred L. Weber, Assistant Resident in Radiology — born in Fulda, Germany, September 23, 1926; German Army, Berlin and Hungary, 1944-45; College and Graduate School, Würzburg, Heidelberg, Marburg, 1945-51; M.D., Munich University, 1951; Resident in Pathology, University of Munich, 1952; Intern, rotating, Toledo Hospital, Toledo, Ohio, 1953; postgraduate work, University of Michigan, Ann Arbor, 1954-55; Resident in Medicine, Herman Kiefer Hospital, Detroit, Michigan, 1954-55; leave of absence for 9 months to observe in hospitals in England, Sweden, Austria, and Turkey, 1955-56.



This letter has come from Dr. Richard C. Batt (r.p. *R.* 1940), our "singleton" in Glens Falls, N.Y. — that is, the only MGH-er engaged in practice in his immediate vicinity. He writes:

Your last plea for progress notes, obituary data, etc. was referred to my trusty wife. Anne promptly dashed off a public relations job reminiscent of her former work at Fox Movietone. When I explained to her that you are not the editor of a pulp magazine, we added a bit of starch to the manuscript.

I eventually found my ideal location in 1946 in the city of Glens Falls, which is about 50 miles up the Hudson River from Albany. The specialties are well represented here, and the quality of work done in our fine community hospital is much better than average. I have had 3 medical papers published since being here. Local speaking dates, staff sessions, and committee meetings are no exception in a small community! With 3 board radiologists alternating as a team, there are 2 of us at the hospital and the other in our office during the day. Night and week-end calls are divided between Dr. J. A. Glenn (PBB 1950) and me. Dr. Edgar Birdsall, our local X-ray pioneer, is still very active and stimulating at 81 years of age.

Anne and I are rearing 2 boys and a girl. The school system is excellent. Skiing and skating are our favorite winter pastimes, and spring brings good fishing. Summer provides much fun at our camp on Lake George, which is only a 20-minute drive from the hospital.

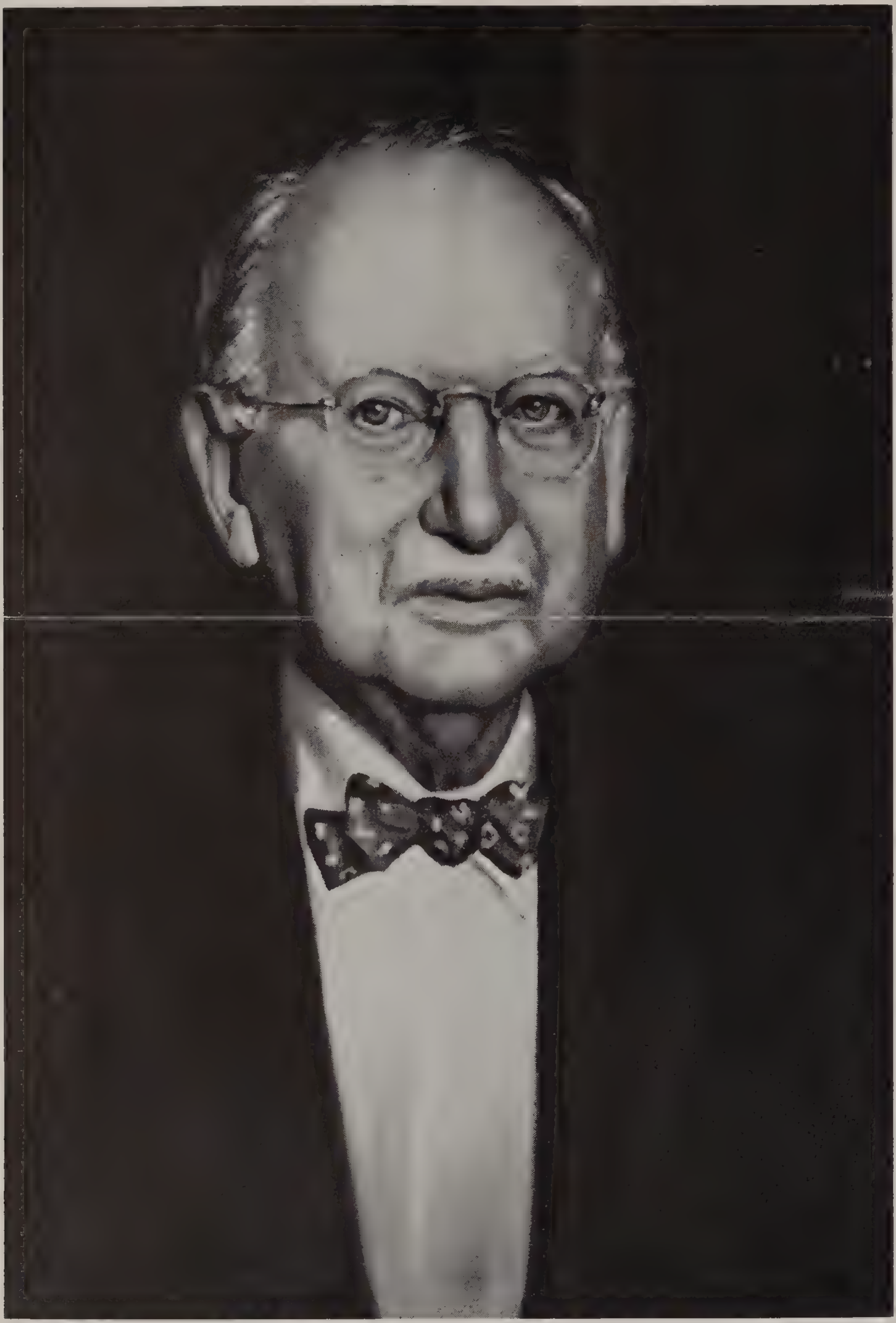
Returning to the M.G.H. is a biannual affair with us. Anne now likes the bean town almost better than her old metropolis down river. New York City and Montreal involve about the same travel time from here by auto or airline as Boston does. Since being here I have enjoyed visits from Otto Sahler, Larry Robbins, Phil Giddings, Ernest Daland, and other MGH-ers. Let's have more of you drop in.

Dr. Robbins received this letter from Dr. Frederick S. Tomchik (r.p. *R.* 1955) last June. It was written from the 2nd General Hospital, APO #180, and reads:

After all this time you're probably wondering whether I disappeared behind the Iron Curtain. Despite the lack of correspondence, I've often thought about you all, even sometimes when I didn't have a puzzling set of films in front of me! When I think back, it's hard to believe that it's already been nine months since I left the General. They've been so eventful, it would take quite a volume to even sketch them.

I've wound up as radiologist for the 2nd General Hospital in Landstuhl, Germany, which is roughly 15 miles east of the Saar and 25 miles north of the northeast border of France. The nearest city is Kaiserslautern, about 10 miles east. The hospital is one of the biggest and is reputed to be probably the best of the Army hospitals in Europe, with sizable medical, surgical, pediatric, ob-gyn, orthopedic, urologic, and neuropsychiatric services. Within two months the neurosurgical center for Europe will also be here, and we will lose the infectious disease center, which has provided me with more cases of active tuberculosis every month than I saw in a couple of years before. I'm the only head of a major department who isn't a lieutenant colonel or colonel; but, as a dyed-in-the-wool civilian, I'm not too rank-conscious. Anyway, the brass round here doesn't do any rank-pulling with medical colleagues, and the whole staff is really very pleasant, cooperative, and congenial.

When I first got here, there were two other radiologists. Col. Harold Vinson, who spent a year in therapy with you at M.G.H. some years ago, was the department head, and he was much interested in hearing news of you and the other staff members. Within two months after I arrived, Colonel Vinson developed a cervical disc which had to be operated upon, and when he recovered from that he retired. Meanwhile, the other radiologist was transferred, leaving me as head of the department by default, you might say. The only trouble with being chief is that, although I



Dr. Frederick H. Verhoeff, Consulting Chief of Ophthalmology, Massachusetts Eye and Ear Infirmary — photograph of a portrait done by Eleanor K. Cavanaugh (Mrs. Thomas Cavanaugh)

have 15 people in the department, I'm the only radiologist. However, it is rumored that eventually I will get an assistant partially trained in radiology. Apparently radiologists are pretty scarce in the Army. Some hospitals have none.

In addition to the hospital X-ray work, I read films and do fluoroscopies for several outlying dispensaries and other units—for a while even including two Canadian fighter wings. I occasionally have films sent in for consults from as far away as Italy and France. A while back a U.S. general from Pakistan was flown up for a G.I. work-up, and next Tuesday I will be fluoroscoping an admiral from the Mediterranean fleet. Right up in the social swim! We have about 2500 examinations a month to read and about 90 fluoroscopies, which is quite a load for a slowpoke like me. Lately, the commanding officer of the hospital, Colonel DeYoung, who is a radiologist, has been coming down for a few hours a week to help me out, and that's made life tolerable here, although it's still too much of a load for comfort. In addition to the routine X-ray and administrative work, I conduct teaching conferences each week for the medical and surgical services. Needless to say, many of the MGH teachings are passed on at these sessions, and I usually manage to come up with a "pearl of the week" that's new to at least most of the staff. Unfortunately, as you might expect with a young patient group getting free medical service, many examinations are negative. Except for lymphomas and a few soft-tissue and bone tumors, I have seen exactly *no* malignant disease. However, every few days a really interesting case turns up. Some unusual ones lately included an osteitis pubis in a 19-year-old male, chondrodystrophia calcificans congenita, a classic renal artery aneurysm, and the other day a "phantom disc" phenomenon in the symphysis pubis of a young woman 8 months pregnant. I've never heard of the latter before. We have a great deal of traumatic work, chiefly auto accidents, but also including a very impressive number of mandibular fractures incurred in the gasthauses (taverns). Strangely enough, although we have a corresponding number of fractured metacarpals, they are always incurred by falling down!

Life over here has been pretty hectic and complicated, and up to a month or so ago, Barbara and I hardly ever had a whole hour to relax in at the end of the day. Barbara and the boys got here in late November, and we moved three times before finally getting our permanent government apartment two months ago. We really have been settled for only about a month. The children have been having a running and so far indecisive battle with a host of Old World viruses, and have just got over the chickenpox. The major excitement lately was the arrival of our fourth boy two months ago. He's such a big fellow compared with the others that I still occasionally "scratch me head" over it! The new baby, our government apartment, and our household goods all arrived in a two-week period, and for a couple of weeks things were a real chaos here. But now things are looking up, and the worst is behind us.

Spring busted out all over here quite early, and for six weeks the weather most of the time has been like May at home. We now have an excellent maid who is unfortunately available only three or four days a week. However, the last three week ends she's been able to stay here with the children while Barbara and I got out for a look at some of the country within 150 miles of here. We've been to Baden-Baden and the northern part of the Black Forest, to Heidelberg and the country north and east of it, to Frankfurt, and to the most scenic part of the Rhine, between Koblenz and Mainz, where it winds between steep hillsides, most of which have vineyards clinging precariously to them, carefully terraced to keep them from falling into the Rhine. Along there, there is a castle or the ruins of one perched up on top of almost every imposing hill overlooking the river. All round here, close to home, the countryside is really beautiful, with quite a bit of variety. Just from here to the Rhine, a matter of some 30 miles, one passes through rolling rural scenery, with the hills a patchwork of small fields and woods, then into thick evergreen forests, then to the vineyard-covered slopes just west of the Rhine, and finally onto the flat plain that runs east to the Rhine. And, of course, every few miles one passes through another little German village, with its red sandstone houses and its red-tiled roofs, usually tucked into a cleft between the hills. The distribution of population in Germany, away from the relatively few large cities, is entirely different from that in the U.S. It is extremely rare to see separate farmhouses set in the middle of the farms. Instead, the farmers live in villages, averaging perhaps a few dozen houses which are only a few miles apart in general, and they walk out to their fields to work them. Around the towns the fields are big crazy quilts of separate small plots, with no buildings at all on them. I gather that this is a remnant of the Middle Ages when they banded together for protection in small villages, sometimes with a wall completely around the town (we've visited one such town), and often with a castle sitting on a nearby hill. So far, Barbara and I have just sort of surveyed the possibilities for sight-seeing, but we're eagerly awaiting a chance to get round more. We are only a few miles from one branch of the Autobahn, so we can get to places fast on that.

While we were at Fort Sam Houston, C. C. [Chiu-chen Wang] and I visited Colonel Isherwood at the hospital. He was a very pleasant man and very kindly spent almost two hours with us, showing us round his departments (he actually has two on the base, about a half-mile apart). I was surprised to find that he had an Elima biplane unit. They are using it for cerebral angiography as well as for angiocardiography, and apparently both the X-ray and Neurosurgery Departments are very much satisfied with the cerebral angiograms. I thought you and Dr. Wyman might be interested in their technique, so I jotted it down. They use 50% Hypaque. The factors were as follows: AP view — 110 KVP, 300 MA, 4 impulses (1/30 sec), 36″ distance; lateral view—same factors except that distance is 50″. They let me have two sample films which they picked out at random and which they said were about what they usually get, and I'm sending them along to you. I'm also including a photograph of me which I hope will pass muster for your gallery!

Best regards to all the staff.

THE NEWS

No. 172 Boston, Mass. December 1957

THE MIXTER LABORATORIES FOR NEUROSURGICAL RESEARCH

In 1911 (the exact date is not available) Dr. William Jason Mixter was given the "neurosurgical assignment" under his father, Dr. S. J. Mixter, at the Massachusetts General Hospital. Two beds for neurosurgical patients were made available. On October 16, 1957 the fourth floor of the new Warren Building was designated "The Mixter Laboratories for Neurosurgical Research". Thirty-one professional and technical workers are currently engaged in various research activities in these laboratories.

More than two hundred guests attended the dedicatory exercises and were privileged to hear from Dr. Dean A. Clark, General Director of the Hospital, Professor Francis O. Schmitt, a member of the Board of Trustees, and the Rev. Dr. Theodore P. Ferris, rector of Trinity Church, Boston. Through these speakers they learned of the current research program of the Neurosurgical Service, the importance of such an effort to the Hospital, and the debt which the Massachusetts General owes to the family for which the floor is named. The possibility that the Mixter Laboratories might, in the near future, be a part of a "Neurologic Center" was mentioned by Dr. Clark. Many of us find this prospect most exciting for reasons which I shall attempt to outline.

With a rapidity which all but numbs comprehension, advances have occurred in the realm of the physical sciences. Twelve short years have demonstrated that man can tap the power residing in the atom and that he can cast a new "moon" into the universe. Such feats as these have, however, been accompanied by a fear that man has so little understanding of his brain, his mind, and his collective actions as to have sown the seeds of his own destruction through being educated (i. e., acquiring skills) beyond his intelligence.

In attempts (which at times seem almost frantic) to understand, protect, and heal the brain, there is a danger that science, which has been defined as "systematized knowledge derived from observation, study, and experimentation", is in danger of being superseded by opinions, intuitions, and even superstitions. This is so because science gives its answers only slowly, reluctantly, and after hard labor on the part of the seeker. The other methods of arriving at "truth" need only a glib exponent and a credulous audience.

To overcome this danger it is desirable that the normal and abnormal functioning of the brain be considered in relation to the normal and abnormal functioning of the body as a whole. To this end we have university faculties, medical schools, and hospitals working together and, particularly, is this true at the Massachusetts General. The Warren Building is an integral part of the Hospital; no space barrier separates its activities from those of other units. The laboratories for the Department of Neurology on the third floor connect directly with clinical facilities in the Baker Memorial. Similarly, the neurosurgical laboratories adjoin and are easily accessible to bed space for the care of neurosurgical patients. Thus, in the midst of a busy general hospital there has been developed a nucleus for the study and care of disease of the central nervous system. It is hoped that psychiatry will also become a part of this loose but potentially effective federation. The value of such an arrangement is well illustrated by a brief consideration of the problem of circulatory disease of the brain. This illness may manifest itself by physical disabilities or mental or emotional aberrations or a combination of all three. Patients so affected are almost invariably first seen and treated by a general physician. Such "medical" illnesses as arteriosclerosis, hypertension, and congenital heart disease are frequently present and may be important factors in the illness. Finally, certain patients appear to benefit from surgery, particularly when intracranial hemorrhage has occurred. Advance in a better understanding of the diagnosis and treatment of circulatory disease of the brain obviously requires the cooperation of physicians, neurologists, neurosurgeons, and psychiatrists; and any cooperative effort is materially enhanced by spatial contiguity.

At the same time, however, there is reason to believe that research is best pursued in as independent an atmosphere as possible. Therefore, the development of a "center" consisting of cooperating, autonomous services would seem to have certain advantages over the more closely knit but potentially isolated "institute".

The contributions that the neurosurgical investigator can make to an understanding of the function of the human nervous system are several. One of the most important, however, might be termed philosophical. Neurosurgeons, more than any other group, see, feel, and work directly upon the living brain. From these experiences they are apt to form the opinion that brain disease, be it manifested by a physical disability or disorders of thinking or behavior, has a "physical basis" subject to correction by "physical means". Whether this opinion be completely true, it would appear to be a logical foundation upon which to build a body of knowledge based upon observation, study, and experimentation. For these reasons, the interests of the neurosurgeon lie in obtaining further information concerning such things as the effects of drugs and various forms of physical energy upon the central nervous system, as well as the anatomical and physiological foundations upon which brain function is based. Within this framework a number of investigations are now in progress and will be materially benefited by the more adequate quarters and the opportunity for frequent exchange of ideas among the scientific and clinical workers, which the new Mixter Laboratories make possible. Radioisotopic and microchemical techniques are being employed to further our understanding of cerebrospinal fluid circulation, the cause and prevention of brain swelling secondary to injury and disease, and the manner in which the central nervous system accepts or rejects certain toxic and nutrient substances offered it by the blood stream.

If certain chemical compounds could be incorporated into malignant cells and then made radioactive, the treatment of brain tumors would be materially advanced. This study, combining the skills of a physicist and a biochemist, is being vigorously pursued.

With focused ultrasound it is possible to produce discrete areas of destruction deep within the central nervous system. This technique may prove valuable as a method of treatment, but the necessary investigations of the pathologic nature of the lesions and the ability of the operator to control their size and shape are currently yielding new information concerning the reaction of the brain to injury and the manner in which it attempts to carry out the reparative process.

Precise placement of electrodes deep within the brain to study function in terms of electrical activity as well as to control intractable pain is still another program of investigation which has been materially enhanced by the new laboratories.

The examples thus far given are intended to illustrate the type of "basic research" which is now in progress, and we are fortunate in having with us scientists who hold appointments on the Hospital staff as well as in the basic science departments (e. g., physics, chemistry, and biology) of Harvard University and Massachusetts Institute of Technology. It is becoming increasingly evident that this type of collaboration, as well as the closer cooperation with specialists in other branches of medicine and surgery, offers the best chance for advancement of our knowledge of the function of the central nervous system. It is, however, incumbent upon a hospital laboratory to concern itself with patients, and provision has been made for this important aspect of medical investigation. Radioisotopic localization of brain tumors is a valuable procedure in daily use within the Hospital. The apparatus employed for such localization is now installed in quarters adjoining the neurosurgical floor of the Baker Memorial. On the other side of these quarters, moreover, is the Physics Laboratory, which is continually investigating ways of improving the reliability of the method.

Space has also been made available for the detailed study of patients with unusual diseases of the central nervous system before and after surgery. Furthermore, the postoperative results of all our neurosurgical procedures will be under continuous scrutiny through the use of modern statistical methods. For example, we are presently investigating the relative safety and value of cerebral arteriography as a result of our experiences with this procedure in about one thousand patients. This is a necessary but difficult and time-consuming task, which will be made much easier by the availability of proper facilities and techniques which can be applied not only to this but to other clinical studies.

Within a few weeks we shall have an electron microscope available, and by its use we hope to learn more about the microscopic anatomy, normal and pathologic, of the brain and spinal cord. Perhaps it will help us to understand more of the nature of the changes which lead to the development of brain tumors and of the effectiveness of the newer methods of treatment.

Although this general survey of our current program might indicate a relatively fixed approach to a study of the central nervous system, this is definitely not the case. We are fortunate in the fact that our laboratories are sufficiently flexible in design to allow for a changing emphasis in research activity. We look forward particularly to those changes, which will allow even closer collaboration with other clinical services as well as with our colleagues in the basic science disciplines. And as we study, observe, and experiment, we hope the scientific results will prove to be of importance not only to the survival of sick patients but that they will also help us to understand better the basic processes underlying the variations in thinking, acting, and feeling which so profoundly influence all of man's activities.

H. Thomas Ballantine, Jr., M.D.,
Associate Visiting Neurosurgeon

For 51 years the names of Dr. W. Jason Mixter and the Massachusetts General Hospital have been very closely associated. Dr. Mixter began his internship at the Hospital in 1906. In 1909 he received his first appointment to our Visiting Staff as Assistant to Surgeons in the Out-Patient Department. Two years later he was made Assistant Surgeon to Out-Patients, and from then on he was elevated successively to Surgeon to Out-Patients, Assistant Visiting Surgeon, Associate Surgeon, and Visiting Surgeon, until 1933 when he became Chief of the Neurosurgical Service. He held this position until February of 1941, when he was appointed to our Board of Consultation. However, in June of that same year he was asked to resume the direction of the Neurosurgical Service during the absence of Dr. James C. White, the newly appointed Chief of Neurosurgery, who was called away from the Hospital for the duration of World War II. During this period Dr. Mixter continued to serve also on the Board of Consultation. From 1947 to 1949 he was a member of our Board of Trustees, and in 1954 he was made an Honorary Surgeon, which title he still holds. In addition to all this, he has served as Consulting Surgeon at McLean Hospital for the past several years.

Dr. Mixter's professional record has been so well known, both nationally and internationally, since the early days of his pioneering work in the field of neurosurgery up to his more recent work in reference to the problem of the ruptured intervertebral disk, that any attempt to do justice to either the doctor or the man, short of a full-length biography, is frustrated by the magnitude of the subject. Unashamedly admitting our inadequacy for the task, we fall back upon these closing words of the address delivered by the Reverend Dr. Theodore P. Ferris, rector of Trinity Church in Boston, at the dedication of the Mixter Laboratories in the Warren Building on October 16: "The proof of the man is the man himself, the man you meet, the man you instinctively trust or distrust. Dr. Mixter is the kind of man to whom thousands of people have been willing and glad to intrust their lives. Nothing more need be said."

In addition to the dedication of the Mixter Laboratories, Ether Day was observed this year with the customary awarding of Service Pins. The occasion took place in the Moseley Rotunda, with Dr. Clark presiding and awarding the pins. Professor Francis O. Schmitt brought greetings from the Board of Trustees and expressed appreciation of the Board for the years of faithful service on the part of so many who are associated with the Hospital. Professor Schmitt then gave a most interesting and informative talk on "The Mixter Laboratories: Crossroads of natural and medical sciences".

Then came the awarding of the pins. Of the nonprofessional group, 111 received pins for 5 years of continuous service at M.G.H., 59 for 10 years, 4 for 20 years, and 5 for 30 years. Members of our professional staff who received 25-year pins numbered 5 this year.

Following these ceremonies, refreshments were served in the Warren Building Lobby, followed by tours of the new Mixter Laboratories.

* * *

Dr. Edwin F. Cave was elected 2nd Vice-President of the American College of Surgeons, at their recent meeting in Atlantic City. Dr. Cave conducted a four-day panel discussion there on "Fractures in children and the aged".

Dr. Arthur L. Watkins was the recipient of the Presidential Award, given by the International Poliomyelitis Congress this past summer, in recognition of his "contributions to mankind in the fields of medicine and science". A letter to Dr. Watkins from Stanley E. Henwood, Executive Secretary of the Congress, reads:

> In view of your absence from the banquet in Geneva on July 11, 1957, we are mailing to you, under separate cover, the "Presidential Award", which was established by resolution for each physician and scientist who presented a paper or otherwise participated in a panel of the International Poliomyelitis Conferences held in New York, Copenhagen, Rome, or Geneva.
>
> These awards were presented by the President of the Congress, Mr. Basil O'Connor, on the night of the banquet in Geneva in appreciation of outstanding and valuable services which helped to make the past four International Poliomyelitis Conferences successful.

The Board of Trustees, at their meetings on October 4 and 18, voted:

To accept with regret the resignation of Dr. William P. Chapman, effective October 31;
To rescind the appointment of Dr. Walter G. Heimann, who was to have begun on April 1, 1958 as Assistant Resident in Radiology;
To advance the appointment of Dr. Harold Simon as Second Assistant Resident in Radiology to April 1, 1958.

To reappoint:

Sidney Leskowitz, Ph.D. as Associate Immunologist in the Department of Medicine for one year, beginning October 1;
Dr. Richard J. Stenger as First Assistant Resident in Pathology, for the period October 1, 1957 through June 30, 1958.

To appoint:

Dr. Florosa A. Bautista as Assistant Resident on the Children's Medical Service, for the period September 1, 1957 through February 28, 1958;
Dr. Joseph H. Dimon, III, as Assistant Resident in Orthopedic Surgery for one year, beginning November 23;
Mr. William H. Ellett as Assistant Biologist (Medicine) for one year, beginning September 24;
Dr. Henry C. Everett, III, as Assistant Resident in Psychiatry for one year, beginning November 1;
Dr. Frederick A. H. Greenwood as Assistant Resident in Orthopedic Surgery for one year, beginning February 4, 1958;
Dr. Richard F. Jackanich as Assistant Resident in Anesthesia, beginning October 15;
Dr. Wallace A. Jones as Third Assistant Resident in Pathology for one year, beginning July 1, 1958;
Philip E. Kubzansky, Ph.D. as Assistant Psychologist, effective as of September 15;
Dr. George F. Kwass as Third Assistant Resident in Pathology for one year, beginning July 1, 1958;
Dr. Kasian Lim as Second Assistant Resident in Surgery, for a period of three months, beginning October 1;
Dr. John J. Martin as Second Assistant Resi-

dent in Radiology, beginning July 1, 1958;

Mr. Emery Nyilas as Assistant Biologist (Medicine) for one year, effective as of August 5;

Dr. Victor J. Rosen, Jr. as Third Assistant Resident in Pathology for one year, beginning July 1, 1958.

The Trustees also voted that the Psychiatry Service be granted an additional Resident in their House Staff, making a total of four.

At their meetings on October 9, 16, and 23, the General Executive Committee voted:

To accept the resignation of Dr. Ruth K. Freinkel from the position of Resident in Dermatology, effective October 31. It was also agreed that upon her return to duty, presumably March 1, 1958, she would be appointed to the position of Clinical and Research Fellow in Dermatology;

To accept with regret the resignation of Dr. Marc P. Moldawer from the position of Clinical Assistant in Medicine, effective September 30;

To conclude the appointment of Dr. Henry J. Powsner as Research Fellow in Neurosurgery, as of September 20.

To change the titles of:

Dr. Hugh R. Dudley, Jr. from Research Fellow in Pathology to that of Clinical and Research Fellow in Pathology, retroactive to July 1;

Dr. Edmund Klein from Assistant Resident in Dermatology to that of Clinical and Research Fellow in Dermatology, effective as of September 1.

To promote from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1, 1958:

Dr. Richard H. Aster
Dr. George P. Baker, Jr.
Dr. Robert B. Layzer
Dr. John T. Potts, Jr.
Dr. John W. Singleton
Dr. Donald W. Sutherland
Dr. David Van Buskirk
Dr. Peter M. Yurchak

To reappoint:

Dr. Gardner F. Fay as Assistant Resident in Orthopedic Surgery, for the period September 1 through December 31;

Dr. Edward L. Ferguson as Second Assistant Resident in Surgery, beginning August 1;

Dr. Ira A. Ferguson, Jr. as Second Assistant Resident in Surgery, beginning September 1;

Dr. Harold L. May as Second Assistant Resident in Surgery, beginning November 1;

Dr. Lot B. Page as Clinical and Research Fellow in Medicine for one year, beginning October 1, with the privilege of being called in consultation occasionally in the Baker Memorial and Phillips House, but not to be allowed to admit patients under his own name;

Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. José R. Solis as Graduate Student Assistant and Clinical Fellow in Pathology, for the period November 12, 1957 through June 30, 1958.

To appoint:

Dr. Neville A. Booth as Clinical Assistant in Dentistry, effective immediately;

Dr. Jacques A. Corvilain as Graduate Student Assistant in Medicine, beginning October 7;

Dr. Paul R. Draskóczy as Research Fellow in Pathology, for the period September 16, 1957 through June 30, 1958;

Dr. Mircea Enesco as Clinical and Research Fellow in Medicine, effective as of October 1;

Dr. Norton Fishman as Clinical Assistant in Dentistry, effective immediately;

Dr. Leonardo S. J. Martin as Clinical and Research Fellow in Urology for one year, beginning November 1;

Dr. Antal M. Martonosi as Research Fellow in Medicine, beginning October 1;

Dr. Hermann K. Schueler as Clinical Fellow in Urology, effective as of October 1;

Dr. John B. Taylor as Clinical Assistant in Dentistry, effective immediately;

Dr. Jerome K. Walker as Clinical Assistant in Dentistry, effective immediately;

Irving Weliky, B.S. as Research Fellow in Medicine, effective as of October 1.

The General Executive Committee also appointed the following doctors as Graduate Student Assistants in Medicine, assigned to Cardiology, for one year, beginning October 1:

Dr. Nerio E. Casanova	Cabimas, Venezuela
Dr. Garo H. Garabedian	Jerusalem (old city), Jordan
Dr. Arthur H. Griep	Evansville, Ind.
Dr. Masao Ikeda	Tokyo, Japan
Dr. Huk Y. Ma	Pusan, Korea
Dr. Jean-Rene Marcoux	Quebec, Canada
Dr. Huerta C. Neals	Jersey City, N. J.
Dr. Robert T. Rengarts	Boynton Beach, Fla.
Dr. Patrick P.-T. Wu	China

Having obtained his permanent Massachusetts license, Dr. Frank R. Ervin's title has been changed from Clinical Fellow in Psychiatry to that of Clinical Assistant in Psychiatry.

MASSACHUSETTS EYE & EAR INFIRMARY

At a meeting of the Executive Committee of the Massachusetts Eye and Ear Infirmary, held on October 21, the following appointments were made:

Dr. Joseph L. Dowling Jr.—Assistant in Ophthalmology;

Mr. Edward O. Dunlavey—Research Assistant in Otology;

Dr. Carl H. Ernlund—Consulting Surgeon in Otolaryngology;

Dr. Ann S. Morgan—Assistant Resident in Ophthalmic Pathology;

Dr. Harold S. Novey—Research Fellow in Otology.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Endoscopy

Atkins, L., Benedict, E. B., and Dreyfuss, J. R.
Correlation of symptoms with gastroscopic findings, X-ray findings and gastroscopic biopsy in gastritis.
Gastroenterology 33:385-388.

Benedict, E. B.
Positive stomach diagnosis by gastroscopic biopsy.
In Surg. Clin. North America, vol. 37, no. 5, Philadelphia, W. B. Saunders Company, pp. 1239-1247.

General Surgery

Barnes, B. A.
Mortality of burns at the Massachusetts General Hospital.
Ann. Surg. 145:210-222.

Barnes, B. A., Eddison, G. G., and Cope, O.
Preparation and bioassay of a low magnesium liquid diet for human consumption.
Surgery 42:643-651.

Taylor, G. W.
The role of the surgeon in advanced cancer.
Radiology 69:341-343.

Laboratory Science

Jeanloz, R. W.
The synthesis of D-allosamine hydrochloride.
J. Am. Chem. Soc. 79:2591-2592.

Jeanloz, R. W., and Gansser, C.
4-*O*-methyl-D-glucosamine hydrochloride (2-amino-2-deoxy-4-*O*-methyl-D-glucose hydrochloride).
J. Am. Chem. Soc. 79:2583-2585.

Jeanloz, R. W., and Jeanloz, D. A.
Partial esterification of methyl 4,6-*O*-benzylidene-alpha-D-glucopyranoside in pyridine solution.
J. Am. Chem. Soc. 79:2579-2583.

Jeanloz, R. W., Schmid, D. M., and Stoffyn, P. J.
3,4-di-*O*-methyl-D-galactosamine hydrochloride (2-amino-2-deoxy-3,4-di-*O*-methyl-D-galactose hydrochloride).
J. Am. Chem. Soc. 79:2586-2590.

Jeanloz, R. W., Stoffyn, P. J., and Tremege, M.
Chemical structure of beta-heparin.
Federation Proc. 16:201.

Schmid, K.
Characterization of an "electrophoretically homogenous" human serum albumin.
J. Am. Chem. Soc. 79:4679-4682.

Tarasiejska, Z., and Jeanloz, R. W.
The synthesis of D-gulosamine.
J. Am. Chem. Soc. 79:2660.

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* * *

VOLUNTEER GROUPS

DISTAFF CLUB

This is a very busy time of year for the Distaff Club. On November 15 a very successful bake sale was held in the Brick Corridor. The Club wishes to thank all those who supported this sale.

It is due to such enthusiastic support that the Club is able to undertake its various projects. A recently completed project was the making of thirteen pairs of gay curtains for the Children's Medical Clinic in the Out-Patient Department. Members who participated in the sewing included Mrs. R. P. Fornshell, Mrs. N. T. Griscom, Mrs. J. N. Hicks, Mrs. R. T. N. Hunt, Mrs. A. L. Hurst, Mrs. J. W. Josse, Mrs. W. E. Karnes, Mrs. A. E. Miller, Mrs. G. C. E. Mueller, Mrs. J. B. Tallon, Mrs. D. G. Tompkins, and Mrs. G. D. Zuidema. The committee was supervised by Mrs. J. J. Greenberg.

Our November meeting heralded the holiday season very appropriately. Mrs. Mildred Nolte, from the Y.W.C.A., showed us the professional way to wrap Christmas gifts. Mrs. S. B. Friedman and Mrs. E. W. Salzman were hostesses for this meeting on November 20, at the Hospital.

The second issue of the "Distaff News" was published the first week in December. This newsletter is enjoyed by all our members. It is edited by Mrs. Charles F. McKhann, III.

All of us are excitedly anticipating our annual Distaff Christmas Party. Committees are making preparations for the affair, which will be held on December 11, at 8 P.M., in the Penthouse. It is rumored there will be a surprise visitor at the party!

On December 17, members of the Club will gather to wrap gifts for children, which will be distributed at the MGH Christmas Party. This is always one of the pleasantest activities of the holiday season. Mrs. David Van Buskirk will be our hostess.

New addresses:—

Dr. Daniel K. Bloomfield (r.p. 1957), Dept. of Chemistry, Harvard University, Cambridge, Mass.

Capt. Robert D. Breer, MC, USAR (a.r.p. *C.M.* 1957), General Delivery, Weaver, Ala.

Dr. James M. Davis (*S.* 1948), 1661 Riverside Ave., Jacksonville, Fla.

Capt. Alexander N. Drescher, MC, USAR (clin. & res. fel. *C.M.* 1956), U.S. Army Hospital, Fort Carson, Colo.

Dr. George F. Emerson (*E.S.* 1939), 764 Main St., Hingham, Mass.

Dr. Benjamin B. Jackson (*S.* 1953), 1206 Heyburn Bldg., Louisville, Ky.

Dr. Zvi Laron (r.p. *C.M.* 1955), Dept. of Pediatrics B, Rambam Hospital, Haifa, Israel

Dr. Thomas C. Leinbach (a.r.s. *Or.* 1956), 330 N. Fifth St., Reading, Pa.

Dr. Sergio A. Leiseca (gr. stud. a. *S.* 1953), Ave. 49—3401—Kohly, Habana, Cuba

Dr. Marc P. Moldawer (clin. a. *M.* 1957), Baylor University College of Medicine, Houston, Tex.

Dr. Burness E. Moore (r.p. *Psychiat.* 1942), 152 E. 73d St., New York 21, N. Y.

Dr. Vincent P. Perlo (a.n.), Warren Building, Massachusetts General Hospital, Boston 14, Mass.

Dr. Oswald H. Robertson (*W.M.* 1914), Dept. of Biology, Stanford University, Stanford, Calif.

Dr. David B. Sheldon (S. 1951), 10911 Weyburn Ave., Los Angeles 24, Calif.

Dr. Philip Solomon (a. psychiat. 1937), 57 Chatham St., Brookline 46, Mass.

Dr. Jack E. Tetirick (*S.* 1956), 131 S. Grant Ave., Columbus, Ohio

Dr. Norman Trieger (*Dn.* 1955), 29 Commonwealth Ave., Boston 16, Mass.

Dr. John L. Wilson (*E.S.* 1940), Dept. of Surgery, School of Medicine, American University of Beirut, Beirut, Lebanon

Brief bits:—

Dr. Edward B. Benedict attended the meeting of the American College of Gastroenterology on October 22 and discussed a paper by Dr. Rossien and Dr. Stanton entitled "A critical evaluation of roentgenology and gastroscopy in the diagnosis of gastric disorders".

Dr. Mary A. B. Brazier has been appointed a Consultant to the National Institute of Neurological Diseases and Blindness of the National Institutes of Health.

Dr. Benjamin Castleman attended the International Congress of Clinical Pathology in Brussels last July. Following the meeting he visited several medical centers in Zurich, Holland, Copenhagen, and London. He saw many former MGH-ers, all of whom wished to be remembered to their friends here. They included Dr. Charles G. DeMuylder of Louvain (gr. stud. a. *S.* 1948), Dr. Andries Querido of Leyden (clin. & res. fel. *M.* 1950), Dr. Hans H. Wandall of Copenhagen (clin. fel. *S.* 1946), Mrs. Uytte Wang also of Copenhagen (a former pathology technician here), and George Cunningham, Professor of Pathology at the Royal College of Surgeons in London. Dr. and Mrs. Castleman were entertained by Professor George Payling Wright of Guy's and his wife, Dr. Helen Payling Wright. They both wished to be remembered to their friends at M.G.H.

Dr. John D. Reeves spoke at the Southwest Regional Cancer Conference held in Fort Worth, Texas, on September 20 and 21. He talked on "Diagnostic applications of radioactive isotopes" and also on "Supervoltage X-ray and cobalt-60 therapy".

Dr. Carter R. Rowe moderated a two-day symposium on "Fractures in the aged" at the recent meeting of the American College of Surgeons in Atlantic City, New Jersey.

Dr. Grantley W. Taylor lectured before the California Academy of General Practice, at their meeting in Los Angeles on November 5. His subject was "Treatment of breast cancer". He also served as panelist on the program for the Pan-Pacific Surgical Association, held in Honolulu on November 19, where he spoke on "The treatment of carcinoma of the breast".

Dr. Claude E. Welch has succeeded Dr. Grantley W. Taylor as Chairman of the Tumor Board at M.G.H.

We were very glad to receive this letter from Capt. David L. Collins, Jr., MC, USAF (*S.* 1955), written from the 3615th USAF Hospital, Craig Field, Alabama:

I am chief of surgery at a modest-sized hospital at Craig Air Force Base, Alabama, serving a population of about 6,000. Nearly 90% of our patients are dependents, so a large part of the surgery I do is in pediatrics and gynecology. I also take a turn in obstetrics and do a few Cesareans.

We are enjoying our brick duplex home at 94 B, Pine Glen Apartments, Selma, Alabama; the weather (wonderful during the cold months and tolerable during the summer because of complete home and hospital air conditioning): more free time (on duty every 9th night and week end); getting paid; and, last but not least, our 8 pound 1 ounce boy, Li'l' Davey, born October 18.

Best wishes to all our MGH friends.

It was very good to receive this letter from Capt. Arthur E. Baue, MC, USAF (a.r.s.), written from the 6208th USAF Hospital, APO 74, c/o Postmaster, San Francisco, California. The letter was written on October 28. In light of the now completed elections in the Philippines, it is interesting to read what Capt. Baue says regarding the then forthcoming balloting.

My wife and I had a very pleasant 18-day cruise from San Francisco to Manila, via Hawaii and Guam. We are now at Clark Air Force Base in mid-Luzon, about 50 miles north of Manila. This is in the middle of what was once Huk territory round Mount Arayat. The Huk uprising has practically disappeared or been crushed, so it is no longer considered a problem.

It is now just 2 weeks before the Philippine national election, and the authorities are busy confiscating firearms in hopes of preventing an uprising following the death of Magsaysay. Most candidates are claiming to be his political heir.

The hospital here is quite adequate and serves all military services in the South Pacific from Burma over to Borneo and up to Okinawa. The bombing victims from Saigon arrived here shortly after the incident.

Best wishes to all at the M.G.H.

This letter has come from Dr. Hubert A. Shaffer (a.r.p. *R.* 1932), our "singleton" in Morgantown, West Virginia:

Since leaving M.G.H., early in 1933, I have been practising in West Virginia, my home State. I practise radiology in Morgantown, doing most of my work at the Monongalia General Hospital, but I also do the medical radiology for the student health service of West Virginia University which is located here. (Our football team invaded Boston in October and beat Boston University 46-6! Please excuse the bragging, for West Virginia University is my alma mater.) Morgantown is less than sixty air miles south of Pittsburgh, with which our airport has commercial air service.

I married a Miss Love, from Virginia, and we have two sons. The older son is a freshman this year in pre-medicine and, if he keeps up the good work he has done so far, he should be in the medical school in a few years. Our younger son is in the ninth grade and doing very well. We all love to go out to swim and play golf at our new Lakeview Country Club. Its wonderful 18-hole championship course was built in a forest and overlooks a beautiful lake several miles long. Our town of about 30,000 people has two private 18-hole courses.

On a 145-acre tract adjacent to the Monongalia General Hospital, West Virginia University is erecting a completely air-conditioned 25 million dollar building with over 3,000 rooms for the medical, dental, pharmacy, and nursing schools—the first in the United States to be all under one roof. The first portion of the building is complete and is occupied by the dental school and the first two years of medicine. The second portion of this building, which will include the teaching hospital and clinic, is under construction. It will be completed in less than three years, at which time the two-year medical school will be expanded to four years and the four-year school of nursing started. In the next few years there will be a great expansion in the teaching personnel needed in all four schools, and then I hope there will be several more MGH-ers in my town!

Capt. Thomas G. Gabuzda, MC, USAF (*M.* 1956) has written us from the 36th Tactical Hospital, APO 132, c/o Postmaster, New York, N. Y. His letter, dated October 18, reads:

Enclosed is a check for subscription to The News. I look forward to the straws of information it will bring, since news from the U.S.A. is no longer easily available.

My present position is as ward officer in the 75- to 100-bed military hospital at the U.S. Air Base in Bitburg, Germany. My chores are strictly in internal medicine, under which domain influenza falls—much to my present dismay! The medical ward averages some 45 to 55 beds. This manages to keep me busy and, in addition, supplies "interesting cases" from time to time.

For approximately 6 weeks after flying over, Stella and I lived in a hotel because of the serious housing shortage here. We are now very happily settled in a new cozy apartment in Bitburg, where 80% of the buildings have been newly built since the destruction of the war.

We have managed to see much of the nearby beautiful Mosel Valley and have cultivated a taste for the local Mosel wine. German beer is second to none. We have already traveled to Switzerland, and are now planning a trip to Denmark and also to Sweden, where I hope to visit Karolinska Hospital in Stockholm. We will then have to dig in for the winter, since the roads in this relatively isolated part of Germany in the Eifel are sometimes hardly safe even for mountain goats, much less for automobiles! At any rate, we are very contented here and look forward to our 2-year stay.

Our warmest regards to all our friends at the M.G.H.

This letter containing Hospital family news has come from Dr. Ernest H. Picard (a.r.p. *N.* 1957). Dr. Picard does not include his military title, and gives as his address 435 Sumner Drive, San Antonio, Texas. His letter reads:

Since I'm stationed at Brooke Army Hospital at Fort Sam Houston, I have seen many old friends here as they come through the Army Medical Service School on their way to becoming G.I. physicians. The most recent was Carl Brownsberger (a.r.p. 1957), who was assigned from here to Korea. Before that, Gil Hermann (*S.* 1955), Quent Stiles (*S.* 1956), Bob Breer (a.r.p. *C.M.* 1957), and Sandy Drescher (clin. & res. fel. *C.M.* 1957) provided pleasant company.

Capt. Gilbert Hermann, MC, USAF (*S.* 1955) has sent us this letter from the 48th Surgical Hospital, APO 59, c/o Postmaster, San Francisco, California:

Just a short note to let you know my address, so that I can keep up on current events at the M.G.H. via The News until I return.

The Army, in its infinite wisdom, decided that I could best serve my country in Korea. That strictly unilateral decision was carried out forthwith and at present I am one of the two surgeons at the 48th Mobile Army Surgical Hospital in Pusan.

The living conditions here are ranked among the best in Korea for two reasons: inside johns and hot and cold running water 24 hours a day. We also have electricity after 10 P.M., when the generators don't break down.

There is much that is ugly and dirty in the Far East, but much more that is fascinating, exotic in its strangeness, and, in Japan at least, esthetically pleasing. To phrase it differently —things could be worse.

This letter, addressed to "all our MGH friends", has come from Dr. Wilma Canada Diner (a.r.p. *Path.* 1951 & r.p. *R.* 1954). Her husband, Jack Diner, is a graduate of our School of Medical Illustration.

I had suspected that I might be a "singleton" in Little Rock, and am very happy to bring you up to date on our activities, as well as to tell you something about the active and growing Medical Center of which we are a part.

After eighteen months in the practice of radiology at St. Luke's Hospital in New Bedford, Massachusetts, I came along with my husband to Arkansas, the "Land of Opportunity", when he was appointed Medical Illustrator at the University of Arkansas Medical Center here in Little Rock. We have bought a home, acquired a son (Bradley Canada, now eight months old), and expect a second child this winter.

Since last September I have been working part time in the Department of Radiology, and now work half time as assistant professor, doing diagnostic work only. The rest of my time is well spent with our home and budding family. Jack is an instructor in the Medical School, and keeps busy at routine illustrating, research projects, exhibits, and books. He is the only artist at the Center, and feels that his excellent background obtained at the Massachusetts General Hospital under the supervision of Mrs. Miller stands him in good stead.

The Medical Center is in new modern buildings on the west side of Little Rock. The hospital was completed shortly before we arrived, and the Medical School this past spring. The Center is architecturally beautifully constructed and is up to date in scientific facilities. A new dormitory for medical students and a research building are planned for the near future. The medical staff is, generally speaking, a young and energetic group, which we think is "going places" academically.

Dr. David Gould, from Johns Hopkins, is Director of the Department of Radiology, and there are two other full-time radiologists besides me. There are seven residents, who receive excellent training and experience in diagnostic and therapeutic radiology and isotopes, with emphasis upon each person's carrying his share of the routine work and encouragement to participate in clinical or basic research and clinical procedures within the department. The diagnostic division includes four fluoroscopic-

PHOTOGRAPH OF A PORTRAIT OF DR. W. JASON MIXTER
THE PORTRAIT WAS DONE BY ARTHUR POLONSKY, AND HANGS IN THE CONFERENCE ROOM ON THE MIXTER FLOOR OF THE WARREN BUILDING. THE PHOTOGRAPH WAS TAKEN BY FRANK T. MCCARTHY OF OUR PHOTOGRAPH LABORATORY.

radiographic units, an Elema biplane angiocardiographic unit, a Siemens tomographic unit, and four conventional radiographic units. On the therapy side are a 900 curie cobalt^{60} unit, a 220 KV deep therapy, and a 120 KV superficial machine, as well as a strontium applicator, and intracavitary and interstitial cobalt^{60} sources. An isotope laboratory is equipped for all diagnostic and therapeutic procedures and research, with the services of a full-time physicist.

The Medical, Pediatric, and Surgical Services are very active and academic interest is high. The hospital now uses about 300 beds and plans to have about 500 in use in the foreseeable future. The Out-Patient Clinic recorded 67,883 visits during the last fiscal year.

Incidentally, only residents of Arkansas (those living with parents or employed here for at least one year, but not students or armed forces personnel) are considered for entrance into the Medical School. This rule, we hope, will eventually be changed.

Little Rock, the capital of Arkansas, has a population of about 110,000. It is the commercial center and only large city in the State. The basis of its economy is surrounding cotton, corn and rice farming, beef-cattle breeding, bauxite mining, and other diversified smaller industries. The Little Rock Air Force base has recently added considerably to the city's income. The climate is moderate, though the summers seem very hot compared with those of New England. The winters are mild. There was no snow last year.

Culturally, one can take in the Community Concert Series of visiting artists, performances of the Little Rock Philharmonic Orchestra (a fairly new group), an art club at the Museum of Fine Arts, or the Community Theatre. There is much enthusiasm for the University of Arkansas Razorbacks, several of whose football games are always played in Little Rock. Medical School dances and frequent picnics and barbecues are well attended. We have joined a Great Books discussion group, and there are other similar groups. The Little Rock Junior College has recently become Little Rock University with the addition of the third and fourth college years, and a variety of courses are offered in the evening section. Arkansas is a land of wide open spaces as compared with the northeast, traffic is much less a problem, and standing in line for shopping or entertainment tickets is unusual. The Ozark Mountains area is within easy reach for vacationers. Of course, a lover of the seacoast finds it missing among the attractions out here.

I think this just about covers the situation except to say that we miss the M.G.H., Boston, and New England, and some day will pay you a visit with our family.

Best regards from Jack.

This interesting letter has come from Dr. William N. ("Nick") Jones (a.r.s. *Or.* 1954), our "singleton" in New London:

My growing family, consisting of a wife, a baby daughter, and a dog, are happily ensconced in the seaport town of New London, Connecticut, where I commenced private practice in orthopedics in January 1956. My work takes me across the State line into Rhode Island almost daily, where I am on the consulting staff at the Westerly Hospital, and once a week up to the Newington Home and Hospital for Crippled Children near Hartford. This is a well administered orthopedic hospital, staffed by orthopedic surgeons from throughout the State. Its physical facilities, combined with a well trained resident staff, are capable of providing the best of orthopedic management. My patient responsibilities seem to increase with the lapse of time, and each month I find I am traveling in larger and larger circles. Nevertheless, I am thoroughly enjoying the adventures that this type of specialty affords.

This geographical area makes a great appeal to me because of its remarkable variety. The country on all sides of New London and Westerly is picturesque in all seasons of the year. The staid character of rural New England life, which is strongly affected by the proximity of the sea with its numerous attractions, blended with the less appealing influences of expanding industry and growing population, combine to provide this region of New England with a unique versatility which makes it a good place in which to live the year round.

Both New London and Westerly are busy towns, well supplied with doctors; and the specialties are likewise well represented except for some of the surgical specialties—notably neurosurgery. However, on the rare occasions when outside medical assistance is needed, Providence and Boston on the one side and New Haven and New York on the other are near enough.

My wife and I recently acquired an old house (1740) in Old Mystic, which we call "Backachers", midway between New London and Westerly. We are painfully restoring it and hope to occupy it as our home in about a year's time. This will place me within twenty minutes' driving time of both local hospitals and only ten minutes away from my New London office.

To all of my MGH friends who take the trouble to read this I extend my personal greetings and invite you to stop by for a visit at any time when you are traveling along this section of the eastern Connecticut shore.

Dr. John W. Bell (*E.S.* 1946) has sent us this letter from the Veterans Administration Hospital, 4435 Beacon Avenue, Seattle 8, Washington:

Thank you very much for your recent follow-up letter. In order to bring your records up to date: I left Boston in December 1953 and spent 2 1/2 years at the Veterans Administration Hospital in Sunmount, N. Y., as Chief of the Surgical Service. This was an interesting and valuable experience.

In the summer of 1956 I left Sunmount to take up residence at the other corner of the country, i.e., Seattle, Washington. This is my home town, and I finally made it back after 14 years in Chicago, Boston, and New York State.

Seattle is a thriving medical community, with many MGH-ers. At present I am directing the Surgical Service at the Seattle Veterans Administration Hospital, and am Assistant Professor of Surgery at the University of Washington School of Medicine.

Am always glad to hear from you.

THE NEWS

1811

No. 173 Boston, Mass. JANUARY 1958

ELECTRON MICROSCOPY AT M.G.H.

The rather recent development of the electron microscope and its application to the study of biological and medical problems represent one of the most exciting advances in science. The reason the electron microscope is of such tremendous value to the biological or medical investigator is because it is capable of resolving (visualizing) very small objects, thus producing useful magnifications up to about one million times. This may be contrasted with the conventional light microscope, whose range of useful magnifications extends at the most to only several thousand diameters.

Electron and light microscopes are very similar in principle. They both produce direct magnified images by means of a series of lenses. What, then, is the reason for the far greater resolving power (i. e., useful magnification) of the electron microscope? The answer is very simple. Whereas the visible light waves used in illuminating the light microscope are relatively long, the corresponding electron beam used in the electron microscope has a very short wave length. Inasmuch as the resolving power, or the ability to magnify usefully, of an optical instrument is greater the shorter the wave length of the illuminating beam, it is obvious that the electron microscope can visualize far smaller objects than can the light microscope. A beam of electrons is, of course, invisible as such to the human eye but can be made visible by allowing it to strike a fluorescent screen. This is what is done in the electron microscope to produce a visible image of the object and is quite analogous to the formation of a picture in a television set. The image may, of course, be photographed also.

There are two other features of the electron microscope as compared with those of the light microscope which should be mentioned. One of these concerns the nature of the lenses employed. The familiar glass lenses of the ordinary microscope are opaque to electrons and thus cannot be used in electron microscopes. Electrons are charged particles and their paths can be altered by means of electrical or magnetic fields. Accordingly, most electron microscope lenses are no more than magnets which, by appropriately changing the direction of the electron beam, produce magnified images in much the same way that glass lenses alter the path of visible light to form images in the light microscope. The other feature of the electron microscope which we shall mention is the fact that it will operate only if there is a vacuum (as in a television picture tube) along the course of the electron beam. This is one disadvantage, because it precludes the examination of living cells or tissues.

The field of electron microscopy is in its infancy, having only begun as recently as the early 1940's, and there are still many problems to be overcome regarding the preparation of materials to be examined. Nevertheless, in a relatively short time the electron microscope has already brought to light an enormous amount of information regarding the ultrastructure of cells and tissues.

For the first time the intimate details of muscle, nerve, and other cell structures which are beyond the scope of light microscopy have been seen. The visualization of the formerly invisible viruses is now routine. In some instances even the individual molecules of some biological components have been photographed under the electron microscope. A sufficient amount of information regarding normal cells and tissue components has now accumulated to enable workers to start studying those changes occurring in disease which cannot be seen with the light microscope. It is anticipated that the examination of abnormal tissues with the electron microscope will reveal at least as much more information over and above that obtained by the light microscope as the latter discloses in comparison with gross visual examination.

A number of departments at the Massachusetts General Hospital have recognized the importance of the electron microscope in research to the extent that the Hospital now has three separate electron microscopy laboratories. These laboratories are working on varied problems, which serves to emphasize the manifold applications of this powerful new technique. Another reason for the great interest in electron microscopy in this institution stems from the close relationship between the Hospital and Professor Francis O. Schmitt's biology laboratories at the Massachusetts Institute of Technology. Dr. Schmitt, who is an Institute Professor at M.I.T. (and a member of the Board of Trustees of the Massachusetts General Hospital), has pioneered in the application of the electron microscope in the biological sciences as well as in the training of scientists in this field, including several of those now working at the Hospital.

The oldest electron microscope laboratory at the Hospital is an integral part of the Arthritis Unit in the Research Building and is under the direction of Dr. Jerome Gross. Dr. Gross has been studying the very important and ubiquitous protein collagen, which makes up such a large proportion of the structural framework of the human body. In collaboration with Dr. Schmitt he has studied, over the past few years, the basic structure and properties of collagen. At present he is investigating the mechanisms of formation and breakdown of connective tissue.

The second electron microscope laboratory is within the Department of Pathology in the Edwin S. Webster Laboratory. Here Dr. Spiro is studying the structure of kidneys in both normal and diseased states by examining very thin sections of tissue under the electron microscope. It is anticipated that this method of approach will result not only in advancing our fundamental knowledge of kidney disease but will also aid clinicians in the diagnosis of obscure renal ailments.

The newest electron microscope laboratory is located in the Mixter Laboratories for Neurosurgical Research in the Warren Building. The research program which will be undertaken here involves the study of the nervous system with the electron microscope in order to obtain more fundamental knowledge regarding its function and fine structure. It is hoped that results obtained will help to clarify some of those changes which occur in pathological conditions.

In closing it might be mentioned that the setting up of an electron microscope laboratory is no inconsiderable undertaking. The training necessary to produce a competent electron microscopist is highly specialized and, accordingly, qualified personnel are in great demand. The cost of an electron microscope is in the vicinity of $30,000, and the required ancillary equipment costs perhaps as much. It should be noted in this connection that the U.S. Public Health Service provided a large part of the funds for the equipment in these laboratories at the Massachusetts General Hospital.

It is the conviction of those working in this field that the costs mentioned above are insignificant in view of the tremendous potentialities of the technique. Indeed, we are at the brink of a new era in scientific discovery, much as investigators of the last century were when employing the light microscope for the first time.

David Spiro, M.D.,
Assistant Pathologist

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The Government of Ecuador has conferred the Order of Merit on Dr. Paul D. White, in appreciation of his having started the Ecuadorian Cardiological Society.

Dr. Joseph S. Barr received the Presidential Award from the Fourth International Poliomyelitis Conference of the International Poliomyelitis Congress this past summer, in appreciation for his participation in the Conference held in New York.

Dr. Madelaine R. Brown was honored as Medical Woman of the Year by the New England branch of the American Medical Women's Association, at the meeting of the Association held in Dallas, Texas, in November.

Dr. Laurence L. Robbins was elected President-elect at the annual meeting of the Radiological Society of North America, held in Chicago in November. Dr. Robbins will assume this new office in November 1958.

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At a tea, given in the Warren Building on October 22 in honor of Dr. Chester M. Jones, a Lecture Fund established in his name and an oil portrait of Dr. Jones were presented to the Hospital. The presentation speech was made by Dr. Daniel S. Ellis, on behalf of the large number of professional colleagues, students, patients, and friends of Dr. Jones who had helped to make these gifts possible. Mr. Francis C. Gray, Chairman of our Board of Trustees, accepted the gifts on behalf of the Hospital. Dr. Walter Bauer spoke of Dr. Jones's contributions to the Hospital, the Harvard Medical School, and to American medicine. In closing, Dr. Jones expressed his appreciation and gratitude for the recognition which had been shown him.

The Board of Trustees, at their meeting on November 8, voted to appoint:

Dr. Frank K. Austen as Resident in Medicine for one year, beginning July 1;
Dr. Lloyd Caplan as Resident in Psychiatry at McLean Hospital, beginning October 1;
Dr. Roman W. DeSanctis as Assistant Resident in Medicine for one year, beginning July 1;
Dr. Thomas E. Gaffney as Assistant Resident in Medicine for one year, beginning July 1;
Dr Alan H. Goldberg as Assistant Resident in Anesthesia, beginning July 1;
Dr. Peter J. Gomatos as Assistant Resident in Medicine, for the period July 1, 1958 through December 31, 1958, and as Resident in Medicine for the period January 1, 1959 through December 31, 1959;
Dr. Mehran Goulian as Assistant Resident in Medicine for one year, beginning July 1;
Dr. Robert H. Jones as Resident in Medicine for one year, beginning July 1;
Dr. Walter Kaupe as Resident in Psychiatry at McLean Hospital, beginning July 1;
Dr. David M. Klein as Second Assistant Resident in Neurosurgery, assigned to Neurology, for the period January 1 through August 31;
Dr. Jan Koch-Weser as Resident in Medicine for one year, beginning July 1;
Dr. Donald B. Martin as Resident in Medicine, for a period of six months, beginning July 1;
Dr. Richard F. Mayer as Assistant Resident in Pathology, assigned to Neuropathology, for a period of six months, beginning January 1;
Dr. Egbert H. J. Mueller as Resident in Psychiatry at McLean Hospital, beginning July 1;
Dr. Herbert A. Newman as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Jack Rice as Resident in Psychiatry at McLean Hospital, beginning July 1;
Dr. Harvey D. Rothberg, Jr. as Resident in Medicine for one year, beginning July 1;
Dr. Richard V. Wilson as Assistant Radiologist, for the period November 25, 1957 through June 30, 1958;
Dr. Herbert Wohl as Assistant Resident in Medicine for one year, beginning July 1.

At their meetings on October 30 and November 13, 20, and 27, the General Executive Committee voted:

To promote:

Dr. William R. Blade to the position of Resident in Radiology for one year, beginning January 1;
Dr. Alexander Breslow to the position of First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Harold T. Dillon, Jr. to the position of Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Ira A. Ferguson, Jr. to the position of First Assistant Resident in Surgery, beginning January 1;
Dr. Robert S. Harper to the position of First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Betty J. McClellan to the position of Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Robert B. McFarland to the position of Second Assistant Resident in Pathology for one year, beginning July 1;
Dr. John Mealey, Jr. to the position of First Assistant Resident in Neurosurgery, for the period January 1 through August 31;
Dr. Richard C. Packert to the position of Resident in Radiology for one year, beginning January 1;
Dr. John T. Pollard, Jr. to the position of First Assistant Resident in Radiology for one year, beginning January 1;
Dr. Sanford I. Roth to the position of Second Assistant Resident in Pathology for one year, beginning July 1;
Dr. Richard L. Rovit to the position of Resident in Neurosurgery, for the period January 1 through October 31;
Dr. R. Neal Schneiderman to the position of Resident in Dermatology, beginning November 1, 1957;
Dr. Giles D. Toll to the position of Second Assistant Resident in Pathology for one year, beginning July 1.

To reappoint:

Dr. Clive B. Cameron for one year, beginning November 15, 1957, with a change of title to Clinical and Research Fellow in Medicine;
Dr. G Richard Dickersin as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Robert E. Key as Assistant Resident in Orthopedic Surgery for one year, beginning November 23, 1957;
Dr. Marie-Louise Levy as Clinical and Research Fellow in Anesthesia for one year, beginning October 29, 1957;
Dr. Joseph D. Sabella as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Dagoberto Sosa as First Assistant Resident, assigned to Neuropathology, for the period January 1 through August 31;
Dr. Douglas G. Tompkins as Assistant Resident in Orthopedic Surgery, assigned to the Lemuel Shattuck Hospital, retroactive to July 1, 1957, and to promote him to the position of Senior Resident in Orthopedic Surgery, beginning January 1, 1958.

To appoint:

Dr. Károly Balogh as Research Fellow in Pathology for one year, beginning May 1;
Dr. Raymond N. Kjellberg as Clinical and Research Fellow in Neurosurgery, for the period October 1, 1957 through December 31, 1957, and to promote him to the position of Senior Resident at the Veterans Administration Hospital, for the period January 1, 1958 through August 31, 1958;
Dr. Pierre Lazorthes as Clinical Fellow in Anesthesia, beginning approximately December 1;
Dr. Yosh Maruyama as Clinical and Research Fellow in Radiology for one year, beginning July 1;
Dr. Roger Simoneau as Graduate Student Assistant in Orthopedic Surgery, for a period of eight weeks, beginning October 28, 1957;
Dr. John B. Stokes as Clinical and Research Fellow in Medicine for one year, beginning January 1.

The General Executive Committee also voted to assign Dr. Robert G. Ojemann to the Veterans Administration Hospital as Junior Resident, for the period January 1 through August 31.

* * *

THE MIXTER NEUROCHEMISTRY LABORATORY

If one accepts the assumption that the brain is the seat of the mind, then its physical and chemical functioning becomes of particular interest as it defines, at least in one dimension, the potentialities and limitations of our mental performance. This consideration applies in both health and disease, and it is, of course, by no means new. The widespread use, among the healthy population, of such things as coffee, alcohol, barbiturates, and tranquilizers attests to the general recognition of the interrelationship between soma and psyche and indicates how commonly we attempt to modify the state of our minds through an effect on the function of our brains.

In the realm of disease, there are many afflictions (i.e., vascular, neoplastic, degenerative) that are clearly the result of pathology in the brain as an organ. Their prophylaxis, diagnosis, and treatment may be expected to improve as we gain a better understanding of certain of the chemical mechanisms involved. Perhaps of even greater importance is the large, heterogeneous group of illnesses characterized by deficiencies in intellectual and emotional performance. A few of these so-called "mental illnesses" are known to be primarily the result of derangements at the chemical level. There are probably others in which a partial chemical defect plays a contributory or permissive role in the etiology. In others of clearly psychogenic origin, physical and pharmacological manipulations may be important adjuncts to therapy. Our present knowledge of what is happening in this general area is, at best, fragmentary.

Considerations such as the above have led to the current interest in neurochemistry and indicate its enormous scope as an area for research. The Mixter Neurochemistry Laboratory operates within this general context. Studies which are complementary to other research activities going on on the floor and studies which may contribute toward the solution of problems confronting the neurosurgeon (such as the control of cerebral edema or the localization or chemotherapy of brain tumor) are of particular interest to the laboratory. At the same time it is hoped that basic information will be acquired that will contribute to a better understanding of functional neurochemistry in general.

The laboratory is currently devoted to problems of electrolyte metabolism in nervous tissue. The movements, in and out of nerve cells, of charged particles such as sodium, potassium, calcium, magnesium, chloride, and phosphate ions are of particular interest because these movements have been shown to be responsible for the electrical phenomena so characteristic of nerve cell function. Conditions which affect these ionic movements may thus be expected to have a rather direct effect on nerve function. We are interested in studying the effects of hormones, drugs, and other substances which may be present in body fluids.

Since water accompanies the movement of solute particles, it is hoped that these studies will throw some light on the important clinical problems of cerebral edema. It is further hoped that some of the information acquired about the distribution of these inorganic electrolytes in nervous tissue will be applicable to the distribution of compounds useful in the diagnosis and treatment of tumors.

Most of the studies are performed on nervous tissue excised from anesthetized animals and kept alive in an artificial medium. We expect also to analyze small samples of human brain removed for therapeutic reasons at operation or obtained at post-mortem.

In order to be able to observe changes in specific, small areas of the nervous system, the analyses are performed on a micro scale. As the amount of material being analyzed diminishes, the relative importance of contaminating substances increases. This fact is responsible for what are perhaps the only distinctive physical features of the laboratory. In order to eliminate the contamination resulting from sodium and calcium dissolving out of glass containers, the laboratory glassware has been largely converted to plastic containers and special cleaning apparatus has been developed.

The laboratory has been extremely fortunate in regard to its physical layout and equipment. In addition to a complete complement of the standard facilities required for the efficient operation of a modern chemical laboratory, it is provided with a warm room for the isolation and incubation of living tissue specimens.

The location of the laboratory is particularly advantageous. It is in immediate proximity to other laboratories on the floor which are studying the same general problem via quite different methodological approaches. These include electron microscopy, electrophysiology, ultrasonics, histology, isotopic techniques, and organic chemistry. Furthermore, it is within easy reach of the laboratories of neuropathology, neurology, and psychiatry on the floors below and above. It is hoped that this unusual physical proximity of these related groups will lead to a cross-fertilization of ideas and productive collaboration.

The work of this laboratory is being pursued by the author, and Miss Frances B. Nesbett whose qualifications include an M.A. in chemistry and extensive experience in this type of research, and Dr. Yasuso Tsukada of Keio University who is with us for a year on a Rockefeller Fellowship. Dr. Tsukada has published a number of papers from Japan on the functional chemistry of the brain.

As one of the most recent additions to the research laboratories of the M.G.H. the Neurochemistry Laboratory is aware with something of a sense of obligation, that it is joining a group distinguished by a tradition of productive research.

Adelbert Ames, III, M.D.,
Associate Biochemist in Neurosurgery

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send promptly all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Medicine

Anderson, E. P., Kalckar, H. M., Kurahashi, K., and Isselbacher, K. J.
A specific enzymatic assay for the diagnosis of congenital galactosemia. I. The consumption test.
J. Lab. & Clin. Med. 50:469-477.

Isselbacher, K. J.
Clinical and biochemical observations in galactosemia.
Am. J. Clin. Nutrition 5:527-532.

Isselbacher, K. J.
Evidence for an accessory pathway of galactose metabolism in mammalian liver.
Science 126:652-654.

Kennedy, B. J., Kelley, R. M., White, G., and Nathanson, I. T.
Surgery as an adjunct to hormone therapy of breast cancer.
Cancer 10:1055-1075.

Sisson, J. H.
Periodic examination of well patients.
In M. Clin. North America, vol. 41, no. 5, Philadelphia, W. B. Saunders Company, pp. 1439-1449.

General Surgery

Waddell, W. R.
The acid secretory response to histamine and insulin hypoglycemia after various operations on the stomach.
Surgery 42:652-658.

Laboratory Science

Waddell, W. R., and Geyer, R. P.
Effect of insulin on clearance of emulsified fat from the blood in depancreatized dogs.
Proc. Soc. Exper. Biol. & Med. 96:251-255.

Neurology

Brown, M. R.
The earliest description of paralysis due to multiple neuritis following diphtheria.
Bull. Hist. Med. 31:375.

Neurophysiology

Brazier, M. A. B.
Electroencephalographic studies of flicker in normal man.
In ERDL-Tulane Symposium on Flicker, U.S. Army Engineer Research & Development Laboratories Report, pp. 199-224.

Brazier, M. A. B.
Electroencephalography.
In Progress in neurology and psychiatry, vol. 12, chap. 13, New York, Grune & Stratton.

Ophthalmology

Mangiaracine, A. B., and Liebman, S. D.
Fungus keratitis (Aspergillus fumigatus): Treatment with nystatin (Mycostatin).
A.M.A. Arch. Ophth. 58:695-698.

Books

Short, C. L., Bauer, W., and Reynolds, W. E.
Rheumatoid arthritis: A definition of the disease and a clinical description based on a numerical study of 293 patients and controls.
Cambridge, Mass., Harvard University Press.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Allen, J. G., and others
Surgery: Principles and practice.
Philadelphia, J. B. Lippincott Company, 1957.
(23A)

American Hospital Association
Cumulative index to hospital literature, 1950-1954.
Chicago, American Hospital Association, 1955.
(1A)

Ciba Foundation Colloquia on Endocrinology, vol. 11.
Hormones in blood.
Boston, Little, Brown and Company, 1957.
(14L)

Conway, H.
Tumors of the skin.
Springfield, Ill., Charles C. Thomas, 1956.
(27K)

Freud, S.
The standard edition of the complete psychological works (English translation), vol. 11. Five lectures on psycho-analysis. Leonardo da Vinci and other works, 1910.
London, The Hogarth Press and the Institute of Psycho-analysis, 1957.
(190p)

Glick, D. (Editor)
Methods of biochemical analysis, vol. 5.
Philadelphia, W. B. Saunders Company, 1957.
(5A)

International Cancer Cytology Congress.
Transactions of the first international cancer cytology congress, Drake Hotel, Chicago, Ill., Oct. 8-11, 1956.
Columbus, Ohio, The Ohio State University, 1956.
(13Vc)

Jessiman, A. G., and Moore, F. D.
Carcinoma of the breast: The study and treatment of the patient.
Boston, Little, Brown and Company, 1956.
(24R)

Lammerant, J.
Le volume sanguin des poumons chez

l'homme.
Bruxelles, Editions Arscia, 1957.
(20M)

Pickering, G. W.
High blood pressure.
New York, Grune & Stratton, 1955.
(7F)

Rank, B. K., and Wakefield, A. R.
Surgery of repair as applied to hand injuries.
Edinburgh, E. & S. Livingstone Ltd., 1953.
(180)

Rickham, P. P.
The metabolic response to neonatal surgery.
Cambridge, Mass., Harvard University Press, 1957.
(13A)

Rodriquez, J. A.
An atlas of cardiac surgery.
Philadelphia, W. B. Saunders Company, 1957.
(15Es)

Steele, J. D. (Editor)
The surgical management of pulmonary tuberculosis.
Springfield, Ill., Charles C. Thomas, 1957.
(12N)

Willis, R. A.
Pathology of tumors, ed. 2.
St. Louis, The C.V. Mosby Company, 1953.
(23K)

MASSACHUSETTS EYE & EAR INFIRMARY

Dr. LeRoy A. Schall, Chief of Otolaryngology at the Infirmary, was elected President at the October meeting of the American Academy of Ophthalmology and Otolaryngology, held in Chicago. Over 5,000 members gathered to participate in the 346 courses that were conducted by a faculty of 398 instructors.

The Academy, whose membership numbers over 6,500 certified ophthalmologists and otolaryngologists, is the largest special society of its type in the world. Originally established as a training center, the group is dedicated to the education of its members. Its prime function is to raise the standards of its specialties. Besides the symposium-type meetings, the Academy conducts home study courses, and has sponsored the publication of such works as an atlas of otolaryngological pathology and one of ophthalmological pathology.

On November 4, Dr. Schall left for Hawaii to present papers at a meeting of the Pan-Pacific Surgical Society. On November 23, he flew to Japan to represent the U.S. Air Force Medical Corps at a conference sponsored by the Japanese members of the Pan-Pacific organization.

TINNITUS RESEARCH LABORATORY

Anyone who has ever had a slight ringing in his ears for even a few minutes and can imagine this sound magnified several times, constantly present and with no prospect of relief, will have some comprehension of the symptom called tinnitus. For years this extremely annoying symptom has eluded the efforts of otologists to establish its cause or causes and has equally eluded efforts to discover an effective treatment.

In April of 1956 the Tinnitus Research Laboratory was set up under the support of a grant from the Research Committee of the Massachusetts Eye and Ear Infirmary to further study the tinnitus problem. The primary purpose of establishing the laboratory was to study the possible therapeutic effect of loud noise on tinnitus. Since it has been shown by animal experimentation that portions of the inner ear or cochlea can be selectively damaged or destroyed by the use of loud noise, it was felt that if the source of sound in some patients' tinnitus could be localized to a portion of the inner ear, then it might be possible by the use of loud noise to selectively damage or destroy this portion of the cochlea and thereby alleviate or eradicate the ringing. Through the assistance and advice of Dr. J. Zwislocki, then of the Harvard Psycho-Acoustic Laboratories, electronic equipment was assembled which enabled us to ascertain the frequencies or tones involved in the patient's tinnitus and thereby determine the source of tinnitus. In general, this is done by performing extensive pure tone and speech audiometric testing to accurately determine the extent of the patient's hearing loss. The patient's noise is then duplicated by creating mechanically noises of known frequency content. The almost innumerable possible combinations of frequencies make this a rather long and tedious task, but it has been found that with patience it is possible to almost exactly duplicate the patient's noise in most cases. By these measures and other testing procedures it is possible to determine quite accurately whether the ringing originates from the inner ear and, if so, from what part. Also, from this information it is then possible to select or determine the frequency or tone of the noise which might be expected to influence the ringing. Fortunately, most tinnitus is of a high-pitched nature involving the frequency of sound not needed by the ear for speech reception and, also, it is usually accompanied by a rather severe hearing loss involving the frequencies concerned in the tinnitus. This makes it possible in most cases to employ the damaging effects of loud noise in the frequencies involved in the ringing without unduly damaging the patient's everyday hearing.

The patients used in this study have been recruited from the ENT Clinic on a volunteer basis, and the supply of patients to date has been abundant. The results regarding the therapeutic effect of noise were at first discouraging, but the coincidental findings with regard to: audiometric findings in patients with tinnitus, the effect of extremely loud noise on human ears, and the possibility of developing testing procedures to determine the actual site of origin prompted a continuation of the program. As time went on and the methods of producing and applying the loud noise therapeutically became more refined and more vigorous (we are now using sound intensities in the neighborhood of 130-140 decibels, which is comparable to the noise 50 feet from the tail of a jet plane at take-off), the therapeutic possibilities became more encouraging. In view of these results and the possible importance of allied information obtained, in April of 1957 a 3-year research grant was obtained from the Institute of Neurological Diseases and Blindness of the U.S.P.H.S. for further study of tinnitus from this approach.

To date, approximately 300 patients with tinnitus have been studied in the laboratory. Although nothing dramatic, therapeutically, has emerged from the study as yet, it appears that loud noise can be safely used and is capable of affecting tinnitus in some cases, at least temporarily. It is planned to continue the audiometric study of patients with tinnitus, as well as the effect of loud noise on hearing and tinnitus.

George F. Reed, M.D.,
Assistant Surgeon in Otolaryngology
and *Assistant to the Chief of Otolaryngology*

BIOGLETS

Dr. Richard F. Bedell, Intern on the Children's Medical Service—born in New York City, November 3, 1931; A.B., Duke University, Durham, North Carolina, 1953; M.D., Duke University Medical School, March 1957; Fellow in the Department of Allergy, Duke Hospital, March-June 1957; married; home: Scarsdale, N. Y.

Dr. Henry N. Claman, Assistant Resident in Medicine—born in New York City, December 13, 1930; A.B., Harvard College, 1952; M.D., New York University, 1955; Intern and Assistant Resident in Medicine, Barnes Hospital, St. Louis, 1955-57; married; one daughter; home: New York City.

Dr. John P. Connelly, Assistant Resident on the Children's Medical Service—born in Boston, Massachusetts, May 12, 1926; graduated from English High School, Boston, 1942; Private in the U.S. Army Air Corps, 1943-46; B.S., Boston College, 1952; M.D., Georgetown University, Washington, D. C., 1955; Intern, Royal Victoria Hospital, Montreal, Canada, 1956; Captain, U.S. Air Force, 1956; married; three children.

Dr. Daniel Deykin, Intern in Medicine—born in New York City, October 29, 1932; A.B., Harvard College, 1953; M.D., Harvard Medical School, 1957; married; temporary home: Cambridge, Massachusetts.

Dr. David A. Drachman, Assistant Resident in Neurology—born in New York City, July 18, 1932; A.B., Columbia University, 1952; M.D., New York University-Bellevue Hospital, 1956; Intern in Medicine, Duke Hospital, Durham, North Carolina, 1956-57; Inactive Senior Assistant Surgeon, USPHS (NIH), Bethesda, Maryland.

Dr. M. Judah Folkman, Intern in Surgery—born in Cleveland, Ohio, February 24, 1932; B.A., Ohio State University, Columbus, Ohio, 1953; M.D., Harvard Medical School, 1957; home: Columbus, Ohio.

Dr. H. David Hall, Intern in Dentistry—born in Henryetta, Oklahoma, May 15, 1931; B.S., University of Oklahoma, 1953; D.M.D., Harvard School of Dental Medicine, 1957.

Dr. Timothy S. Harrison, Assistant Resident in Surgery—born in Kodaikanal, South India, July 13, 1927; A.B., Hope College, Holland, Michigan, 1949; M.D., Johns Hopkins Medical School, 1953; Resident, Johns Hopkins Hospital, 1953-56; Research Fellow in Surgery, Massachusetts General Hospital, 1956-57.

Dr. John B. Herrmann, Intern in Surgery—

born in Cincinnati, Ohio, November 21, 1932; A.B., Dartmouth College, Hanover, New Hampshire, 1954; Certificate in Medicine, Medical School, Dartmouth College, 1955; M.D., Harvard Medical School, 1957.

Dr. Jeannette A. Hovsepian, Assistant Resident in Radiology—born in Philadelphia, Pennsylvania, August 28, 1930; B.A., Barnard College, New York, N. Y., 1952; M.D., College of Physicians and Surgeons, Columbia University, 1956; Intern, rotating, University of Illinois Hospitals, Chicago, 1956-57.

Dr. Howard S. King, Assistant Resident on the Children's Medical Service—born in Boston, Massachusetts, April 2, 1931; graduated from Boston Latin School, 1948; A.B., Harvard College, 1952; M.D., Boston University School of Medicine, 1956; Intern in Medicine, Massachusetts Memorial Hospitals, 1956-57; home: Brookline, Massachusetts.

Dr. Herbert J. Levine, Assistant Resident in Medicine—born in Boston, Massachusetts, July 22, 1928; graduated from Governor Dummer Academy, 1946; A.B., Harvard College, 1950; M.D., Johns Hopkins Medical School, 1954; Intern in Medicine, Peter Bent Brigham Hospital, Boston, Massachusetts, 1954-55; Senior Assistant Surgeon, USPHS, Endocrinology Section, National Cancer Institute (NIH), Bethesda, Maryland, 1955-57.

WESTERN WATER

After a summer of drought in Massachusetts, it may not be inappropriate to compare our plight with that of another section of our country which is very familiar with this difficulty. The problem of water supply is prevalent throughout most of the Western States, and is one with which my native land of Colorado has been struggling perennially for its 71 years of statehood. The situation is expressed simply in a maxim, familiar in the West: "The land is worth the water you can get to it."

The reason for this condition can be dramatically revealed by any aerial view of the potentially fertile plain. Half of it is brown and nonproductive, the other half is lush green, and a clean straight line separates the two. On closer inspection, we see that the dividing line is an irrigation canal.

Colorado's water problem is due mainly to its geographical make-up. The eastern portion of the State is an extensive plain which is capable of great production, but which lies mostly quite arid. The western part consists of a massive bulwark in the form of the Southern Rocky Mountain chain. An accompanying factor is the meteorological situation. Water-bearing clouds, originating in storms off the California coast, are intercepted by the Rocky Mountain rampart (including 52 peaks which tower to an elevation exceeding 14,000 feet) before they can reach the parched farm lands in eastern Colorado. The result is that rain and snow precipitate in the mountains on the western side of the Continental Divide and do not reach the thirsting prairies farther east.

While it was the powerful lure of gold and silver which first brought people to this area, today its principal industries are farming and cattle-raising. Unless the uranium and oil shale resources exceed present expectations, its economic welfare will continue to rest chiefly on the agricultural wealth of the area. But the farms can't produce without water.

Of course, some of the precious commodity finds its way over the mountain wall, and it is largely this water which has sustained the present farming of the eastern plains. Much of this precipitation is found in the myriad of small mountain lakes, nestling beneath the Continental Divide on the short eastern slope of the Rockies. An indication of the keen competition for water is given by the realization that every cupful in these isolated mountain pockets is spoken for by a farmer somewhere to the east before the water even begins its turbulent trip down 40 miles of stream to the plains.

Being an ingenious creature, man has found ways of moving some of the western slope water through the mountains to fields on the opposite side by using miles of tunnels. Most of these tunnels have been drilled with the express purpose of carrying water. One of the largest of these is the Big Thompson Project.

But man's resourcefulness goes further. In 1927 Colorado opened this country's second longest railroad tunnel—the Moffat. To drill a tunnel of this size through 6.2 miles of hard rock beneath the Continental Divide, it was necessary to have a smaller, parallel, or "pioneer" bore, connected intermittently with the main tunnel, to be used for logistical needs or in the event of "cave-ins". When railroading interests had completed the principal tunnel, the pioneer bore was temporarily idle. But not for long. The pressing need for water soon converted the smaller tunnel to a conduit for the precious liquid, and today progressively more and more water is being shunted through this channel to the eastern plains.

As might be expected, the conflict between individuals for water has expanded to interstate rivalries. The headwaters of the Colorado River rise on the western slope of the Colorado Rockies. Heretofore much of this water has been used without dispute by the city of Los Angeles, via the Boulder Dam. But now Colorado is beginning to tap this supply of water by conveying it to the eastern slope, and the rightful ownership of this water has become a major political issue for Colorado.

While it has been primarily the rural interests which have been keenly aware of the water lack, the paucity has made itself felt to the urban dwellers as well. In the past 10 years the population of Denver has doubled — 350,000 to 700,000. With the growth there has not only been this rapid large influx of people, but simultaneously a number of small industrial plants have appeared. These industries, as well as the population growth, have created a water shortage which has necessitated water rationing. Citizens are now required to limit radically the amount of water used to maintain lawns and gardens—such watering often being limited to a very few hours a week. This rationing is enforced by law as vigorously as the traffic regulations or other measures for safe community living. The result has been that a city, previously remarkable for its fine gardens, is becoming noted for its sunbrowned lawns.

In a less overt way Denver has felt the problem for many years. The water supply has never been adequate to meet the demands of a possible major conflagration. To avoid a potential catastrophe, a city ordinance, passed many years ago, made it mandatory to use noninflammable materials in all buildings. Consequently, brick and stone are used entirely throughout the city, and the frame house is nonexistent.

In terms of everyday living, the citizens of this area are quick to correct a leaking faucet. And the luxury of a prolonged hot shower is significantly curbed by the uncomfortable thought that it requires excessive amounts of the precious necessity.

Colorado claims with pride as a native son one of the foremost contemporary poets—Thomas Hornsby Ferril. With a wonderfully articulate pen, Mr. Ferril has eloquently expressed the problem in the following poem which can be seen today in the rotunda of the State Capitol in Denver:

Here is a land where life is written in water.
The West is where the water was and is.
Father and son of old mother and daughter
Following rivers up immensities
Of range and desert thirsting. The sundown ever
Crossing a hill to climb a hill still dryer.
Naming tonight a city by some river,
A different name from last night's camping fire.
Look to the green within the mountain cup.
Look to the prairie parched for water lack.
Look to the sun that pulls the oceans back.
Look to your heart and may your wisdom grow
To the power of lightning and to peace of snow.

Giles D. Toll, M.D.,
Assistant Resident in Pathology

* * *

VOLUNTEER GROUPS

DISTAFF CLUB

The festivities of the Christmas season are over, but the Distaff Club looks forward to many delightful occasions in the New Year.

The Hospital administration plans to give another tea in January to welcome the incoming House Staff. This will start the year off very pleasantly.

In February, the Distaff Club will meet in area gatherings. These smaller meetings give the members an opportunity to meet those who live in their vicinity. They also offer an excellent chance for those who live some distance from the Hospital to participate in Distaff activities as the Club members meet in their own communities. The areas and their representatives are: Boston — Mrs. Donald M. McKee and Mrs. Fred B. Ballard, Jr.; Newton, Needham, Natick — Mrs. George D. Zuidema; Brookline — Mrs. Gerhard Nellhaus and Mrs. Jack H. Mendelson; Watertown, Concord, Cambridge, Winchester — Mrs. Theodore van Ravenswaay and Mrs. John P. Connelly; Chestnut Hill — Mrs. William E. Karnes. The area representative for Eye and Ear Distaff-ers is Mrs. August Stemmer. Mrs. Sumner I. Zacks is area representative coordinator.

No. 70 in a series of Staff photographs
Dr. Jerome Gross, Associate Biologist (Medicine)—
in charge of the electron microscopy laboratory
in the Research Building

No. 71 in a series of Staff photographs
Dr. David Spiro, Assistant Pathologist—
in charge of the electron microscopy laboratory
in the Department of Pathology

A project recently completed by the Distaff Club was the obtaining of colorful travel posters to use in decorating the psychiatry wards. These posters were hung early in December, and add a bright touch to the walls.

A new interest among Distaff-ers is that of the reading aloud of plays. The group meets every other week. Such works as "Ah, wilderness" and "Anne of a thousand days" have been read. Anyone interested is cordially welcomed to join the group. For further information, get in touch with either Mrs. Alfred E. Miller or Mrs. Charles E. Huggins.

New addresses:—

Dr. Gordon E. Jones (*E.S.* 1939), 108 W. 22nd St., Olympia, Wash.

Dr. Donald P. Pederson (c.r.p. *An.* 1957), Jaegerfborg Alle 203, St., Gentofte, Denmark

Dr. John W. Raker (*E.S.* 1942), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.

Capt. Charles P. Summerall, III, MC, USAR (*M.* 1956), 5th General Hospital, APO 154, c/o Postmaster, New York, N. Y.

Dr. Thomas J. Whitfield, III (*C.M.* 1954), Concord Medical Center, Concord, Mass.

Brief bits:—

Dr. Joseph S. Barr delivered the Robert Jones Memorial Lecture before the Royal College of Surgeons of England on October 31. His subject was "Arthroplasty of the hip".

Dr. Mary A. B. Brazier was invited by the Polish Physiological Society to be their guest at the 7th Congress of Polish Physiologists, held recently in Warsaw.

Dr. Benjamin Castleman was the leader of the Histopathology Workshop on Cancer of the Lung, which was sponsored by the American Cancer Society, at Virginia Beach, on November 7 and 8. The theme of this Workshop concerned the changes in man and the experimental animal associated with exposure to cigarette smoke.

Dr. Earle M. Chapman was a member of the panel which discussed "Problems in thyroid cancer" at the October 28 meeting of the American Cancer Society, held in New York City. Dr. Chapman served as Chairman of the Doctors Committee during the recent United Fund drive.

This interesting bit of information came from Dr. Robert R. Linton: "I participated in the meeting of the American College of Surgeons and the International Society of Angiology, held in Atlantic City in late October. At the latter meeting I had the pleasure of entertaining two Russian anatomists and two Russian surgeons who flew in from Moscow to join us at this session. I found them to be an interesting group. One of them, fortunately, spoke English, so we were able to converse quite satisfactorily. They demonstrated with a motion picture that they brought with them the transplantation of one dog's heart into another dog's circulation, and said it had functioned for approximately 30 days. This procedure, in part, was made possible by utilizing the stapling device which one of the surgeons has devised for making rapid blood vessel anastomoses. Unfortunately, despite my most avid attempts to get them to visit us in Boston, this was not permitted by the State Department, since at that time Boston was not on the list of American cities Russian citizens were permitted to visit. (It has been added since.) Following this meeting, I joined others of the MGH Staff in Honolulu, at the meeting of the Pan-Pacific Surgical Association, where we missed our President, Dr. Arthur W. Allen, but were glad to hear while we were out there that he had left the hospital and was on the road to recovery."

At the International Symposium on Enzyme Chemistry, held in Tokyo and Kyoto, Japan, one thousand enzyme biochemists from all over the world gathered to exchange ideas and discoveries. Dr. Dorothy Villee, Research Fellow in the Children's Medical Service, attended the Symposium, in company with six other Harvard biochemists. It was felt by all who attended that the meeting was highly successful and that it presented a unique opportunity for Western scientists to meet and talk with their Eastern colleagues.

* * *

A short note has arrived from Brigadier General Richard Collins, USA (*E.S.* 1933). He gives as his address: The Joint Staff, Room 2E 966, The Pentagon, Washington 25, D.C., where he serves as Deputy Director for Intelligence. Having received an Alexandria, Virginia, address for General Collins, we automatically classified him as our Alexandria "singleton", wrote him to that effect, and received the following reply from him:

> I have your note about "singletons" and hasten to reply. Unfortunately, Alexandria is not as "single" on the ground as it might look in a directory. It is, in fact, part of Washington's bedroom. As a result, even if I were still practising medicine, I could probably contribute nothing distinctly Alexandrian.
>
> I am still doing business in the same stand, as you can see.
>
> Please convey my best wishes to my many friends who are still connected with the Hospital.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 174 Boston, Mass. February 1958

EPIDEMIOLOGICAL STUDIES OF NUTRITION IN PREGNANCY*

The need for epidemiological studies of nutrition in pregnancy was indicated clearly by the speakers this morning. Many, in reporting laboratory experiments with animals, stated their reservations in applying that work to the human. It is not possible for nutritionists and physicians to stop at this point. In fact, the experimenters themselves would not want this. The epidemiological study, therefore, offers the only opportunity for the study of the problem of nutrition in pregnancy in the human.

The epidemiological study, as you know, is based on the interrelationships among host, agent, and environment. Though it is often difficult, they must be defined clearly if various studies are to be valid within themselves and are to be compared with each other. This is true of studies within the broad confines of our own country — to say nothing of attempting, otherwise, to compare studies in foreign lands with those done in the United States.

The host in this case is obviously the mother and her fetus. Yet many would quarrel immediately with this possibly rather narrow definition. Certainly the baby after birth is properly one of the hosts and a definite question may be raised as to including the father and the entire family in this category. Furthermore, whichever individuals are considered in this grouping, great care must be taken to be sure that the host is so clearly defined in respect to all of his attributes that it will be possible to evaluate and compare studies critically at a later date. This is no easy task.

The agent in these studies, certainly, is nutrition. Yet this in itself, as you have seen here today, has many aspects. We must consider as part of the agent the individual nutrient, the total diet, the nutritional status of the mother, and the means of obtaining information about these — whether by biochemical analyses, by studying the aliquot amounts of the diet, by simple dietary histories, by full diet research dietary histories, by sample meals, or by other mechanisms. The type of personnel involved in the determination of these factors must come in for examination as well. All these variables, of course, complicate the problem.

The environment in these studies is inconceivably broad. Nutrition never operates in a narrow field. You have seen demonstrated this morning the physical, social, and emotional influences which help shape the ultimate nutritional state. Possibly in epidemiological studies this is the most difficult area in which to achieve comparable constants. Great care must be taken in describing the actual "total climate" in which subjects as well as workers move.

It is clear that many problems beset the investigator who would rely upon an epidemiological study in searching for knowledge in this field. The gremlins of multiple variables beset him at every turn. Yet variability is such a fundamental human characteristic that it would be useless to try to avoid it. The manner in which these variables are handled marks the significance of the individual studies and the degree to which they can be compared with each other. In spite of all these inherent difficulties, the epidemiological study remains the only method at the present time for evaluating nutritional influences in human pregnancy on a large scale.

In the past thirty years or more there have been many studies of this type.

Perhaps the oldest and best known — one to be termed the classic study — is that of Ebbs, Tisdall, and Scott in Toronto (1). Three groups of women were studied during the latter half of pregnancy. The diets of the women in one group were supplemented to an excellent nutritional level, another group was taught an excellent diet for pregnancy, while the third group remained on poor diets and therefore served as control. The incidence of abortions, premature births, stillbirths, and neonatal deaths was significantly higher in the group on a poor diet. Not only did the women in the groups with supplemented and good diets have healthier babies, but they themselves proved to be better obstetric risks. They suffered fewer complications, including less toxemia, and had fewer difficulties during labor, delivery, and the post-partum period. The ability of the mother to nurse her infant also appeared to be influenced by the quality of the diet during pregnancy.

Tompkins and Wiehl (2) in their studies showed that an approximately normal gain in weight during the first two trimesters is necessary to reduce the hazard of toxemia, and that an excessive restriction in the rate of gain during this period seriously increases the probability of premature labor. The importance of the rate of weight gain in the three trimesters of pregnancy was stressed.

Woodhill (3) has recently reported the results of her studies of 186 pregnancies among Australian women. She, also, found a relationship between the maternal diet and the incidence of toxemia — patients having a "very poor" dietary rating showing 35% incidence as opposed to 4% only for those in a "good or excellent" class. The incidence of prematurity ranged similarly between 19% and 0%, and the duration of lactation was related to the level of the maternal diet. Her study is noteworthy for a thorough examination of the many variables which enter into such a method.

Other noteworthy studies are those of Scrimshaw in Guatemala (4), and Woodruff in Africa (5).

It is only fair to say also that other workers have been unable to make similar correlations.

Williams and Fralen (6), in an extensive study of 514 women in Philadelphia, could not show any positive relationship between dietary adequacy and the occurrence of certain complications of pregnancy and childbirth.

Smith (7) reported in 1947 the results of his study of pregnant women in northwestern Holland during the severe undernutrition of the winter of 1944-45. Although infertility was common, and infants conceived before the hunger months but born during that period were significantly below the expected birth weight and length, toxemia, fetal loss through stillbirth, and neonatal death were not increased. In interpreting these results against certain American and Canadian studies, Smith indicates the need for careful analysis of the samples for comparability. It is possible, he suggests, that a chronic malnutrition may act in a manner quite different from an acute undernutrition in women previously well nourished.

Darby and his associates (8), beginning in 1945 at Vanderbilt University School of Medicine, have conducted a cooperative study of maternal and infant nutrition designed, among other purposes, to ascertain whether there existed for patients presenting themselves for care at their hospital clinic "any significant relationship between nutriture and the development of maternal and fetal complications." By December of 1950, 2,046 white women were included in the study. The workers were unable to identify nutrition as a major causative factor in the development of any of the ordinary obstetric and fetal abnormalities. They recognized that pregnancy and the health of the offspring can be adversely influenced by nutritional deficiencies of sufficiently severe degree and demonstrable etiology. However, these were not the conditions found in the women of their study. They conclude finally "either that there does not exist a direct causative relationship between malnutrition and these abnormalities, or that our patients were above any such level of nutrition required to precipitate the disease."

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*Introductory talk to panel discussion to review epidemiological studies at a Symposium on Nutrition in Pregnancy, sponsored by the Council on Foods and Nutrition, American Medical Association, University of Missouri Medical Center, Columbia, Missouri, October 11, 1957.

In our own studies at the Harvard School of Public Health, the Boston Lying-in Hospital, and the Children's Medical Center, we have found certain statistically significant correlations between maternal nutrition and the mother's pregnancy and her baby.

Two hundred sixteen infants and their mothers were studied carefully from the nutritional, obstetrical, and pediatric viewpoints. Data were collected by the workers in each of these fields independently, with no knowledge of others' findings until the final assembling of the material. The details of methods of examination and evaluation used are given in the initial papers (9). Particularly important is the method of taking the dietary history (10), which involves a careful cross check to validate the mothers' statements.

If the 216 infants were divided into three groups according to their mothers' diets and they themselves were rated from "excellent" to "poorest", 94% of the babies whose mothers had been on a "good or excellent" diet were rated "excellent" or "good". On the other hand, if the mothers' diets were "poor to very poor", only 8% of the babies fell into the "excellent" and "good" classes, while 92% were classified as "fair" or "poorest". If the same figures are analyzed further by arranging the maternal diet into four groups, the following figures result (11):

	Condition of infant			
Maternal diet	Excellent	Good	Fair	Poorest
Excellent/Good	42%	52%	3%	3%
Fair	8	50	35	7
Poor	2	28	68	2
Poorest	3	5	25	67

The shift in physical conditions of the infant with each change in either direction in the mean general prenatal dietary rating is clearly indicated. Particular note should be made of the category of the infant marked "poorest". It is only when the maternal diet reaches very low levels against normal standards that the marked change in the condition of the infant occurs. It is equally true that the most favorable results of pregnancy are most likely to be associated with the most favorable maternal diets. All of the stillborn infants, all of the early neonatal deaths with the exception of one, the majority of infants with marked congenital defects, all prematures, and all so-called "functionally immature" infants were born to mothers with inadequate diets during pregnancy.

In our study group a clearly positive correlation existed between the quality of the maternal diet and the weight and length of infants, regardless of sex (12). Osseous development followed a similar pattern.

While a poor to very poor maternal diet appeared to enhance the occurrence of toxemia, no statistically significant association was found between prenatal nutrition and the duration and character of labor or delivery (11). There was a tendency, however, for the mothers with the poorer diets to have more difficult types of labor and more major complications at delivery. Again no statistically significant relation was found between prenatal nutrition and the post-partum course, but major complications tended to appear more frequently in the poorer diet groups.

A later study (13) of 68 siblings born to 57 of the women studied previously in the original group produced interesting results. Whether added to the original 216 or viewed separately as a new group, the distributions of the original 216 were repeated. It was further possible to compare the first against the second sibling of 53 of these mothers. The numbers are not sufficient for statistical significance, but improvement of the infants' conditions followed improvement in the maternal diet, while the opposite effect also was true. Unfortunately, however, only 11 mothers improved their diets during their second pregnancies, and 12 of the mothers ate poorer diets than in their first gestations. The remainder made no essential gain or loss. It would seem, therefore, that strong effort is necessary to produce a change in fundamental eating habits.

In an effort to secure direct biochemical evidence of a maternal and fetal nutritional relationship, a study of the effect of maternal diet on size and content of the fetal liver was made (14). The liver material was obtained from autopsies of all non-macerated fetuses and newborn infants dying in less than forty-eight hours at the Boston Lying-in Hospital, during a five-year period. The livers were analyzed by size and, in varying numbers, for the concentration of riboflavin, ascorbic acid, vitamin A, protein, iron, and thiamine. The authors concluded "that even though fetal growth in the human species is relatively slow compared with that in many other mammals, the weight and composition of at least one important fetal tissue reflects maternal intake during pregnancy and presumably can be altered by improvement of the mother."

On the basis of this work we believe these statements can be made. First, that when dietary deficiency reaches a certain inadequacy, the fetus appears to suffer more than the mother. Probably for the same physiological reason, unless the maternal diet is "very poor" the high percentage of the "poorest" infants does not appear. Second, it follows from this that there is a great safety factor built into human pregnancy. The corollary of this statement, however, is equally true — that the best chance of having an infant in "excellent" condition comes only with the "good to excellent" prenatal diet. Finally, nutrition is a controllable factor, although to make a change for the better requires great effort. The fact that emotional, social, and economic influences bear heavily on eating habits only complicates the problem.

In a somewhat more philosophical vein, there are three significant generalities that can be drawn from the evidence I have presented.

In the human, conditions are never as simple as in the controlled laboratory experiment. It is impossible, therefore, to define nutrition as the only factor in producing the results that have been reported. I believe that the evidence indicates the fundamental importance of good nutrition in normal pregnancy. Though in some individuals and in certain situations it may be of critical significance, nutrition is by no means the only factor affecting the pregnant woman. But it is one of the controllable factors. Therefore, it comes within our power always to provide the optimum in nutrition to every mother.

If this is true, then, we have at least one element in the solution of the major obstetrical problem of the day. That is the right of every mother to be delivered without injury and the right of every baby to be born not only alive but well, with its total potential unimpaired. It is no longer sufficient for the mother to escape death in delivery or for the baby to be born without gross birth injury. The mother must be able to resume fully her role in the family, undamaged physically and emotionally, and the baby must be brought into this life without jeopardy to his future development. If some subtle deficiency in pregnancy care has reduced a baby with the organic cerebral equipment of a possible genius to the capabilities of only an average man, the delivery is a failure. Worse still is the reduction of a baby destined to grow into a solid average citizen to the level of the deficient who is a constant community problem.

Just as it is true that nutrition is only one factor, it follows that there are many other elements of total pregnancy care. Such care, then, is compounded not only of physical but of emotional, social, and economic factors as well. It is only through this broad-view approach that the ideal goal of total pregnancy care can be reached.

It is the epidemiological method which has in no small way pointed to this broad approach which sees not merely the pregnant woman, but the pregnant mother, in the pregnant family, in the pregnant community.

Samuel B. Kirkwood, M.D.,
Associate Obstetrician, M.G.H.
and *Commissioner of the Department of Public Health, Commonwealth of Massachusetts*

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(3) Woodhill, J. M., et al.: Nutrition studies of pregnant Australian women. Am. J. Obst. & Gynec. 70: 987 (Nov.) 1955.
(4) Scrimshaw, N. S.: Evaluation of nutrition in pregnancy. J. Am. Dietet. A. 26: 21, 1950.

(5) Woodruff, A. M.: The natural history of anemia associated with protein malnutrition. Brit. M. J. 1: 1297, 1955.
(6) Williams, P. F., and Fralen, F. G.: Nutrition study in pregnancy. Am. J. Obst. & Gynec. 43, no. 1: 1-20 (Jan.) 1942.
(7) Smith, C. A.: The effect of wartime starvation in Holland upon pregnancy and its product. Am. J. Obst. & Gynec. 53, no. 1: 599-608 (Apr.) 1947.
(8) Darby, W. J., et al.: The Vanderbilt cooperative study of maternal and infant nutrition. VIII. Some nutritional implications. J. Am. Dietet. A. 31, no. 6: 582-588 (June) 1955.
(9) Burke, B. S., Beal, V. A., Kirkwood, S. B., and Stuart, H. C.: Nutrition studies during pregnancy. Am. J. Obst. & Gynec. 46, no. 1: 38-52 (July) 1943.
(10) Burke, B. S.: The dietary history as a tool in research. J. Am. Dietet. A. 23: 1041, 1947.
(11) Burke, B. S., Beal, V. A., Kirkwood, S.B., and Stuart, H. C.: The influence of nutrition during pregnancy upon the condition of the infant at birth. J. Nutrition 26: 569, 1943.
(12) Burke, B. S., Harding, V. V., and Stuart, H. C.: Nutrition studies during pregnancy. IV. Relation of protein content of mother's diet during pregnancy to birth length, birth weight, and condition of infant at birth. J. Pediat. 23: 505-515 (Nov.) 1943.
(13) Burke, B. S., Stevenson, S. S., Worcester, J., and Stuart, H. C.: Nutrition studies during pregnancy. V. Relation of maternal nutrition to condition of infant at birth: Study of siblings. J. Nutrition 38, no. 4: 453-467 (Aug.) 1949.
(14) Smith, C. A., Worcester, J., and Burke, B. S.: Maternal-fetal nutritional relationships. Obst. & Gynec. 1, no. 1: 46-58 (Jan.) 1953.

* * *

Dr. Anne Parsons, Assistant Sociologist at McLean Hospital, has been awarded a National Institute of Mental Health, Public Health Research Grant, to continue her studies on cultural aspects of schizophrenia. In May Dr. Parsons will go to Naples, Italy, for 18 months, where she will be associated with the Institute of Psychology at the University of Naples.

The Board of Trustees, at their meetings on November 29 and December 13, voted:

To accept the resignation of Dr. William J. Brown, Jr. from the position of Assistant Radiologist;

To accept with regret the resignation of Dr. Joseph Hanelin from the position of Radiologist, effective November 30, 1957, and to appoint him as Clinical Associate in Radiology, effective December 1, 1957.

To reappoint:

Dr. John A. Malcolm as First Assistant Resident in Surgery, beginning January 1.

To appoint:

Dr. Robert E. Ball as Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Oliver Cope as Acting Chief of the Surgical Services during the absence of Dr. Churchill;

Dr. Barbara C. Gurd as Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Ken Hashimoto as Assistant Resident in Dermatology, beginning July 1;

Dr. Herbert R. Lazarus as Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Richard A. Mayo as Assistant in Orthopedic Surgery, beginning January 1;

Dr. Henning Pontoppidan as Assistant in Anesthesia if and when he obtains his permanent Massachusetts license;

Dr. Stuart E. Price, Jr. as Assistant Resident in Urology, beginning September 1;

Dr. Dwight R. Robinson as Third Assistant Resident in Surgery, beginning July 1;

Dr. Alfred D. Surtees as Chief Resident in Anesthesia, for the period January 1 through July 24;

Dr. Sanford D. Weinert as Assistant Resident in Urology, for the period December 1, 1957 through May 31, 1958.

To change the appointment of:

Dr. Victor J. Rosen, Jr. from Intern in Surgery to that of Intern in Pathology, for the period November 16, 1957 through June 30, 1958.

To change the titles of:

Mr. William H. Ellett from Assistant Biologist to Assistant Physicist (Medicine);

Mr. Emery Nyilas from Assistant Biologist to Assistant Physicist (Medicine).

At their meetings on November 13, and December 4 and 11, the General Executive Committee voted:

To grant Dr. Robert E. Key leave of absence from the position of Assistant Resident on the Orthopedic Service for the month of December 1957, and to appoint him as Clinical Assistant in Orthopedic Surgery during that month, with the privilege of assisting Dr. Otto E. Aufranc in the Baker Memorial, Phillips House, and Fracture Office. It is understood that he will return to the position of Assistant Resident on January 1, 1958 and will affiliate at the Lemuel Shattuck Hospital for six months, after which he will be promoted to Senior Resident in Orthopedic Surgery, beginning July 1.

To promote:

Dr. Robert W. Chamberlin, Jr. from the position of Second Assistant Resident to that of Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Stanford B. Friedman to the position of Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Alfred J. Luessenhop to the position of Clinical Assistant in ~~Neurology~~, beginning January 1, with the privilege of assisting Dr. Jost J. Michelsen with his private practice;

Dr. Gerhard Nellhaus from the position of Assistant Resident to that of Chief Resident on the Children's Medical Service for one year, beginning July 1;

Dr. Patrick F. Rose from the position of Second Assistant Resident to that of Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Margaret A. Single to the position of Assistant Resident on the Children's Medical Service for one year, beginning January 1.

To reappoint:

Dr. Josip Matovinovic as Clinical and Research Fellow in Medicine for one year, beginning December 12, 1957;

Dr. Claus W. Reichle as Clinical and Research Fellow in Anesthesia for one year, beginning January 1;

Dr. Marie Sadka for one year, beginning January 1, with a change in title from Clinical and Research Fellow in Neurology to that of Research Fellow in Neuropathology;

Dr. John T. Sharp as Clinical and Research Fellow in Medicine for one year, beginning December 1, 1957.

To appoint:

Dr. David C. Blair as Clinical Fellow in Physical Medicine for one year, beginning July 1;

Dr. Alison K. Scott as Clinical and Research Fellow on the Children's Medical Service, beginning January 2;

Dr. Beatrice E. Sleigh as Clinical Fellow in Anesthesia, beginning June 1;

Dr. Yasuzo Tsukada as Research Fellow in Neurosurgery, beginning December 23, 1957.

ADOLESCENT ENDOCRINE CLINIC

The Adolescent Endocrine Clinic was established in 1942 by Drs. Butler and Talbot at the time of Dr. Butler's appointment here as Chief of the Children's Medical Service. A small group of patients in whom Dr. Butler and Dr. Talbot had already become interested formed its nucleus. New patients were added to the original group by referral from the Children's Medical and other out-patient clinics and, as this new Clinic began to become known, its material was enriched by referrals from physicians outside the Hospital. "Adolescent Endocrine" soon became a misnomer both because children of all ages were seen and because, as will later be evident, interests developed in areas beyond endocrinology as strictly defined. Then, as now, the Clinic met weekly on Friday afternoons and had as its purposes: first, service to the patients; second, teaching of house officers, interested staff members, and postgraduate students; and third, research into the problems of pediatric patients of the types seen in such a specialty clinic.

Early, the Clinic population was composed of patients with the classic primary endocrinopathies. Those with diabetes mellitus and thyroid disorders, especially hypothyroidism, comprised the two largest groups. Next in order of frequency came patients with dwarfism due to causes other than thyroid deficiency and patients with sexual precocity. Smaller numbers of patients with diabetes insipidus, resistant rickets, ovarian agenesis and the like were seen for diagnosis, and these patients returned at intervals for treatment. With the passage of time, the frequency with which these various categories of patients with primary endocrinopathy has changed is but little. There has been, however, an ever-increasing amount of attention given in the Clinic to the patient who formerly was seen but once, and then discharged. This was the patient who, by the best available criteria, was endocrinologically normal but had some functional complaint like obesity or was suffering a metabolic disturbance such as that which may result, for instance, from chronic renal insufficiency. Most recently, as longer and longer follow-ups have impressed their lesson, an increasing focus of attention has been turned toward a problem common to both this group and a group of patients with primary endocrine disease. That is the problem posed by the patient for whom there is highly effective therapy but who nevertheless fails to do well because he lacks sufficient motivation to avail himself of help offered. Of particular concern in this respect have been the juvenile diabetics. Our attempt to cope with this problem will be touched on later.

Interestingly, in attempting to fulfill its teaching function the Adolescent Endocrine Clinic at one point was confronted with a rapidly declining patient attendance. Initially, teaching was carried out informally by Dr. Butler and Dr. Talbot in the examining rooms as they saw the patients. The increasingly large group of house officers, staff members, and visitors who crowded in eventually interfered to a major degree with the patients' sense of privacy. In addition, the larger the number of observers the slower the progress from patient to patient, with the result that distressingly long periods in the waiting room were frequent. Recognizing the responsibility of these factors to the falling patient census, a change of procedure was adopted in 1949 which has had many advantages, in addition to bolstering Clinic attendance.

Each week one of the research fellows in the Department reviews the records of the 15 to 20 patients scheduled for the coming Friday and amasses from various sources as much pertinent information as possible on newly referred cases. For an hour and a half immediately prior to the time of the first scheduled appointment on Friday, a Clinic "preview" is held. This preview session is attended not only by the group who will actually see the patients but also by the visitors and other interested physicians who had formerly crowded the examining rooms. The pertinent features of the current problems of each patient are briefly presented and discussed. Suggestions are frequently forthcoming as to new diagnostic procedures to be tried. Responses to therapy are critically evaluated with the aid of charts, and experience with groups is brought to bear on the problem of the individual. At the end of the discussion the patient is assigned to one physician for interview and examination. This physician, who may not have seen the patient previously, is then equipped to initiate or carry on therapy or to pursue diagnosis with a sense of reassurance that would not otherwise have been possible. Appointments are made on a time schedule to prevent the simultaneous arrival of three or four patients all expecting to see the same physician. It has been apparent that the patients not only appreciate the return of prompt attention and privacy thus made possible but also the benefits that accrue from the group consideration of each patient. Dr. Talbot and the writer attend the Clinic to serve the function of introducing old patients to new physicians as well as to evaluate, on the spot, changes in physical findings, unexpected developments, or to expedite administrative problems.

At the conclusion of each Clinic session the records are returned to the physician who prepared the preview session. At this time he has an opportunity to review the developments at this visit. It is also his responsibility to see that letters are sent to the referring physicians and to follow up on laboratory data which may not be at hand for some days.

The Adolescent Endocrine Clinic has been a productive research laboratory. The book, *Functional endocrinology from birth to adolescence* by Drs. Talbot, Sobel, McArthur, and Crawford is largely based on experiences in the Clinic. Dr. Gertrud Reyersbach and Dr. Butler have contributed papers on the management of the juvenile diabetic. A series of papers by Dr. Edna Sobel and Dr. Talbot describes their observations on the effect of methyltestosterone in problems of growth. The entity of hypocaloric dwarfism has been defined with respect to its clinical attributes as well as its high frequency and causation. In one of the papers resulting from this study Dr. Erich Lindemann joined us in pointing up the psychiatric aspects. Drs. Frederic Blodgett and Leo Burgin collaborated in a study of the effects of cortisone on linear growth of patients drawn from this and the Allergy Clinic. Dr. Janet McArthur has published on her experiences in treating adolescent girls with menstrual disorders. Dr. Mary Arnold's interest in patients with thyroid disease led to reports on optimal dosage for patients with hypothyroidism as well as a review with Drs. Talbot and Cope of the experiences with surgical therapy of juvenile thyrotoxicosis. Lack of space precludes a complete listing of the contributions which have been accumulating at an increasing pace as the active participation of the Department's research fellows has grown.

In conclusion one more word is in order regarding the increased interest of the Clinic group in the patient who fails to take advantage of therapy of proved benefit. Dr. John Lamont of the Children's Psychiatry Service, Miss Patricia Clark of the Social Service Department, and Dr. Stuart Flerlage, our newest member, in whom are combined medical and divinity school backgrounds, have joined us in an attempt to fathom the ingredients of patient motivation. In this effort we are also calling upon educators, theologians, social scientists, and others in the community who may have special knowledge or techniques of value. While our focus is on the therapeutic failures, emphasis is also being given to study of the personality make-up and social ecology of the patients who have been eminently successful in coping with their disabilities. Our aim is to define methods for dealing more effectively with a large group of patients, representative of a wide spectrum of disease including juvenile diabetes, obesity, hypocaloric dwarfism, advanced renal disease, and gonadal disgenesis, to mention only some of the areas where the challenge is met.

John D. Crawford, M.D.,
Physician to Children's Medical Service

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

General Medicine

Irwin, J. W., Itkin, I. H., Weille, S., and Little, N.
Diseases of the chest: Bronchial asthma.
In A.M.A. Scientific Exhibits, 1957, New York, Grune & Stratton, Inc., 1957, pp. 49-55.

Gynecology

Simmons, F. A.
Role of the husband in therapeutic donor insemination.
Fertil. & Steril. 8:547-550, 1957.

Laboratory Science

Waddell, W. R., Geyer, R. P., Olsen, F. R., and Stare, F. J.
Clinical observations on the use of nonphosphatide (Pluronic) fat emulsions.
Metabolism 6: 815-821, 1957.

Neurosurgery

White, J. C.
Care of the severely injured patient — neurosurgical injuries.
J.A.M.A. 165:1924-1930, 1957.

Ophthalmology

Dunphy, E. B.
Management of intraocular malignancy.
Am. J. Ophth. 44:313-322, 1957.

Orthopedic Surgery

Aufranc, O. E., Barr, J. S., and Rowe, C. R.
The upper extremity: The shoulder.
In The American Academy of Orthopaedic Surgeons instructional course lectures, R. Beverly Raney, M.D., Editor, Ann Arbor, Michigan, J. W. Edwards, vol. 14, chap. 2, pp. 107-122, 1957.

Psychiatry

Lindemann, E.
Problems related to grandparents.
In Understanding your patient, Samuel Liebman, M.D., Editor, Philadelphia, J. B. Lippincott Company, pp. 147-158, 1957.

The next issue of THE NEWS will be the last one in which 1957 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Abraham, E. P.
Biochemistry of some peptide and steroid antibiotics. (Ciba Lectures in Microbial Biochemistry, No. 2)
New York, John Wiley & Sons, Inc., 1957.
(5B)

Annual review of biochemistry, vol. 26.
Palo Alto, Calif., Annual Reviews, Inc., 1957.
(5A)

Ball, T. L.
Gynecologic surgery and urology.
St. Louis, The C. V. Mosby Company, 1957.
(24A)

Brown, J. B., and McDowell, F.
Neck dissections.
Springfield, Ill., Charles C. Thomas, 1954.
(23P)

Bychowski, G., and Despert, J. L.
Specialized techniques in psychotherapy.
New York, Basic Books, Inc., 1952.
(22V)

National Health Council
Ten million and one.
New York, Paul B. Hoeber, Inc., 1957.
(19O)

New York Academy of Sciences. Special Publications, vol. 5.
Cellular biology, nucleic acids and viruses.
New York, New York Academy of Sciences, 1957.
(12A)

United States Congress. Joint Committee on Atomic Energy. Special subcommittee on radiation.
The nature of radioactive fall-out and its effects on man. 2 pts.
Washington, D. C., United States Government Printing Office, 1957.
(36Jn)

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

Through the generosity of an anonymous donor, it has been possible for the Staff Wives to purchase a baby grand piano, in excellent condition, for our Chapel. The piano was "christened" on January 8, when Staff Wife-er Anne Talbot (whose husband is Dr. Nathan B. Talbot of the Children's Medical Service) presented a program of songs, with Mr. John Woodworth as accompanist.

On January 24, Mr. Rowland Sturges of Cambridge gave a piano recital in response to the many requests that he reappear in our Chapel concerts.

Another of the Staff Wives Association social hours, which always afford opportunities for our professional visitors from other lands and from elsewhere in this country, and members of the Hospital staff and their wives to meet, was held on January 21 in Bartlett Hall. It was a morning coffee party, to which Distaff Club members were also invited. Many of the acquaintances first made at the Hospital parties during the Christmas season and at festivities in staff members' homes were happily renewed on this occasion.

DISTAFF CLUB

One of the highlights of our present year's activities was our January 16 meeting. We were very fortunate to have as our speaker Mr. W. G. Constable, recently retired Curator of Painting at the Boston Museum of Fine Arts. His subject was "Collectors and collecting". In his stimulating talk he discussed how the collector works, and explained the potential triumphs and pitfalls in collecting and how certain great collections have been assembled.

On January 21, Distaff-ers were invited to a morning coffee given by the Staff Wives Association. This was a very pleasant occasion and provided an excellent opportunity for us to become better acquainted with the Staff Wives.

Area meetings will be held in various homes throughout February. This is a good way for newcomers to meet people first in small groups. It is also a more convenient way to get together in stormy weather.

The Distaff Club is most appreciative of the hospitality extended to us by Mrs. Soma Weiss. Our members have been invited to her home for an evening of music on February 9.

Our group looks forward to our March agendum, which includes a game night — always one of the most popular evenings of the year. Cards, scrabble, etc. will be available, and, of course, a chance to talk.

MASSACHUSETTS EYE & EAR INFIRMARY

Fellowships in the New York Academy of Sciences were conferred upon Endre A. Balazs, M.D. and Laszlo Varga, Ph.D. of the research staff of the Retina Foundation, 30 Chambers Street, Boston, "for outstanding work toward the advancement of science". The Retina Foundation was established about six years ago, to do basic eye research in affiliation with the Massachusetts Eye and Ear Infirmary and the Harvard Medical School.

Dr. Balazs and Dr. Varga were among the limited number of scientists from all over the world elected this past year to Fellowships by the New York Academy. Dr. Balazs, who was born in Budapest, Hungary, did extensive research both in Budapest and in Stockholm, Sweden, before coming to the Retina Foundation in 1951 as Associate Director in charge of the biochemistry and biology units. Dr. Varga, also born in Hungary, was associated with the Department of Biology at the Massachusetts Institute of Technology before joining the Foundation research team which is studying connective tissue — especially certain connective tissues of the eye, such as the vitreous body, the cornea, and the uvea.

At a meeting of the Executive Committee of the Massachusetts Eye and Ear Infirmary, held on December 16, 1957, the following votes were passed:

Dr. Maurice B. Rappaport was appointed Research Associate in Otology;
Dr. Mendell Robinson was appointed Assistant in Otolaryngology;
Dr. Albert Weiser was appointed Assistant in Otolaryngology.

The following resignations were accepted:

Dr. Richard Coffey from the position of Graduate Assistant in Otolaryngology;
Dr. Daniel F. Milam from the position of Assistant in Ophthalmology;
Dr. Bernard H. Zeavin from the position of Assistant in Ophthalmology.

BIOGLETS

Dr. Richard H. Aster, Intern in Medicine—born in Grand Rapids, Michigan, July 30, 1930; B.S., University of Michigan, 1952; M.D., University of Michigan, 1957; married; one child; home: Grand Rapids.

Dr. James H. Duxbury, Assistant Resident in Urology—born in Ladysmith, British Columbia, Canada, 1927; B.A., University of British Columbia, 1949; M.D.C.M., Mc Gill University, 1953; Intern, rotating, Montreal General Hospital, 1953-54; Intern in Surgery, Queen Mary Veterans Hospital, Montreal, 1954-55; Resident in Surgery, Reddy Memorial Hospital, Montreal, 1955-56; Resident in Pathology, Royal Jubilee Hospital, Victoria, British Columbia, 1956-57; married; one daughter; home: Victoria, British Columbia.

Dr. John R. Huckell, Assistant Resident in Orthopedics—born in Edmonton, Alberta, Canada, February 6, 1928; B.Sc., University of Alberta, 1948; M.D.C.M., McGill University, 1952; Intern, Montreal General Hospital, 1952-53; Resident in Pathology, University of Alberta Provincial Laboratory, 1953-54; Assistant Resident in General Surgery, University of Alberta Hospital, 1954-55; Assistant Resident in Orthopedic Surgery, University of Alberta Hospital, 1955-56; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1956-57; married; three children; home: Edmonton, Alberta, Canada.

Dr. William E. Karnes, Resident in Neurology (Captain, MC, USAF, on active duty with duty station at the Massachusetts General Hospital)—born at Fort Sam Houston, San Antonio, Texas, September 5, 1930; B.S., University of Oklahoma, 1952; M.D., University of Oklahoma, 1955; Intern (Air Force), Tripler Army Hospital, Honolulu, T.H., 1956; Fellow in Neurology, acting as Assistant Resident, Massachusetts General Hospital, 1957; married; two sons; home: Oklahoma City, Oklahoma.

Dr. Betty J. McClellan, Intern in Pathology—born in Little Rock, Arkansas, October 26, 1932; B.S., Southern Methodist University, Dallas, Texas, 1955; B.M. and M.D., University of Arkansas School of Medicine, Fayetteville, 1957; home: North Little Rock, Arkansas.

Dr. D. Glyndwr Millard, Assistant Resident in Radiology—born in Featherstone, Yorkshire, England, October 14, 1922; attended St. Michael's School, Bryn-Llanelly, South Wales; military service: Pilot, Royal Air Force, Flight Lieutenant, serving in Rhodesia, South Africa, North Africa, Malta, Italy, Egypt, Palestine, Cyprus, Greece, Lebanon, Syria, France, and England, 1940-46; M.B., B.S., St. Thomas's Hospital Medical School, University of London, England, 1953; Intern, Newton-Wellesley Hospital, Newton Lower Falls, Massachusetts, 1953-54; general practice, Jaffrey, New Hampshire, 1954-57; married; one daughter.

Dr. Robert G. Ojemann, Assistant Resident in Neurosurgery—born in Iowa City, Iowa, May 5, 1931; B.A., State University of Iowa, Iowa City, 1952; M.D., State University of Iowa School of Medicine, 1955; Intern, Cincinnati General Hospital, Cincinnati, Ohio, 1955-56; Assistant Resident in General Surgery, Baylor University College of Medicine, Houston, Texas, 1956-57; married; one son.

Dr. John T. Potts, Jr., Intern in Medicine—born in Philadelphia, Pennsylvania, January 19, 1932; B.A., La Salle College, Philadelphia, 1953; M.D., University of Pennsylvania, 1957; home: Moorestown, New Jersey.

Dr. Dwight R. Robinson, Intern in Medi-

Dr. Samuel B. Kirkwood, Associate Obstetrician — Commissioner of the Department of Public Health, Commonwealth of Massachusetts

cine—born in Morristown, New Jersey, September 7, 1931; B.A., Cornell University, 1953; M.D., Columbia University, 1957; home: Mendham, New Jersey.

Dr. Earle H. Rosenberg, Intern on the Dental Service—born in Cambridge, Massachusetts, April 24, 1929; A.B., Harvard College, 1951; M.A., Boston University, 1953; D.M.D., Harvard School of Dental Medicine, 1957; married; one daughter; home: Brookline, Massachusetts.

Dr. Stefan C. Schatzki, Acting Resident in Radiology—born in Leipzig, Germany, July 16, 1931; B.A., Harvard College, 1952; M.D., Harvard Medical School, 1956; Intern, Harvard (II & IV) Medical Service, Boston City Hospital, Boston, Massachusetts; married; one son.

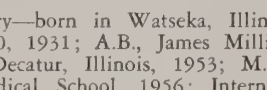
Dr. R. Neal Schneiderman, Resident in Dermatology—born in Omaha, Nebraska, November 15, 1930; B.S., Northwestern University, Evanston, Illinois, 1952; M.D., Northwestern University, 1955; Intern, Mount Zion Hospital, San Francisco, California, 1955-56; Resident, University of California Hospital, San Francisco, 1956-57.

Dr. Richard H. Smith, Assistant Resident in Psychiatry—born in Woodsfield, Ohio, December 4, 1928; A.B., Ohio State University, 1949; M.D., Ohio State University Medical School, 1953; Intern, rotating, Ohio State University Medical Center, 1954; military service: Private, U.S. Army, Fort Knox, Kentucky, 1954-56; Resident in Psychiatry, Harding Sanitarium, Worthington, Ohio, 1956-57; married; now living in Boston.

Dr. William L. Strickler. Assistant Resident in Surgery—born in Watseka, Illinois, September 20, 1931; A.B., James Millikin University, Decatur, Illinois, 1953; M.D., Harvard Medical School, 1956; Intern in Surgery, Barnes Hospital, St. Louis, Missouri, 1956-57.

Dr. David Van Buskirk, Intern in Medicine—born in Pittsburgh, Pennsylvania, February 10, 1932; B.A., Yale University, 1953; M.D., Harvard Medical School, 1957; married; one child.

Dr. Arnold N. Weinberg, Assistant Resident in Medicine — born in Brooklyn, N. Y., September 30, 1929; B.S., Cornell University, Ithaca, N. Y., 1952; M.D., Harvard Medical School, 1956; married; three children.



New addresses:—

Dr. Haroutioun A. Aprahamian (a.r.p. *An.* 1956), Dept. of Surgery, Section of Anesthesiology, Yale University School of Medicine, New Haven, Conn.
Dr. Bradford Cannon (assoc. v.s.) Suite 808, Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Miriam W. Carmichael (a.r.p. *N.* 1956), Medical College of Virginia, Richmond, Va.
Dr. Lincoln D. Clark (*M.* 1948), Dept. of Psychiatry, Salt Lake County General Hospital, 156 Westminster Ave., Salt Lake City, Utah - *a temporary address*
Dr. Edwin M. Cole (r.p. *N.* 1932 & r.p. *Psychiat.* (*McL.*) 1934), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. John R. David (*M.* 1956), National Institutes of Health, Bethesda 14, Md.
Dr. Francis L. A. de Marneffe (a.r.p. *Psychiat.* 1952), 84 Garden St., Cambridge 38, Mass.
Dr. Robert H. Hansen (a.r.p. *An.* 1957), 286 Marion Drive, Baton Rouge, La.
Dr. Wayne M. Hebertson (r.p. *N.* 1957), National Hospital, Queen Square, London, England
Dr. Justin R. Hüppe (r.p. *R.* 1957), Adelbert Stifter Str. 27, München 27, Germany
Dr. William F. Ketchum (*C.M.* 1948), American Cyanamide Co., Danbury, Conn.
Dr. John D. Leidholt (a.r.s. *Or.* 1952), 830 E. 18th Ave., Denver, Colo.
Dr. Cesare T. Lombroso (a.r.p. N. 1955), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Allan B. McNie (a.r.p. *Path.* 1957), Dept. of Legal Medicine, Harvard Medical School, Boston, Mass.
Dr. Henry A. Mosher (a.s. *Oph.*), 266 Beacon St., Boston 16, Mass.
Capt. David B. Murray, MC, USAR (a.r.p. *Path.* 1956), 98th General Hospital, Birkenfeld, USAREUR APO 34, c/o Postmaster, New York, N.Y.
Dr. Robert M. O'Brien (*Or.* 1941), 950 Francis Place, St. Louis 5, Mo.
Dr. Frederic H. Packard (supt. emeritus *McL.*), 98 Washington St., Marblehead, Mass.
Dr. Francis M. Rackemann (*E.M.* 1914), 266 Beacon St., Boston 16, Mass.
Dr. Raymond L. Robillard (a.r.p. *N.* 1957), National Hospital, Queen Square, London, England
Dr. John Rock (*W.S.* 1919), 77 Glen Rd., Brookline 46, Mass.
Dr. Fred A. Simmons (*W.S.* 1935), Suite 910, Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Richard H. Wallace (*W.S.* 1929), 101 River Rd., Weston, Mass.
Dr. Edwin C. Wood (*M.* 1951), Dept. of Psychiatry, Veterans Administration Hospital, West Haven, Conn.
Dr. Donald N. Wysham (*M.* 1954), New York Hospital, New York, N.Y.

Brief bits:—

Dr. Henry K. Beecher lectured recently at the NATO Naval Base at Naples, Italy, on invitation of the Surgeon General, and gave several other lectures in Europe — the final one at the Royal Society of Medicine in London.

Mr. Lloyd D. Brace, a member of our Board of Trustees, has been elected a trustee of the Rockefeller Foundation.

Dr. Benjamin Castleman was guest speaker at the meeting of the California Academy of Medicine on December 7. His subject was "Clinical pathological aspects of hyperparathyroidism". The meeting was held in San Francisco, and many MGH-ers were in the audience — John Sampson, C. A. Noble, Jr., Benson Rowe, Dexter Richards, J. M. Robinson, and John C. Rowe.

Dr. Edwin F. Cave has returned from attending the meeting of the Pan-Pacific Surgical Association, held in Honolulu, where he presented a paper on "Complications of medullary nailing of long bone fractures". This meeting was also attended by Drs. Ulfelder, Welch, and Linton.

A fine tribute to Dr. Charles C. Dennie (*D.* 1914) appears on pages 774-776 of the December 1957 issue of the *A.M.A. Archives of Dermatology.* The piece was written by Dr. Richard L. Sutton, Jr. It carries pictures of Dr. Dennie and of the cup which was presented to him. The article was brought to our attention by a note from Dr. Henry W. N. Bennett (a. *D.* 1928-36) of Manchester, N. H.

Dr. Joseph Hanelin has been appointed Chief of the Department of Radiology at the Newton-Wellesley Hospital. As noted elsewhere in this issue, Dr. Hanelin continues on our staff as Clinical Associate in Radiology.

THE NEWS

No. 175 Boston, Mass. March 1958

THE MIXTER LABORATORIES FOR NEUROPHYSIOLOGY AND BORON CHEMISTRY

The purpose of these laboratories, as with others on this floor, is to obtain a better understanding of nervous tissue in both normal and diseased states. With this in mind, we have sought (1) to diagnose and to grant therapy for disorders of the central nervous system by the utilization of isotopes — both radioactive and non-radioactive, (2) to obtain information leading to a fundamental understanding of the blood-brain barrier under various conditions, and (3) to determine the mechanism of formation and pathways of cerebrospinal fluid.

The various chemical, biological, and physical disciplines are all brought to bear on these problems which involve histology, toxicology, organic and inorganic chemistry, surgical procedures, photomicrography, and radioisotope techniques. This collaboration of people with varied backgrounds allows a more concerted approach for obtaining knowledge of the central nervous system and thus to facilitate therapy for nervous disorders.

The utility of these disciplines can be best illustrated by one of our present efforts directed toward the treatment of glioblastoma multiforme by a neutron capture irradiation therapy — this as an adjunct to surgery. The entire basis for this therapy results from a unique difference between normal and neoplastic tissue in the brain. This is the marked alteration in the blood-brain barrier in the neoplasm, resulting in its increased permeability to many substances which are preferentially excluded to a great extent in normal brain tissue. Thus boric acid, when injected intravenously, achieves a tumor-to-brain boron ratio after thirty minutes of two or three to one. Utilizing the boron^{10} isotope with a high cross section capture for thermal neutrons, obtained from the nuclear reactor, it would seem feasible to be able to destroy tumor tissue selectively. The radioactive process which would occur in tissue is as follows:

$${}_5B^{10} + {}_0n^1 \rightarrow [{}_5B^{11}] \rightarrow {}_3Li^7 + {}_2He^4 \text{ (2.4MEV)}$$

The doubly charged helium, or alpha particle, would dissipate all its energy in about 14 microns of tissue. Thus, the destructive ionizing effect of this particle would be limited to the cell containing B^{10} or to its immediate neighbors. This form of therapy would be used to destroy those cancerous cells behind the tumor face which have escaped surgical removal.

One of the problems has been to obtain compounds which would yield an increased tumor-to-brain boron ratio. This would minimize destruction of brain function and might possibly permit treatment for inoperable tumors. Another part of the problem is to extend the duration of this ratio to allow greater maneuverability in delivering this neutron flux and longer irradiation times.

The first step in this program has been the preparation of boron-containing compounds which fulfill the following requirements:

1) compounds which are relatively non-toxic in large doses
2) water-soluble compounds
3) substances which are stable under the physiological conditions in which they are used

A compound satisfying these conditions is then injected into Swiss albino mice which have intracranial tumors (produced by implantation of methylcholanthrene pellets into the brain) and C 3 H gray mice with subcutaneously transplanted brain tumors. The character of these tumors is ascertained histologically and is determined following successive transplantations to verify the constancy of the tumor. The animals are sacrificed at definite times following the boron injection, and the various tissues are carefully excised and then analyzed by a spectrophotometric procedure for boron content. The method involves digestion of the tissue in concentrated acid, destruction of the organic material, and complex formation of the boron with an organic dyestuff. The spectral change is a function of boron content, and tumor-to-brain boron ratio by this method is then plotted against a time axis.

A compound which gives a consistently high ratio is evaluated by extensive toxicological testing in animals. On this basis it is determined whether a compound could be used in man and what dosage would be well within safe limits. Such substances can then be given to terminal glioma patients to determine their tolerance and to follow their mode of excretion. Satisfactory results with a compound would allow small doses to be given to glioma patients undergoing craniotomy. Boron analysis and histology of the biopsy material would determine the absorption of boron as a function of tumor structure and yield information regarding the dosage required for tumor destruction.

These steps would all be done prior to instituting this procedure as a form of therapy. The nuclear reactor at the Massachusetts Institute of Technology is nearly completed. It is being constructed, in part, with a view to its use in this procedure and other medical research. We will endeavor to utilize the operating facilities there in this proposed neutron capture therapy for brain tumors. Its success will be due completely to the combined efforts of the entire research group.

The complete program is under the direction of Dr. William H. Sweet, Visiting Neurosurgeon at the Massachusetts General Hospital. In addition to Dr. Sweet and to the authors, the various phases of the research are being performed by the following staff: Dr. Derek Gordon, Clinical and Research Fellow — a visiting neurosurgeon from Belfast, Northern Ireland; Dr. Federico Mora, Clinical and Research Fellow, who has completed his neurosurgical residency at this Hospital; Dr. Raymond Kjellberg, Neurosurgical Resident, with several years of research experience in stereotaxic procedures; Miss Beverly Whitman, Senior Technician, who has a Bachelor of Science degree in biology; Miss Winnie Crane, Technician, who has a Bachelor of Arts degree in science; and Mrs. Joan Crowley, Technician, who has had chemical and biological training at Tufts University.

The facilities on Warren 4 are excellent and this, together with a stimulating atmosphere emanating from the other laboratories on the floor, creates an ideal medium for productive research. We are fortunate to be associated with this group.

Albert H. Soloway, Ph.D.,
Assistant Chemist in Neurosurgery
Janette Robinson, A.B.,
Independent Research Worker in Neurosurgery

* * *

WILLIAM FRANKLIN WOOD

His older friends called him Frank, his newer friends addressed him as Bill. Their number was legion. He was respected and loved.

William Franklin Wood was born in New York on November 19, 1890. He was a graduate of the New York Homeopathic Medical College in 1912, and of Tufts College Medical School in 1917. He served in administrative positions in the Massachusetts Homeopathic Hospital from 1917 to 1921; in the Munson State Hospital from 1921 to 1924; as Assistant to the Massachusetts Commissioner of Mental Diseases from 1924 to 1926; and at the Danvers State Hospital from 1926 to 1927.

He was appointed an Assistant Director of the Massachusetts General Hospital in 1928 and was instrumental in promoting the planning, the building, and the opening of the Baker Memorial. In 1932 he became Director of the McLean Hospital, where he served with distinction until his retirement on March 1, 1956. On June 8 of that same year a reception was held in his honor, followed by an informal buffet supper, which was attended by scores of doctors, nurses, and other hospital personnel with whom he had worked for so many years.

During his administration at McLean, many innovations were introduced, including an extensive research program which was housed in a superb new laboratory. His relationship with the patients was kindly and intimate. His friendly personality built up a cordial rapport between the Hospital and the citizens of Belmont — no mean accomplishment. While serving as Director *Emeritus* of McLean Hospital from 1956 to 1958 he continued to be active in outside medical affairs, as Health Officer of the Town of Belmont and as Consultant to the Massachusetts Department of Mental Health.

Dr. Wood lived a full and many-sided life. He was Secretary-Treasurer of the New England Hospital Assembly in 1931, became Vice-President in 1936, and was elevated to the office of President in 1937. He served as Secretary to the Massachusetts Hospital Association from 1941 to 1947, and as President in 1948. He was a corporation member of both the Massachusetts Memorial Hospitals and the Massachusetts General Hospital. Nor were his activities confined merely to medical and hospital affairs, for he was a Past President of the Boston Rotary Club and a member of the Belmont Rotary. He even invaded the financial field as a Director of the Waverley Cooperative Bank and as a Trustee of the Belmont Savings Bank.

In July of 1952 Dr. Wood suffered a severe cardiac infarction, but recovered sufficiently to carry on under restrictions. He died suddenly at his home in Belmont, on January 15, 1958.

The Payson Park Congregational Church in Belmont, where memorial services were held on Sunday, January 19, was filled with his many friends who gathered there to do him honor.

His wife and a daughter, Mrs. Frank H. Gardner of Belmont, survive him.

N. W. F. [axon]

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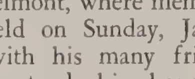
Mr. Henry R. Shepley, senior partner in the firm of Shepley, Bulfinch, Richardson and Abbott, has been chosen to receive the gold medal award for architecture by the National Institute of Arts and Letters for 1958. He will receive the honor at the joint annual ceremonial of the National Institute and the American Academy of Arts and Letters in May.

Besides many examples of his work in this vicinity and in other parts of the country, Mr. Shepley is responsible for the designs of our new buildings here at the Hospital, including the White Building, the Research Building, and the Warren Building.



The Board of Trustees, at their meetings on December 27, and January 10 and 24, voted:

That Mary A. B. Brazier, Ph.D. be granted leave of absence with pay, for the period January 1 through March 31.

To appoint:

Dr. Donavin A. Baumgartner as Second Assistant Resident in Surgery, beginning July 1;

Dr. John F. Burke as Assistant in Surgery, with the privilege of seeing a limited number of private patients in his office at the Hospital, beginning January 1;

Dr. James J. A. Cavanaugh as an "exchange" Assistant Resident on the Children's Medical Service, for a period of two months, beginning January 2;

Marc A. Fried, Ph.D. as Associate Psychologist for one year, beginning January 15;

Herbert J. Gans, Ph.D. as Assistant Sociologist in the Department of Psychiatry, beginning January 15;

Dr. Stephen M. Krane as Assistant in Medicine, beginning January 1;

Dr. Marvin M. Lipman as Assistant Resident in Medicine, for the period July 1 through December 31;

Dr. Zbigniew J. Lipowski as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Arthur S. Lurie as Assistant Resident in Dermatology, beginning July 1;

Dr. Clyde N. Shealy as Assistant Resident on the Neurosurgical Service, beginning July 1;

Dr. Merrill C. Sosman as Consultant in Radiology, beginning January 1;

Dr. John A. Warden as Assistant in Radiology, beginning July 1;

Dr. Thomas J. Whitfield, III, as Assistant to the Children's Medical Service.

At their meetings on December 24 and during January, the General Executive Committee voted:

That the appointment of Dr. Ronald S. Cowie as Assistant Resident in Orthopedic Surgery be concluded as of January 31, and that he be appointed Clinical Fellow in Orthopedic Surgery, beginning February 1.

To extend the appointment of:

Dr. Lionel O. Garrote as Clinical and Research Fellow in Neurosurgery from March 1 through September 30.

To reappoint:

Dr. Robert L. Bragg as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1, 1957;

Dr. Frederick J. Duhl as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Liselotte I. Hecht, Ph.D. as Research Fellow in Medicine for one year, beginning January 1;

Dr. Jack H. Mendelson as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Maurice Thibault as Clinical Fellow in Radiology for one year, beginning July 1.

To appoint:

Dr. Harriet L. Boardman as Clinical Fellow in Psychiatry for one year, beginning January 1;

Dr. Richard J. Brown as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Francis R. Coughlin, Jr. as Clinical and Research Fellow in Surgery, for the period January 1 through June 30;

Dr. Leslie J. DeGroot as Clinical and Research Fellow in Medicine for one year, beginning January 1;

Dr. Judith F. Gould as Clinical Fellow in Anesthesia for one year, beginning September 1;

Dr. William H. Harris as Clinical Fellow in Orthopedic Surgery, for the period February 1 through March 31, and that he be promoted to the position of Senior Resident in Orthopedic Surgery, beginning April 1;

Dr. Jesus S. Manlapaz as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Alberto Miyara as Clinical Fellow in Medicine, retroactive to October 8, 1957, through June 30, 1958;

Dr. Alex F. Muller as Research Fellow in Medicine, for the period January 1 through April 30;

Annette M. C. Rapin, Ph.D. as Research Fellow in Medicine, beginning February 1;

Dr. George M. Ricketson as Clinical Fellow in Orthopedic Surgery, for a period of three months, beginning January 2;

Dr. Norman Ronis as Research Fellow in Neurology, for the period January 1 through June 30;

Dr. Heinrich E. Seidel as Graduate Student Assistant in Orthopedic Surgery, for six months, beginning January 6;

Dr. Richard H. Smith as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Richard J. Stenger as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Alfred D. Surtees as Clinical Fellow in Anesthesia and Acting Chief Resident in Anesthesia, for the period January 1 through July 24.

Dr. Alfred J. Luessenhop was promoted to the position of Clinical Assistant in Neurosurgery on January 1, *not* in Neurology, as reported in the last issue of THE NEWS.

⁂

TUMOR CLINIC

The Tumor Clinic, established by Dr. George W. Holmes as a consultation service, was legalized by formal title in 1925. As a clinic, organized under Dr. Robert B. Greenough, it has become the prototype of numerous similar groups set up in hospitals throughout the country. Meanwhile his "table of organization" which included members primarily from the Departments of Dermatology, Surgery, and Radiotherapy, and later from the Departments of Medicine, Pathology, Otolaryngology, Urology, and Neurosurgery was changed by additional appointments from the Orthopedic, Gynecologic, and Dental Services. However, changing personnel, varying patterns of activities, and the impact of numerous other accredited clinics have modified the complex relationship of clinic and hospital here and throughout the country.

All of the successors of Dr. Greenough were associated at some time with the Collis P. Huntington Memorial Hospital. Dr. Greenough, Dr. Channing C. Simmons, and then Dr. Ernest M. Daland headed the clinic in turn until 1946. For the next ten years Dr. Grantley W. Taylor was the chairman and Dr. Ira T. Nathanson co-chairman. When Dr. Taylor retired in 1957 Dr. Claude E. Welch was appointed Chief, and Dr. John W. Raker Associate Chief. The direction of the clinic is assigned to the Tumor Clinic Committee and also includes Drs. Laurence L. Robbins and Milford D. Schulz, representing the Department of Radiology, Drs. Paul C. M. Zamecnik and Rita M. Kelley, the Department of Medicine, Dr. LeRoy A. Schall, the Eye and Ear Infirmary, and Dr. Benjamin Castleman, the Department of Pathology.

The Massachusetts Eye and Ear Infirmary has been closely associated with the clinic since 1925. Dr. D. Crosby Greene and Dr. Harry A. Barnes were the original members from that hospital. Dr. Edwards W. Herman was in active charge and continued his otolaryngological duties until V-J Day. Associated with him from the inception were Drs. Carl H. Ernlund and LeRoy A. Schall.

The clinic, which has been set up in

close proximity to the Radiotherapy Department, is bursting at the seams, and physical expansion is essential for the near future. The patient load is enormous. A total of 9,725 new and subsequent visits were made to the Tumor Clinic in 1956. This number is surpassed in the Out-Patient Department by only the general medical and general surgical clinics, where 26,000 and 13,000 patients, respectively, were seen.

In order to accommodate our patients in the present cramped quarters, the clinic is open mornings and afternoons five days a week to segregate special groups of patients and consultants. On Friday afternoons the survivors of the old Huntington Clinic are still seen, and the Huntington plan, by which private patients are treated with all the advantages of the easily available consultations of the clinic, is being re-expanded under Dr. Raker's direction.

The smooth functioning of the clinic is due to many factors. There is a large Visiting Staff who have had special training in cancer, particularly by association with the Pondville Hospital. For several years a Clinical Fellow in Cancer has been appointed through a grant from the American Cancer Society — Dr. D. Albert Young being the present incumbent. These Fellows often continue to visit the clinic after the completion of their appointed year. In addition, the Nursing Staff, headed by Miss Isadora Glann, and the Social Service Department, now represented by Miss Barbara Willes, make invaluable contributions to the care of patients.

The Tumor Clinic conference now holds its weekly meeting in the Bigelow Amphitheatre each Wednesday at 12 o'clock, since the crush of visitors has outmoded the old conference room on White 2. Problem cases from various wards of the Hospital and from the clinic are discussed by consultants who are available from all departments of the clinic.

In addition to these specified activities many other projects are sponsored by the clinic. One of the most important involves close liaison with the house staff. Surgical residents are not required to consult with members of the clinic but can obtain advice readily, as well as operative assistance or direction, from surgeons of the clinic who are qualified in particular fields. Physicians may obtain opinions from the Huntington group, which is under Dr. Zamecnik, or from the members of the clinic who are particularly interested in chemotherapy.

Clinical research is constantly in progress. Of the many projects that have not yet been completed, those inaugurated by the surgeons of the clinic may be cited. Drs. Taylor and William P. Rogers, Jr. are continuing their studies on the results of therapy of cancer of the breast by radical mastectomy. Dr. Gerald G. Garcelon has just presented a study of salivary gland tumors at the annual American Cancer Society lecture given in the Memorial Hospital, New York City. Dr. Chester J. Dexter is investigating cancers of the floor of the mouth and carotid body tumors. Dr. Frank C. Wheelock, Jr. has completed an investigation of suture line implantation of cancer after resection and anastomosis of the colon. Dr. Gordon A. Donaldson has just presented data on perforated cancers of the colon to the New England Surgical Society. Dr D. Albert Young is collecting and analyzing the records of our chordoma patients. An end-result study of cancer of the lung is being made by Drs. J. Gordon Scannell and Earle W. Wilkins, Jr. Dr. William C. Quinby, Jr. is investigating sarcoma of the soft tissues, and malignant disease in infants and children. Dr. George L. Nardi is studying the free amino acid contents of normal and neoplastic tissue in man, and the elevation of serum trypsin in carcinoma of the pancreas. He also has devised a method of treatment of cancer of the esophagus, consisting of total thoracic esophagectomy and colon replacement. Dr. William V. McDermott, Jr. is continuing his studies of cancer of the pancreas, liver, and thyroid. Dr. Welch, in conjunction with Dr. Wilkins, is completing an extensive review of our patients with cancer of the stomach, and, with Dr. Ralph C. Darling, Jr., of those with small bowel tumors.

The boundary between clinical and laboratory research has become increasingly vague. Several projects involve the use of both facilities. The Cytological Laboratory, under the direction of Dr. Priscilla D. Taft since Drs. John B. and Ruth M. Graham left for Roswell Park Institute in Buffalo, continues its investigations. Drs. William H. Baker, John G. Freymann, William D. Sohier, Jr., and Rita M. Kelley have procured interesting data from metabolic studies on patients under treatment by hormones or therapeutic agents. They are also utilizing patients of the "hormone-breast" and lymphoma clinics for clinical research studies under generous grants from the U.S. Public Health Service, as part of a national program seeking improved therapeutic techniques for the palliative treatment of these patients. Dr. Raker is initiating a detailed study of cancer cells in the blood stream, and has recently visited other institutions in this country where this work is under investigation. Drs. Raker, George S. Richardson, and others are engaged in setting up a research program to investigate the significance of metastatic cancer of the breast in internal mammary nodes. Dr. Richardson is investigating the complex problem of tumor immunity, and, with Dr. Lewis L. Engel, is carrying out fundamental work in metabolism of estrogenic hormones on patients with and without malignant disease.

The relationship of the Huntington Laboratories and the Tumor Clinic has always been close. Policies formulated by Dr. Joseph C. Aub have been continued by Dr. Zamecnik. Some current problems of investigation are being pursued in both areas.

There also has always been and there must continue to be a very close relationship between the Tumor Clinic and the Department of Radiotherapy. Physically they share facilities, and functionally their activities cannot be divided. Both are oriented directly toward the care of patients with malignant disease and the training of young physicians in the care of such patients. At least one member of both the resident and senior staffs of the Department of Radiology is in regular attendance in the Tumor Clinic.

With our active program of clinical research, it is fortunate that the American Cancer Society has, by an additional grant, provided us with a research secretary, Miss Green, who is available to the staff. At the present moment, fettered in her small pigeonhole, she hopefully awaits relief by the administration.

In addition to the teaching program that has been outlined above, a formal course is given to Harvard Medical students in their fourth year. This was a very popular elective when it was conducted by Dr. Nathanson. After a temporary decline, increased interest is again being shown by the students. Dr. Edward D. Churchill, the cancer coordinator for the Medical School, integrates the teaching throughout various hospitals. At present 12 students are taking the course under the direction of Dr. Zamecnik and Dr. Richardson.

Despite these activities, it must be realized that the Massachusetts General Hospital is only one of over 700 hospitals in this country that have similar clinics which are recognized and approved by the American College of Surgeons. Since the days of Dr. Greenough many important hospitals have been erected and dedicated solely to the care and investigation of patients with cancer. Where before we were only one, now we are one of many, and the competition from other clinics has made it difficult to retain what we believe is the traditional aura of leadership of the Massachusetts General Hospital. For example, in the coming year, follow-up records of all patients with malignant tumors entering this Hospital, private as well as ward, must be established. It is hoped that this file will function with a minimum of inconvenience, since individual doctors will be asked to supply information about the condition of their cancer patients at yearly intervals. Such material should be easily available and will supply invaluable information in the study of this disease. Mrs. Brady has been placed in charge of this record system which has just been activated. The wholehearted and effective support of the entire staff will be necessary to obtain these data and thereby maintain our position.

Claude E. Welch, M.D.,
Visiting Surgeon
and *Chairman of the Tumor Board*

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Dermatology

Lever, W. F., and Klein, E.
Untersuchungen ueber die Pathogenese der idiopathischen Hyperlipaemie.
Dermatologica 115:579-586, 1957.
Spangler, A. S.
New treatment for pitted scars: Preliminary report.
A.M.A. Arch. Dermat. 76:708-711, 1957.

General Surgery

Barnes, B. A., Krane, S. M., and Cope, O.
Magnesium studies in relation to hyperparathyroidism.
J. Clin. Endocrinol. & Metab. 17:1407-1421, 1957.
McDermott, W. V., Jr.
Medical progress: Metabolism and toxicity of ammonia.
New England J. Med. 257:1076-1081, 1957.
McDermott, W. V., Jr.
A simple discriminatory test for upper gastrointestinal hemorrhage.
New England J. Med. 257:1161-1164, 1957.
Zuidema, G. D., and Clarke, N. P.
A pulse simulator for the study of flash burns.
J. Appl. Physiol. 11:487, 1957.

Hematology

Hays, E. F., Simmons, N. S., and Beck, W. S.
Induction of mouse leukaemia with purified nucleic acid preparations.
Nature 180:1419-1420, 1957.

Ophthalmology

Liebman, S. D.
Riley-Day syndrome (familial dysautonomia): Concerning the etiology of the corneal pathology; an ocular survey of nineteen cases.
A.M.A. Arch. Ophth. 58:188-192, 1957.

Physiology

Blank, I. H., Griesemer, R. D., and Gould, E
The penetration of an anticholinesterase agent (sarin) into skin. I. Rate of penetration into excised human skin.
J. Invest. Dermat. 29:299-309, 1957.

Psychiatry

Lorenz, M.
Expressive form in schizophrenic language.
A.M.A. Arch. Neurol. & Psychiat. 78:643-652, 1957.
Wolf, I.
Hostile acting out and Rorschach Test content.
J. Project. Tech. 21:414-419, 1957.

Miscellaneous

Garland, J.
Editorial responsibility for medical advertisements.
New England J. Med. 257:1117-1120, 1957.

This is the last issue of THE NEWS in which 1957 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Adams, R. (Editor)
Organic reactions, vol. 19.
New York, John Wiley & Sons, Inc., 1957.
(5P)
American Medical Association. Council on Scientific Assembly.
Scientific exhibits, 1957.
New York, Grune & Stratton, 1957.
(1R)
Ball, E. (Editor)
Biochemical preparations, vol. 2.
New York, John Wiley & Sons, Inc., 1952.
(5A)
Beal, J. M.
Manual of recovery room care.
New York, Macmillan Co., 1956.
(32O)
Beckerley, J. G. (Editor)
Annual review of nuclear science, vol. 6.
Palo Alto, Calif., Annual Reviews, Inc., 1956.
(36Jn)
British Postgraduate Medical Federation, University of London.
Lectures on the scientific basis of medicine, vol. 5, 1955-56.
University of London, The Athlone Press, 1957.
(6A)
Clifton, C. E. (Editor)
Annual review of microbiology, vol. 11.
Palo Alto, Calif., Annual Reviews, Inc., 1957.
(9A)
Colowick, S. P., and Kaplan, N. O. (Editors)
Methods in enzymology, vol. 4. Special techniques for the enzymologist.
New York, Academic Press, Inc., 1957.
(22Em)
de Hevesy, G. C., Forssberg, A. G., and Abbatt, J. D. (Editors)
Advances in radiobiology. Proceedings of the fifth international Conference on Radiobiology held in Stockholm on 15th-19th August, 1956.
London, Oliver and Boyd, 1957.
(36Jn)
Freud, S.
The standard edition of the complete psychological works (English translation), vol. 14. On the history of the psychoanalytic movement. Papers on metapsychology and other works.
London, The Hogarth Press and the Institute of Psycho-analysis, 1957.
(19Op)
Harris, R. S., Marrian, G. F., and Thimann, K. V. (Editors)
Vitamins and hormones. Advances in research and applications, vol. 15.
New York, Academic Press, Inc., 1957.
(5N)
Lawrence, J. H., and Tobias, C. A. (Editors)
Advances in biological and medical physics, vol. 5.
New York, Academic Press, Inc., 1957.
(5Am)
Lovern, J. A.
The chemistry of lipids of biochemical significance.
New York, John Wiley & Sons, Inc., 1955.
(5D)
Nord, F. F. (Editor)
Advances in enzymology and related subjects of biochemistry, vol. 19.
New York, Interscience Publishers, Inc., 1957.
(5C)
Shemin, D. (Editor)
Biochemical preparations, vol. 5.
New York, John Wiley & Sons, Inc., 1957.
(5D)
Snell, E. E. (Editor)
Biochemical preparations, vol. 3.
New York, John Wiley & Sons, Inc., 1953.
(5D)
Tocantins, L. M. (Editor)
Progress in hematology, vol. 1.
New York, Grune & Stratton, 1956.
(14B)
Waelsch, H. (Editor)
Progress in neurobiology, vol. 2. Ultrastructure and cellular chemistry of neural tissue.
New York, Paul B. Hoeber, Inc., 1957.
(19Ab)
Westerfeld, W. W. (Editor)
Biochemical preparations, vol. 4.
New York, John Wiley & Sons, Inc., 1955.
(5D)
Wolfrom, M. L. (Editor)
Advances in carbohydrate chemistry, vol. 12.
New York, Academic Press, Inc., 1957.
(5D)
Wolstenholme, G. E. W., and O'Connor, C. M. (Editors)
Ciba Foundation Symposium on drug resistance in micro-organisms; mechanisms and development.
Boston, Little, Brown and Company, 1957.
(9F)

MASSACHUSETTS EYE & EAR INFIRMARY

STAPES MOBILIZATION OPERATION FOR THE IMPROVEMENT OF HEARING IN OTOSCLEROSIS

Otosclerosis is a condition which produces deafness in human beings only. It is a disease which may affect any part of the bony labyrinth. When this disease affects a certain part of the labyrinth in the region of the oval window in which the stapes lodges, then and then only does hearing become affected. The pathological changes begin first with an increased vascularization of the area involved and absorption of the bone. This first stage is followed by redeposition of calcium in an unorthodox arrangement which characterizes it pathologically—with staining characteristics which distinguish it sharply from the surrounding normal bone.

The cause of otosclerosis is unknown. There is definitely an inherited factor present, as it frequently occurs successively in families. It is a disease which appears most commonly in females, and chiefly between the ages of twenty and forty. Otosclerosis develops insidiously, is hardly noticeable at its onset, is slowly progressive, and ultimately leads to rather profound deafness. Both ears are usually involved. The condition in one ear may progress more rapidly than in the other but, as time goes on, the loss becomes bilaterally equal, and is frequently accompanied by tinnitus and occasionally by vertigo.

There have been many efforts over the past seventy-five years to improve hearing by surgical measures. Some of these procedures were very well conceived but, because of inadequate illumination and magnification, and poor asepsis, the improvement did not last. Enthusiasm and hope engendered by early reports gave way to discouragement and final abandonment. For more than fifty years thereafter otologic literature was completely devoid of reference to procedures upon the stapes as a means of improving hearing.

Brief historical review of surgery in otosclerosis: It was well recognized by otologists in the 1870's that hearing is impaired as a result of scar tissue, following infections of the middle ear space, which impedes sound transmission to the inner ear. They also recognized deafness due to bony fixation of the stapes in the oval window, which is unrelated to infection. This is called "chronic otitis insidiosa". It was Kessell, in the early 1870's, who advised removing the drum membrane, including the malleus and incus, to relieve the obstruction in the middle ear. This procedure was subsequently abandoned, but it was the first attempt to improve hearing by surgical means. Some years later, in 1888, Boucheron of France published his procedure known as the stapes mobilization. This was the first time this term had been used. His technique was improved upon in 1892 by Miot, also of France, who was the first to describe in minute detail from beginning to end the entire procedure of stapes mobilization for any obstruction to the passage of sound waves to the inner ear. In this report on several hundred patients, there were included the records of many who were suffering from otosclerosis. In this country, Drs. Frederick L. Jack and Clarence Blake, surgeons at the Massachusetts Eye and Ear Infirmary, were the first to perform middle ear surgery for the improvement of hearing. After the initial procedure of complete removal of drum membrane, malleus, and incus, the surgery was extended to actual manipulations upon the stapes itself. By 1888 the drum and ossicles were no longer excised. Instead, an incision was made in the drum membrane, adhesions due to scar tissue were severed, and the tendon of the stapes was also severed. Later, Miot directed his attention to the stapes itself, and tried to loosen it in order to re-establish its mobility to sound pressures. Drs. Jack and Blake went a step further and actually removed the stapes from the window. By 1900 the results of these surgical procedures could not withstand the severe criticism of some of the leading otological authorities, and for a time nothing more was heard of stapes mobilization. In 1952, after a lapse of fifty years, Dr. Samuel Rosen of New York published a report on five patients with hearing improvement following stapes mobilization.

It is very interesting how this rediscovery of the stapes mobilization occurred, for the course of events leading to it was quite accidental. Approach to the contents of the middle ear heretofore had been by means of an incision through the drum. This was an undesirable approach. Dr. Julius Lempert of New York, seeking a means of relieving tinnitus, believed that the tympanic plexus of nerves lying on the medial wall of the middle ear was one of the causes producing it. He believed this was true because when the tympanic plexus was destroyed by chronic disease of the middle ear, tinnitus rarely was present. Since he was the originator of the endaural incisions technique for entry into the middle ear, he made an incision 7 or 8 mm. lateral to the drum membrane in the canal wall membrane from approximately 3 to 9 o'clock. He elevated the canal wall membrane and its attached drum from their bony attachments, exposing the middle ear beautifully. However, Lempert discarded this procedure, as it failed to accomplish relief from tinnitus, which had been his aim.

Dr. Rosen believed that tinnitus and vertigo could be relieved by severing the chorda tympani nerve. He performed this operation on many patients, but with such questionable results that the procedure was not attempted by many other otologists. In exposing the middle ear space, Rosen obtained an excellent view of the incudostapedial articulation and of the stapes in many patients. On one occasion, in operating upon a patient with otosclerosis and tinnitus, Dr. Rosen was about to sever the chorda tympani nerve, when he accidentally mobilized the stapes. As this operation was being performed under local anesthesia, the patient was able to suddenly cry out that he could hear everything that was going on in the operating room. Rosen, knowing the degree of deafness that had been present, tested the patient's hearing while he was still on the table and observed that actually there was an improvement. This not only surprised him, but impressed him tremendously. He attempted the same procedure in other patients suffering from otosclerosis, and although the results were unsuccessful, his initial observation encouraged him to continue and, in doing so, the same phenomenon occurred — immediate improvement of hearing, while the patient was still on the table, when the stapes was successfully mobilized. He hastened to report these observations, and I believe a paper on his operation was published in 1952 in the *New York State Journal of Medicine*. Full credit has been given to Dr. Rosen for the rediscovery and revival of this operation, which is today the most popular and most frequently performed type of surgery for the improvement of hearing in otosclerosis. The operation as described by Dr. Rosen is as follows: After light preoperative sedation, and with brilliant illumination and under two-power magnification, and with local anesthesia, using 1% or 2% zylocaine or novocain solution to which has been added 5 minims of adrenalin per c.c., the canal wall membrane is injected with ½ to 1 c.c. of the solution. This produces complete anesthesia. A circumferential incision is made from approximately 12 to 6 o'clock, posteriorly 7 to 8 mm. lateral to the drum membrane. The canal wall membrane and the drum are elevated gently and cleanly from their bony attachment. This exposes the middle ear space. The high-powered Zeiss operating microscope is now used for the subsequent manipulations of the stapes.

Rosen initially applied pressure to the neck of the stapes, but he has now modified his technique. If he finds that the stapes is immovable by the first maneuver, he makes direct pressure upon the footplate of the stapes. If this fails, a window is cut through the footplate. The hearing is tested after each manipulation. Under high magnification the movement of the stapes is quite easily discerned. At the completion of the manipulations, the drum and the canal wall membranes are laid back in their original position and held with various materials, until re-union with the canal wall has taken place. At the end of a week or ten days, the packing in the external auditory canal is removed and the hearing tested.

When a report on Rosen's operation was first published, there was an immediate reaction against it. It was inconceivable to many otologists that the stapes in this diseased area could remain mobilized. However, Rosen was not easily deterred and, as his technique improved, the number of patients successfully operated upon increased. He traveled far and wide demonstrating his procedures. The phenomenon of immediate hearing improvement while the patient was on the table was witnessed by many observers.

It was not long before world-wide interest was aroused in the revival of this operation, and innumerable modifications of the Rosen operation have been developed. These modifications of technique, wherein an attack is made upon the otosclerotic area by means of chisels, burs, needles, etc., are truly heroic and not without risk to cochlear function. Because these manipulations of the footplate endanger the structures within the inner ear, there has been an increase in the number of complications. Vertigo, labyrinthitis, tinnitus, total loss of hearing, trauma to the facial nerve with temporary and, on occasion, permanent partial facial paresis have been reported.

The indications for the operation are practically the same as those for the fenestration operation. It is indicated primarily in patients with otosclerosis, where the cochlear nerve function is good. There are many reliable tests to determine the residual cochlear function. The drum membrane and the ossicular chain must be intact. However, scarred and healed perforations of the drum membrane are not contraindications, if it can be established that the hearing loss occurred subsequent to the infection. The patient should be fully informed as to what the operation attempts to do. Beautiful charts illustrating the structure of the ear are available, which make it possible to explain to the patient why he does not hear. They also help in explaining why there is no way of predetermining what the result will be following the attempt to mobilize the stapes. The chances of success or failure are explained, as well as the chance of postoperative complication. If the patient is not fully informed and the surgical attempt to improve the hearing is a failure, the reaction of disappointment to the patient may be very severe.

The surgeon must be prepared to perform the various manipulations step by step. Testing of the patient on the operating table, either by live voice or by means of an audiometer, will usually indicate whether the mobilization of the stapes has been successful. The hospital stay is usually two days. Occasionally, because of vertigo, an extra day or two is necessary.

From world reports in the literature, including that of the Winthrop Foundation at the Massachusetts Eye and Ear Infirmary, it appears that hearing for 35%

No. 73 in a series of Staff photographs
Dr. Claude E. Welch, Visiting Surgeon — Chairman of the Tumor Board

to 45% of the otosclerotic patients is successfully improved to a level of 30 decibels or better, for both speech and pure tones. When we speak of improvement of hearing to the 30 decibels level or better, we mean that the patient no longer needs a hearing aid and he is socially and economically rehabilitated.

Because the stapes mobilization procedure retains the normal physiological pathway for sound transmission, it is not surprising that, for many patients, hearing returns to normal.

Advantages of the stapes mobilization operation are:

a. Incapacitation of the patient is limited — rarely over two days of hospitalization.

b. No postoperative aftercare is necessary, other than removing the packing from the external canal.

c. Postoperative effects are minimal.

d. The operative procedure may be repeated if regression of hearing improvement occurs.

e. The patient may have the fenestration operation if the stapes operation is a failure.

If the initial hearing improvement is not maintained, the regression is usually due to fibrosis, as it is believed that healing of the otosclerotic bone does not occur.

Complications are:

a. Loss of the sense of taste at the side of the tongue may occur. This is due to trauma or severance of the chorda tympani nerve which lies directly in the field of operation.

b. Permanent perforation of the drum membrane may occur; also tinnitus, vertigo, and, as already mentioned, temporary or partial facial paralysis, but this is very rare.

With regard to the permanency of hearing improvement, it appears that in patients who have had their hearing improved to a practical, serviceable level, 70% can expect the improvement to be maintained. At least 15% to 20% may expect the hearing to recede from the high level of improvement, but it will remain improved over the preoperative level. About 10% to 15% may expect the improvement to recede to the preoperative level.

The revival of stapes mobilization as a surgical procedure for the improvement of hearing in patients with otosclerosis is certainly a step forward. To Dr. Julius Lempert must go the credit for introducing his techniques for modern temporal bone surgery, which include fenestration and tympanoplastic procedures. To Dr. Samuel Rosen goes world-wide acknowledgment for the revival of the particular procedure of stapes mobilization. To Drs. Zollner and Wullstein credit must be given for introducing under high magnification the surgical techniques for improvement of hearing in chronic otitis media. With these surgical developments, plus the advances in psychoacoustics and in neurophysiology, there is increasing hope for the alleviation of deafness in those so afflicted.

Philip E. Meltzer, M.D.,
Surgeon for the Service for the Deaf

New addresses:—

Dr. Irving P. Ackerman (*M.* 1951), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Bob Bullwinkel (*S.* 1957), 313 Melton Rd., Warrington, Fla.
Dr. Howard S. Cameron (sr. r.s. *Or.* 1957), 450 Central Ave., London, Ontario, Canada
Dr. Sheo-Nan Cheer (*E.M.* 1922), House 1001 VAC, VAC Medical Service, Martinsburg, W. Va.
Dr. Lewis Cozen (*Or.* 1938), 6221 Wilshire Blvd., Los Angeles, Calif.
Dr. Thomas M. Foley (*Or.* 1915), 140 Quince St., San Diego, Calif.
Dr. John H. Kennedy (*S.* 1950), 7755 Fay Ave., La Jolla, Calif.
Dr. Joseph S. Lichty (a. dir. 1950), Akron General Hospital, 400 Wabash Ave., Akron 7, Ohio
Dr. Kasian Lim (a.r.s. 1957), Cuyahoga County Hospital (formerly Cleveland City Hospital), Cleveland 9, Ohio
Dr. Harold L. May (*S.* 1954), Hospital Albert Schweitzer, P.O. Box 4, St. Marc, Haiti
Dr. Remedios K. Rosales (r.p. *N.P.* 1952 & a.r.p. *Path.* 1954), University of Santo Tomás, Manila, P.I.
Dr. Shen Kuang Wang (a.r.s. *Or.* 1957), Children's Medical Center, Boston, Mass.

* * *

Brief bits:—

Dr. Edwin F. Cave has been elected President of the American Board of Orthopedic Surgery.

Dr. Edward D. Churchill is in India, on a mission sponsored by the Rockefeller Foundation. At present he is at the Medical College in Lucknow, with Professor Sharad C. Misra, who was a Consultant in Surgery pro tempore here at Massachusetts General in 1953-54.

Dr. Oliver Cope is to be the George A. Ball Visiting Professor for one week in the School of Medicine, Indiana University, beginning March 12. On March 14, he will deliver the Burton D. Myers Lecture before the Nu Sigma Nu Fraternity, Indiana University. His subject will be "Cushing's disease: Experiences harvested in the surgical care of 54 patients". On March 18, he will lecture to the Indianapolis Medical Society on "Nontoxic nodular goiter: The limitations of both surgical and medical treatments".

Dr. John W. Raker was invited to speak at the Thirteenth Annual Postgraduate Course in Surgery, presented by the University of Kansas School of Medicine on January 20. The title of Dr. Raker's talk was "Experiences gained in the study of medical management of civilian disasters".

Dr. Leonard D. Rosenman (*E.S.* 1943) has been appointed Chief of Surgery at Mount Zion Hospital in San Francisco. Dr. Rosenman's office address is still 2320 Sutter Street, San Francisco 15, California.

THE MASSACHUSETTS GENERAL HOSPITAL 1811 NEWS

No. 176 Boston, Mass. April 1958

SOME PRINCIPLES OF MENTAL HEALTH AND THEIR SOCIAL IMPLICATIONS

I shall try to make no claims in this article for knowledge that we do not possess; in other words, I shall try to do what Santayana used to recommend, i.e., *to define the limits of our ignorance.* We have as yet no practicable preventive measures for mental illnesses in the sense that we have them for such diseases as typhoid or typhus or malaria. It would be fine if we had, but the regrettable fact is that we have not. The reason for this is obvious. Our knowledge of specific etiology in mental illness is in many instances quite incomplete. By and large, though not always, the possibility of effective prevention depends upon precise knowledge of cause.

There are, of course, exceptions to this rule. Bubonic plague and leprosy had largely vanished from the Western World before their specific etiological agents were discovered. This resulted undoubtedly from a general improvement in standards of living, with better housing and more widespread habits of cleanliness. Similarly, the incidence of such nutritional disorders as scurvy and rickets decreased as the general quality of diet improved before the significance of vitamins C and D was recognized, or, indeed, the vitamins themselves had been identified. It is not difficult to furnish other examples of the empirical discovery of preventive, even of therapeutic, measures in advance of more precise, controlled scientific knowledge. We can say, therefore, that even in the absence of specific etiological knowledge, man has achieved certain advances in the state of his well-being and in the prevention of illness by means of general improvements in his diet, in his habits of cleanliness, and in his living conditions. These advances have, in turn, been facilitated by public education and enlightenment, and good example.

I am sure that the analogy between these facts and the general facts of mental illness is obvious. Let us, for a moment, examine more closely the state of our knowledge of the causes of mental illnesses. It is admittedly far from adequate. This is perhaps especially true of the two large groups of major psychoses, i.e., those disorders of mood known as "manic-depressive", and those of disorders of thinking known as "schizophrenic". These, especially the latter, are responsible for the bulk of the patient load in our mental hospitals. The incidence of schizophrenic disorders is remarkably constant in different communities. There is a suspicion, but as yet not more than a suspicion, that manic-depressive attacks are the result of still unexplained metabolic disturbances. Evidence, as yet tentative and preliminary, that certain chemical agents in the body may be related to what we recognize as schizophrenic reactions is gradually being accumulated. Critical investigation is urgent here — and an open mind. The burden of proof rests on the shoulders of the dogmatic — those who insist with so much assurance that all is physical or all is mental. It is highly probable that in these psychoses, as indeed in many other illnesses not of a mental nature, we are dealing with *multiple causation.* This is certainly true of "psychosomatic" disturbances such as peptic ulcer, bronchial asthma, and arterial hypertension, in which emotional causes and pathological-physiological ones combine to bring about the morbid result. It is also true even of the common infections. It takes more than the pneumococcus to cause pneumonia. Indeed, the pneumococcus is always with us — always present in the upper respiratory tract — but under certain circumstances only does its virulence increase or is the resistance of the host lowered sufficiently to permit the development of a full-blown attack. Predisposing factors can include not only exposure to cold, fatigue, exhaustion, and alcohol, but probably also to intense emotional disturbance. There is ample evidence that emotional forces can play a contributory role in the onset of an active tuberculosis infection.

Multiple causation is especially valid in mental illness — a fact which must be kept in mind in any program of prevention. One must look for hereditary and constitutional factors, for anatomical lesions, for infectious and toxic agents, and also for cultural, economic, societal, and familial influences. In few mental diseases is any one factor sufficient to account for the entire process. Although syphilis is known to be caused by the *Treponema pallidum,* who could deny that a primary syphilitic lesion results from cultural or personal as well as infectious causes? It is reasonable to assume, for the present at least, that schizophrenic and cyclothymic disturbances spring not only from chemical and perhaps constitutional sources, but also almost certainly from environmental ones as well. Given a certain kind of make-up, a sensitive, withdrawn child can turn either into an autistic (or perhaps schizophrenic) individual, or possibly, with wise and intelligent handling, into a creative member of society even though he may remain sensitive and withdrawn.

It seems paradoxical that the very neuropsychiatric illnesses about which we have the most precise knowledge, as far as brain localization is concerned, are frequently those we can do the least about therapeutically. I refer here to organic brain syndromes, to irreversible changes in the cortex due to infection, new growths, trauma, arteriosclerosis, and to hereditary or congenital defects. Even when the site of difficulty is known, we are often powerless to provide a remedy because, once the brain cells have been destroyed, they cannot regenerate.

The psychoneurotic illnesses offer a field in which the possibilities of prevention are more hopeful. Here, although our knowledge is less precise, and although we cannot localize the cause of illness in any part of the central nervous system or elsewhere in the body, we can still at times effect something approximating a cure. Indeed, I believe that if we could apply the knowledge that we now possess — incomplete though it still is — we could strike a mighty blow for freedom from one of the most insidious, all-pervading, and destructive enemies that afflict man. We may think of psychoneurosis as a minor ailment, but it assuredly is not. It affects the relationship of individuals in their work and their love, and decreases their capacity for enjoyment and for living useful and productive lives. It is responsible for more unhappiness, despair, and waste than almost all other types of illness. It affects our health and is largely at the root of a great variety of psychosomatic disturbances. It comes between man and wife, between parent and child, and is passed on from one generation to the next partly through imitation, partly through direct influence. It often has the appearance of an hereditary trait, but there is no evidence for this. Instead, there is a kind of pseudo-heredity, not the result of transmission by genes, but rather the result of early environmental influences. These psychoneurotic distortions of human character are responsible for more than personal and individual suffering. I believe that much of the political unrest and international hostility and strife from which man has always suffered can be laid at the door of psychoneurosis.

Before proceeding further, I shall attempt to define what I mean by psychoneurosis. Precise definition is difficult because the manifestations of the disorder are so varied. The term is here used in a broad sense to cover disturbances of mental and emotional functioning which are not associated with gross demonstrable damage to the brain or central nervous system. In essence, a psychoneurosis may be considered to represent a fault in the adaptation of an individual to his environment, manifested principally in the character and quality of his personal relationships. This fault in adaptation results from a disturbance in emotional growth and development. An individual so handicapped cannot progress without great difficulty from one stage of growth to the next, or, if he does, he will have a strong tendency, in the face of frustration, to regress or return to earlier and more primitive modes of adaptation. The psychoneurotic drags with him outworn and useless equipment from his past, which not only burdens his present but shapes his future, as if by fate, because it produces a compulsive need to repeat the same mistakes over and over again.

The passions, appetites, and impulses of childhood survive relatively unaltered in the deeper layers of the mind of such a person, only to be met with the strictest prohibition. The conflict of these opposing forces produces a state of inner tension in him so that he becomes the battlefield of a civil war, and much of his energy must be spent in keeping his own destructive impulses at bay and in erecting defenses — often in the form of symptoms and symptomatic acts — against his own anxiety. If a person in this condition could be relieved of his neurosis, the energy expended in such self-protective devices would be freed and could then be put to the service of reality. Better still, of course, is prevention of such conflicts so that this energy may consistently remain available for growth and adaptation to the demands of the environment.

In many respects and in more or less degree everyone is neurotic — even those of us who are free from symptoms. The late Professor Victor von Weizsäcker of Heidelberg coined the word "normopath" to describe the average so-called healthy individual. The fact is that we have not yet learned how to bring up children without inflicting on them some neurotic distortions of character. A certain degree of infantile neurotic anxiety seems to be ubiquitous in our culture. This is perhaps inherent in the utter helplessness of the human infant and in his relatively long period of dependence.

Fortunately, we are somewhat better equipped today than we were, say fifty years ago, to prevent such neurotic distortions of character in children. Insights obtained from dynamic psychiatry, if properly applied to the rearing of children, could, I am certain, prevent much invalidism, crime, delinquency, perversion, alcoholism, drug addiction, misery, discord, and divorce. Modern psychological discovery has demonstrated in a convincing fashion that for the human child, other beings — especially the mother — constitute the most important element of the environment. There can no longer be much doubt that, broadly speaking, an infancy spent in a complete, stable, loving family is the necessary foundation for healthy human development. Psychopathology and unhappy parent-child relationships are, in a sense, inseparable(1). The symbiotic bond between mother and infant does not end with the cutting of the umbilical cord. Unless the baby falls into welcoming and tender arms it cannot thrive. If it is weaned too soon or not allowed to satisfy its sucking needs sufficiently, or if it is trained too early, or disciplined before it is ready for discipline, the tensions created will very likely follow the child throughout life. More than that, unless some of the most primitive and urgent impulses can be satisfied during infancy, the chances are that they will persist in their crude, untamed form in the unconscious and will not be reworked and refined in later life to become available for creative purposes.

Unfortunately, we cannot provide the perfect family for every newborn infant, nor the perfectly patient and loving mother. This should not deflect us, however, from the pursuit of truth, because that alone must guide us in our plans to improve the mental health of a community. Obviously, we cannot wait for the perfect pair to have the perfect baby and then elect him President. We must begin with the here and now, and work with individuals of all ages. Each age has its particular vulnerabilities and problems.

I have already outlined some of the needs of infancy. If these are not met they will continue to assert themselves and to interfere with later emotional development. This is especially true at certain critical times in life: early childhood, when the conscience begins to develop; adolescence, when sexual needs reassert themselves and the struggle for independence and self-identity is so urgent; young adulthood, when one must make one's way in the world; marriage and parenthood, with all their vicissitudes; and the climacterium and old age in both sexes, when everyone must learn to accept failing physical and perhaps mental powers. The success we have in passing through each of these stages of development will depend in the long run on how we have fared in the previous ones.

Those who are interested in mental health must direct their chief efforts toward protection of the family against the strains and stresses which assail it. This requires some understanding of the ingredients of a good marriage, and of those forces which are likely to upset it. The most important interference with good conjugal relations appears to stem from disappointment in the way a marital partner plays his expected role. Individuals who fail in marriage usually love and marry not a real person, but a more or less distorted image of their own inner fantasies. These fantasies are derived in large measure from early experiences and memories which cluster about the parents. Images and memories of parental unhappiness may cause tension in the minds of people who otherwise appear to be well adapted to life. Marriage is often the rock on which an individual founders. It is more difficult and more dangerous for many personalities than war, because it brings to light neurotic faults and distortions of personality which can remain undiscovered in other less searching situations. Even if they attempt to do so, a disturbed couple can rarely conceal their tension and hostility from each other or from their children, who, like all children, are extraordinarily sensitive to the emotional climate in which they grow up. All this is not to imply that one can or should expect parents to live in a state of perfect and sublime harmony, or that a family exists without its tensions, rivalries, and jealousies. To keep these within manageable limits is a valuable part of every child's experience, if he is to learn how to get along in the world.

As has been well said(1):

> Children internalize, in love or in fear and anger, what they see and feel about their parents, just as the parents had internalized the unhappy, angry, forbidding images of *their* parents. In this way the deprived child is likely to become an unsuccessful marriage partner in his turn. Thus an increase in the incidence of marital breakdown in a community will directly swell the numbers of conflict-torn, insecure children who have not learned to identify with "good parents". Because they have not done so, they will be unable to give out secure affection in adult life as fully as they should, in their marriages or in the wider sphere of social obligations. If this were to go on unchecked it is obvious that the danger to society would be great. It would be ironical if we were to see an advance in physical well-being (due to our efforts at prevention and hygiene) go hand in hand with a disintegration of social and personal relationships — that is, of mental health.

I believe that this need not happen if the facts become widely recognized and accepted, and if the concern of men and women of good will from all walks of life is enlisted. The prevention of mental illness and the safeguarding of mental health cannot be the prerogative of psychiatrists alone, who, by virtue of their professional training and experience, know more about mental illness than they do about mental health. An important contribution to this subject can be made by ministers, priests, and rabbis, and by teachers who come in close contact with young children and adolescents. Deans and professors in colleges and universities are becoming more and more aware of this aspect of their work, and so are business executives. Lawyers and judges, as well, who are constantly confronted by troubled individuals, and also obstetricians, pediatricians, and family physicians are in a strategic position; so are many others — social workers among them. All of these can play a significant part in preventing mental illness, but, most especially, the concerned and enlightened layman. This is a battle that must be waged on all fronts.

For success, we need to keep an objective in mind toward which to strive, even though it may remain beyond our reach. Mental health is a positive state — not merely the absence of mental illness. To define it is not easy, but it can be characterized as balance; as the capacity to derive satisfaction from love and from work and also to give satisfaction; as a certain willingness to accept life with all its disappointments and vicissitudes; perhaps as a kind of helpful alliance between conscious and unconscious forces in the personality so that they work in harmony with each other and not in conflict. Definitions by themselves do not, of course, provide the answers we seek. They are, therefore, never quite satisfactory. Our approach must, rather, be an operational one based on a study of individuals and the manner in which they function in their environments. Both the individual and his environment are constantly changing, and a series of fine adjustments is necessary to maintain the stability of the equilibrium which must exist between them.

I have already mentioned some of the changes that occur in the progress of an individual from infancy to adulthood. Many of these are, to be sure, responses to social stimuli or to what society expects. An adult, in our culture, does not run naked in the streets, even if he would like to do so, because such behavior would be discountenanced and is not expected of him. Society demands of us that our behavior be reasonably predictable. People who overstep commonly accepted limits are marked as deviants or psychotics, and frequently have to be deprived of freedom of action within the community. Some societies are, of course, far more liberal and tolerant of deviant behavior than others. Nazi Germany and Communist Russia are examples of illiberal and intolerant societies. Both succeeded in impressing their moulds on great numbers of people by starting the process early in life and permitting little variation in attitude or action. What this does to the mental health of the people who compose such societies we can only guess.

No wonder, then, that anthropologists and sociologists have had much to say to psychiatrists in recent years about the maintenance of mental health and the prevention of mental illness. They have begun by warning us of our own class-limited orientation. Most psychiatrists, engaged in private practice, come from middle-class backgrounds, as do their patients, and the social scientists question the ability of this specialized group to deal effectively with other social groups whose attitudes toward success and security, toward marriage and divorce, toward morality and social responsibility, toward love and sex are often so different from its own. What is true of other economic classes of society is perhaps even more true of other ethnic groups — especially of those in a minority.

Recent studies by Dr. Florence Kluckhohn(2) of the Department of Social Relations at Harvard and her collaborator, Dr. John Spiegel(3), illustrate some of the subjects I have alluded to in perhaps too general terms. Dr. Kluckhohn is well known for her theory of Value Orientations, and it is with this theory that they are operating in their researches. They are studying intensively families from three different ethnic groups in Boston: the old Yankee, the Irish-American, and the Italian-American. Within each of these three groups a good deal of consistency and uniformity is found in attitudes toward such things as time, place, and family.

The typical old-American is oriented toward the future, the Irish-American and Italian-American toward the present. The typical Yankee boy looks forward to leaving home — and is indeed expected to — and to setting up his own establishment and somehow to improve on his father's situation. The first, or even the second, generation Italian-American, on the other hand, is expected to stay near his parental home and maintain close ties, not only with his own family, but also with his uncles, and his cousins, and his aunts. And the first generation Irish-American is frequently kept under strict parental supervision and is not permitted the kind of freedom and experimentation characteristic for an adolescent in a typical old-American middle-class family.

Attitudes toward illness and seeking medical advice and going to hospital are markedly different in the different ethnic groups. An old-American comes to the hospital on the whole willingly, with the hope of preventing worse illness, and he comes with one other person, at most. An Italian-American seeks out a local doctor quickly enough when he is ill, but he does not realistically understand what help he can expect to get from specialists or from modern medical techniques. Also, when he does consent to enter a hospital, he arrives with a bodyguard of parents, siblings, and collaterals, and cannot comprehend why they are not permitted to stay.

Kluckhohn and Spiegel are able to set up norms for these ethnic groups, i.e., for the first generations; but with later generations, what with the influence of public schools and often with intermarriage, some deviation from these norms can be expected and predicted. It must be borne in mind, of course, that even in the so-called old-American stock one finds much variation. It is easy to see how tension within a family can arise from conflicts over such deviations from traditional values, and how what in other psychological dimensions might be explained in terms of the Oedipus complex can be enormously magnified and enhanced by this battle of the cultures.

Furthermore, no two children of such families or, indeed, of any family, encounter the same environmental conditions, or, for that matter, with the exception of identical twins, the same genetic inheritance. This can be accounted for partly by the acculturation of parents and older siblings and also by the relationships which vary with each child's personality and position in the family.

What has been said of ethnic variables could also be said of social and economic ones. The work of the late Dr. Thomas A. C. Rennie and his collaborators at the New York Hospital(4), of Hollingshead and Redlich at Yale(5), and finally of Lindemann and his group in this Hospital(6) should provide us with valuable and needed information concerning these relationships. It is, of course, difficult to separate out ethnic, social, and economic influences, as can be seen, for example, in the case of recently arrived Puerto Ricans and of Negro migrants from the South.

In a large general hospital such as this one, where people of many different ethnic and economic backgrounds come for help, there is an admirable opportunity to explore the multiple causes of mental and emotional illness — especially of the psychoneuroses, whose manifestations are protean and whose effects can be so destructive to health, well-being, and a good life.

Carl A. L. Binger, M.D.,
Member of the Board of Consultation

REFERENCES

(1) Dicks, Henry V.: Quoted, with minor variations, from The predicament of the family in the modern world. The Lancet, February 5, 1955, pp. 295-297.
(2) a) Kluckhohn, Florence R.: Dominant and variant value orientations. *In* Personality in nature, society, and culture, Clyde Kluckhohn, Henry A. Murray, and David M. Schneider, Editors, New York, Alfred A. Knopf, pp. 342-357, 1955; b) Kluckhohn, Florence, Strodtbeck, Fred, et al.: Variations in value orientations. To be published by Row, Petersen Co., Evanston, Ill.
(3) Spiegel, John R.: The resolution of conflict within the family. Psychiatry, vol. 20, no. 1, February 1957.
(4) Rennie, Thomas A. C., Srole, Leo, Opler, Marvin K., and Langner, Thomas S.: Socio-economic status and mental disorder in the metropolis. American Journal of Psychiatry, vol. 113, no. 9, pp. 831-836, March 1957.
(5) Hollingshead, August B., and Redlich Frederick C.: Social class and mental illness: A community study. (In press)
(6) Lindemann, Erich: a) The Wellesley project for the study of certain problems in community mental health. Milbank Memorial Fund Publications, 1953; b) The meaning of crisis in individual and family living. Teachers College Record, vol. 57, no. 10, February 1956.

The Board of Trustees, at their meeting on February 5, voted:

To rescind the appointment of Dr. Walter Kaupe as Resident in Psychiatry at McLean Hospital, as of July 1.

To appoint:

Dr. Habibolah Davanloo as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Elwin W. Donnelly as Second Assistant Resident in Radiology, beginning January 1, 1959;
Dr. Paul E. Gaver as Assistant Resident in Anesthesia, beginning July 1;
Dr. Harry S. Olin as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Robert S. Richards as Assistant in Radiology, beginning July 1;
Dr. Phelps M. Robinson as Resident in Psychiatry at McLean Hospital, beginning July 1;
Dr. Chiu-chen Wang as Assistant Radiologist, on completion of his service with the Armed Forces, approximately July 1;
Dr. Walter P. Zmyslowski as Assistant Resident in Anesthesia, beginning September 1.

At their meetings on February 4, 12, and 19, the General Executive Committee voted:

To promote, as of July 1:

Dr. Louis H. Edmunds, Jr. to the position of Second Assistant Resident in Surgery;

Dr. Edward L. Ferguson to the position of First Assistant Resident in Surgery;

Dr. Moses J. Folkman to the position of Third Assistant Resident in Surgery;

Dr. Abdollah Gashgai to the position of Third Assistant Resident in Surgery;

Dr. Jack J. Greenberg to the position of Second Assistant Resident in Surgery;

Dr. John W. Grover to the position of Second Assistant Resident in Surgery;

Dr. John B. Herrmann to the position of Third Assistant Resident in Surgery;

Dr. Dale G. Johnson to the position of Second Assistant Resident in Surgery;

Dr. Mark M. Kartchner to the position of Third Assistant Resident in Surgery.;

Dr. John L. Lewis, Jr. to the position of Third Assistant Resident in Surgery;

Dr. Donald M. McKee to the position of Second Assistant Resident in Surgery;

Dr. Alfred E. Miller to the position of Second Assistant Resident in Surgery;

Dr. Anthony P. Monaco to the position of Second Assistant Resident in Surgery;

Dr. Gustave C. E. Mueller to the position of Third Assistant Resident in Surgery;

Dr. John P. Remensnyder, Jr. to the position of Third Assistant Resident in Surgery;

Dr. Farrokh Saidi to the position of First Assistant Resident in Surgery;

Dr. William L. Strickler to the position of Second Assistant Resident in Surgery;

Dr. George M. Williams to the position of Third Assistant Resident in Surgery.

To appoint:

Dr. Jan Nielubowicz as Clinical and Research Fellow in Surgery for one year, beginning January 1;

Dr. Norman L. Paul as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dorothy K. Stearns, Ph.D. as Research Fellow in Biochemistry, assigned to Medicine, for one year, beginning January 23;

Dr. Muallâ Süler as Clinical Fellow in Psychiatry, for a period of six months, beginning February 1.

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VOLUNTEER GROUPS

MGH Staff Wives Association

When one of our better-informed Staff doctors made the inquiry recently, "Just what does the Staff Wives Association do?", it was decided that perhaps this was a question present in many minds here at the Hospital. It is to answer this query, as well as to stimulate more interest in this Hospital group, that the following description is submitted.

The Staff Wives Association was founded in 1950 for the purpose of providing service to the Massachusetts General Hospital, and hospitality to our professional visitors from other lands. For some time, several wives and many secretaries had felt the increasing burden of trying to assist the growing number of visitors who came to the Hospital to observe or to study over an extended period of time. Their problems were infinite, and the inauguration of a central bureau to which these situations could be referred for solution was one of the first projects undertaken by the Staff Wives Association.

As a result, we have the Reception Center for Professional Visitors, now in its third year, strategically located in the Moseley Corridor next to the General Store. Staffed weekdays from 10 A.M. to 4 P.M. by the wives of members of the Staff, this center is the spot to which all professional visitors to the Hospital are sent immediately to register. In this way, the Reception Center may keep an accurate file of Hospital and home addresses, as well as other pertinent information concerning all visitors to the Hospital — material not available anywhere else. Such visitors include doctors, nurses, technicians, social service workers, or any other professionally trained person who is pursuing a medical problem.

At the Reception Center we dispense to casual visitors information concerning Hospital programs and clinics, and give directions as to how to reach all areas within the Hospital. For those coming for longer stays, we stand ready to give assistance in locating rooms or apartments, schools for their children, or information on transportation — to name but three of the multitude of services sought by these people. Each year the Reception Center registers about 150 visitors to the Hospital. Of these, roughly 50 bring their families, any one of which may consist of as large a group as a wife, 6 children, and a tutor!

The service most frequently requested is for assistance in finding living quarters, and each year about 200 such problems are handled by the Reception Center volunteers. Our excellent housing files were started by Mrs. Grant V. Rodkey, and are now carefully kept up to date by Mrs. Benjamin Castleman and Mrs. Richard G. Whiting. These references save our Hospital visitors an incalculable number of hours of worry, and obviate unnecessary tramping along unfamiliar streets.

Probably the service that is least expected, and therefore receives the loudest praise from our visitors, is the Furniture Exchange which was started in the spring of 1953 by Mrs. Richard H. Sweet. Since furnished apartments are usually far beyond the means of these guests, the enterprising Staff Wives scoured their attics for "extras" and, greatly assisted by donations from the Hospital Maintenance Department, collected a variety of household furnishings and utensils which are now displayed in a basement area of the McLean Hospital. Under the guidance of Mrs. Paul M. Howard and Mrs. Vincent P. Perlo, our guests may select and use these furnishings during their stay in the Boston area. Last year our "borrowers" availed themselves of this service by taking over 300 pieces, varying in amounts from a single table to the furnishings for a 6-room apartment. The gratitude with which this service is welcomed is beyond comprehension.

In an attempt to mitigate the problems which confront our foreign professional visitors, the Staff Wives Association has just prepared a brochure to be mailed to these students before they leave their native lands. It explains the cost of living and housing conditions in Boston, the climatic variations, the visa requirements for those who must work, and the many services offered by the Reception Center. We strongly urge that our own Staff members send us the names and addresses of all visitors expected by their departments, so that this informative material may be sent to the visitors before their departure for America. Also, please be very sure they come immediately to the Reception Center to register when they arrive.

The Reception Center also fulfills a very important role in overseeing the social entertainment of these visitors from other countries. The Boston and suburban areas are divided into 12 communities, each under a chairman. In the hands of each of these chairmen are the names and addresses of the Staff Wives and of the foreign professional visitors residing in her area. She acts as the agent to encourage social exchanges between the two groups. In addition to these informal meetings, a special effort is made at Thanksgiving and Christmas, when all foreign visitors are invited into our American homes to enjoy our holiday festivities. Then, the annual spring picnic on the spacious grounds at the home of Dr. and Mrs. Bradford Cannon, sponsored by the Staff Wives who reside in Lincoln, provides a delightfully different type of party for the house staff, the foreign visitors, and their families. In addition, to encourage further friendships within the Hospital, three afternoon teas and one morning coffee party are held each year. To these are invited the various staff members and their wives, the foreign visitors, and key Hospital personnel. In these ways a sincere effort is made by the Staff Wives to add that bit of warmth and friendship that will make the visit of our foreign guests to Boston and to the Massachusetts General Hospital a treasured memory.

To the best of our knowledge, this Reception Center was the first of its kind to be established in a teaching hospital, and it has been most gratifying to the Staff Wives to receive complimentary inquiries about our procedures from other institutions. In 1956, Mrs. Oliver Cope (then our president) was invited by both the Massachusetts Hospital Association and the National Hospital Association to describe our Reception Center.

To turn to another service rendered by the Staff Wives Association, we point with pride to the Chapel concerts for the patients, under the able guidance of Mrs. Milford D. Schulz and Mrs. John D. Crawford. This project is now in its sixth season. Last year 14 concerts were given, with an average attendance of 60 persons. When one considers the planning and physical energy involved in getting an audience of that size from the Hospital ward in wheel chairs (or occasionally beds) down to the Chapel at an appointed hour, and then back to the floors for the next medications, one appreciates the efforts of the dedicated women who render this service. To this must be added the generosity of the distinguished musicians — some from the Hospital family and others from the excellent music schools of the Boston area — who give freely of their time so that these long-term patients may be refreshed by an hour of fine music in our beautiful Chapel. In March, through the generosity of an anonymous donor, the Staff Wives were able to purchase a baby grand piano to replace the well-worn upright in the Chapel, so that we now have an instrument worthy of the talented artists who perform upon it.

The Staff Wives Association serves the Hospital in many other ways. Members assist in the planning and execution of the Christmas parties on the Children's Wards, as well as the larger, more publicized ones for the members of the Hospital family. On occasions — such as Hospital Day, Ether Day, or the dedication of a new building — Staff Wives serve on hospitality committees. Yet another group assists the Children's Psychiatry Department in its recreation therapy, and still others supplement the enthusiasm of the Distaff Club in planning the Spring Dance.

To list the multitude of small Hospital services in which the Staff Wives are lending a hand would only bore our readers. But we *do* hope this brief account conveys an idea of the enthusiasm shared by us all in assisting the Massachusetts General Hospital to provide better service to the many patients and students of medical subjects who enter its doors.

Phyllis P. Welch,
Chairman of Publicity

DISTAFF CLUB

There have been two changes in our area representatives. Mrs. Robert E. Key replaces Mrs. John P. Connelly as the Watertown representative, and Mrs. Jack J. Greenberg succeeds Mrs. Sumner I. Zacks as representative coordinator.

On April 10, Dr. T. Berry Brazelton will speak to the Club on topics related to infant and preschool development, and will also answer questions from the audience. We are fortunate to have such an outstanding pediatrician speak to our group. Dr. Brazelton is Associate Physician on the Children's Medical Service at M.G.H., and is on the staff at the Children's Medical Center.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration — an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Cardiology

Lev, M., Benjamin, J. E., and White, P. D.
A histopathologic study of the conduction system in a case of complete heart block of 42 years' duration.
Am. Heart J. 55:198-214.

Sprague, H. B. (Editorial)
Emotional stress and the etiology of coronary artery disease.
Circulation 17:1-4.

White, P. D., Bland, E. F., and Levine, S. A.
Further observations concerning the prognosis of myocardial infarction due to coronary thrombosis.
Ann. Int. Med. 48:38-49.

Dermatology

Lever, W. F., and Klein, E.
The inhibition of lipemia-clearing by hyperlipemic serum.
J. Invest. Dermat. 29:465-469, 1957. [A check with medical libraries revealed that this journal was not received until the last of February 1958, therefore it is included. — *Editor*]

Endocrinology

Moldawer, M. P., Albright, F., Benedict, P. H., Forbes, A. P., and Henneman, P. H.
Eunuchoidism with low urinary follicle-stimulating hormone in the female: Comparison with this syndrome in the male and with the premenarchal menopause.
J. Clin. Endocrinol. & Metab. 18:1-14.

Pediatrics

Arnold, M. B., Talbot, N. B., and Cope, O.
Concerning the choice of therapy for childhood hyperthyroidism.
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McGovern, J. J., Duane, M., and Hebert, R.
Modified method of preparing concentrated smears of bone marrow.
Pediat. 21:112-113.

Surgery — Reconstructive

Cannon, B.
Open grafting of raw surfaces of the hand.
J. Bone & Joint Surg., 40-A, no. 1:79-84.

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The library call number is given, within parentheses, for each item.

American Association for the Advancement of Science Symposium, Publication No. 48.
The beginnings of embryonic development, edited by A. Tyler, R. C. von Borstel, and C. B. Metz.
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Bull, H. B.
The biochemistry of the lipids.
New York, John Wiley & Sons, Inc., 1937.
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The neurohypophysis: Proceedings of the eighth Symposium of the Colston Research Society held in the University of Bristol April 9-12, 1956. Edited by H. Heller.
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Connective tissue: A symposium organized by the Council. Edited by R. E. Tunbridge.
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Cowdry, E. V.
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Dripps, R. D. (Editor)
The physiology of induced hypothermia: Proceedings of a symposium 28-29 October 1955. Publication no. 451.
Washington, D. C., National Academy of Sciences — National Research Council, 1956.
(4H)

Homburger, F.
The biologic basis of cancer management.
New York, Paul B. Hoeber, Inc., 1957.
(13V)

Robbins, S. L.
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Society of General Physiologists.
Electrolytes in biological systems. Edited by A. M. Shanes.
Washington, D. C., American Physiological Society, 1955.
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World medical periodicals, ed. 2.
New York, World Medical Association, 1957.
(41B)

MASSACHUSETTS EYE & EAR INFIRMARY

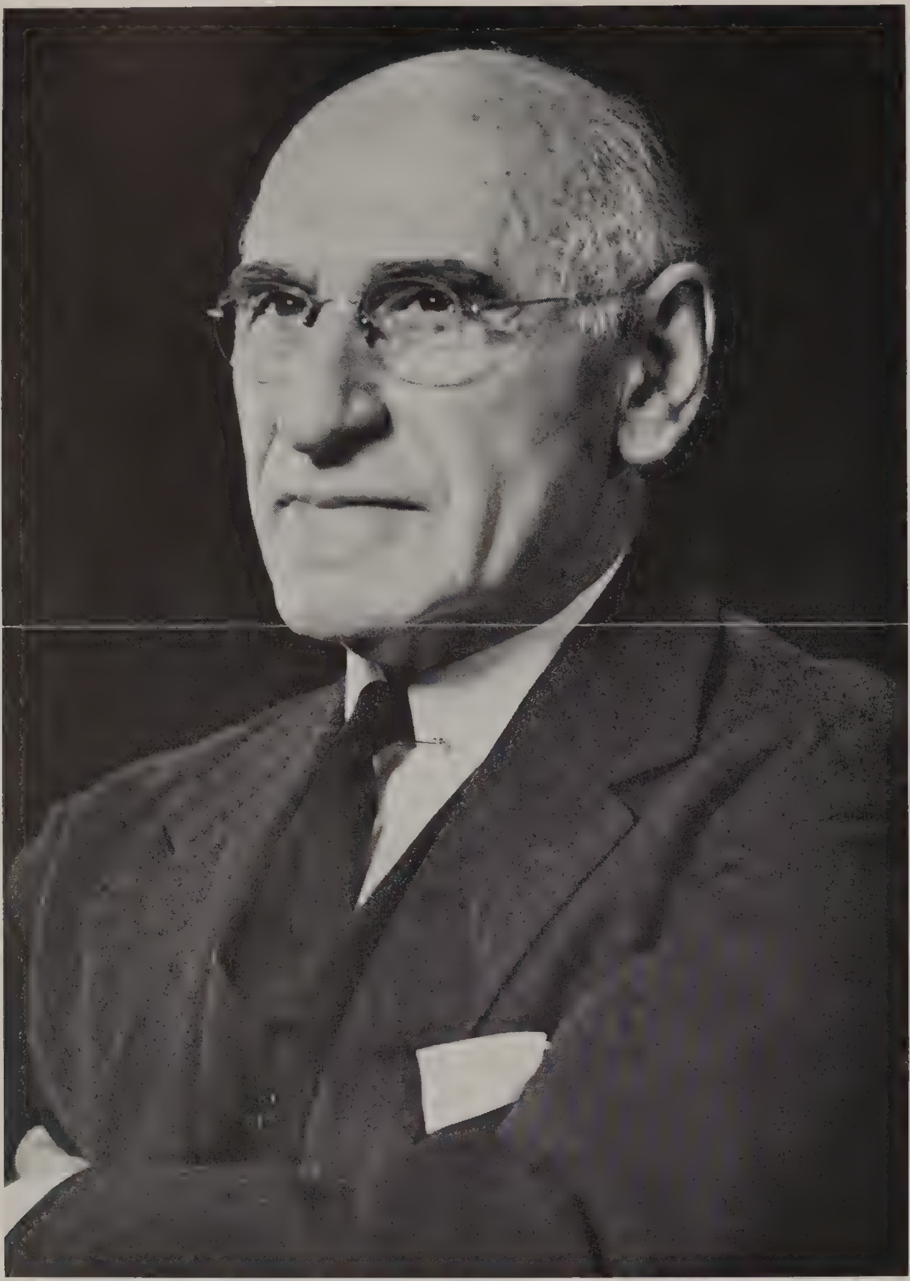
The 442d meeting of the New England Ophthalmological Society was held on March 19, at the Infirmary. The morning Operating Clinic was followed by a demonstration hour by members of the Infirmary staff. Among the afternoon speakers from the Infirmary staff were Drs. Pei-Fei Lee and Brendan D. Leahey, and Charles Snyder, Librarian, Howe Library of Ophthalmology.

Dr. Moses H. Lurie has been appointed President of the American Otological Society — the oldest society of its kind in this country — for the 1959 session.

Dr. LeRoy A. Schall, Chief of Otolaryngology, gave the principal address at dedication ceremonies of the Orton Speech and Hearing Center, Presbyterian Hospital, Newark, New Jersey. The Center was dedicated in memory of Dr. Henry B. Orton.

New addresses:—

Dr. Charles C. Dennie (*D.* 1914), 1524 Professional Bldg., Kansas City 6, Mo.



No. 74 in a series of Staff photographs

Dr. Carl A. L. Binger, member of the Board of Consultation

Dr. John R. McDaniel (*E.S.* 1940), 9th & Edmond Sts., St. Joseph, Mo.

Dr. Ruth E. Stauffer (r.p. *N.* 1949), Massachusetts General Hospital, Boston 14, Mass.

Dr. Ralph W. Walton (*W.S.* 1926), 101 Gates Ave., Montclair, N. J. (after May 1).

Brief bits:—

Dr. Bradford Cannon has been elected to membership in the American Paraplegia Society. He took part in the Hand Symposium held at the Boston City Hospital on January 30, in connection with the Annual Meeting of the Society for Surgery of the Hand. On February 26, Dr. Cannon spoke before the Berkshire County Medical Society in Pittsfield. His address, titled "Pacific adventure", was enthusiastically received by the audience.

Dr. Reed Harwood announces the opening of his office for the practice of Internal Medicine, in Suite 1109, Warren Building, Massachusetts General Hospital, 275 Charles St., Boston 14, Mass. It was in early March of 1957 that Dr. and Mrs. Harwood became the victims of a very serious automobile accident, and it is indeed welcome news to Dr. Harwood's many devoted patients to know that he is now able to resume his practice.

On January 8, Dr. George L. Nardi presented a paper entitled "Studies of liver blood flow in man", at the Third International Symposium on Radioactive Isotopes in Clinical Medicine and Research, held in Bad Gastein, Austria. On January 13, he stopped in Manchester, England, and delivered a lecture on "Recent developments in pancreatic obstruction", at the Royal Infirmary. Upon his return to the United States, Dr. Nardi went to San Francisco, at the request of the University of California Medical Center, and spoke on "Pathophysiology of hiatus hernia: Complications and treatment", at their Postgraduate Program on the Pathophysiology of the Alimentary Canal. On February 12, he was host for the annual meeting of the Mid-Century Surgeons Club, and presented a paper on "Pancreatitis". On February 14, he spoke on "Some observations on hepatic flow in man", before the Society of University Surgeons.

On February 11-12, Dr. Carter R. Rowe spoke before the Tri-State Medical Assembly, at Memphis, Tennessee. His subjects were "The fracture, in children, adults, and the aged" and "Orthopedic pain".

♣ ♣ ♣

This letter has come from the Secretary to Dr. Fiorindo A. Simeone (*W.S.* 1936):

We are terribly sorry not to have explained Dr. Simeone's change of address, and we can well understand your confusion.

On January 1, 1958, City Hospital of Cleveland was transferred from city to county ownership. Although we do not as yet have a popular name for this hospital, we are using the official name of Cuyahoga County Hospital.

Dr. Simeone is still Director of Surgery here — in fact, all remains the same except the name of the hospital. To create the least amount of confusion, your Directory should probably list Dr. Simeone's address as Cuyahoga County Hospital (formerly City Hospital of Cleveland).

This letter has come from Dr. Harvey E. Billig, Jr. (*Or.* 1935):

Enclosed is a reprint of an article on "Extended relief of tic douloureaux by physical therapeutic measures", written by me and published in the *American Journal of Surgery* of January 1958. It may be of interest to your readers to know that the foundation for the work reported in this article was inculcated in my mind by Dr. Sumner M. Roberts, my Chief when I first arrived at the Massachusetts General Hospital in 1934, as indicated in paragraph 4, column 1, page 82. I remember well his kindness, patience, and meticulous approach. Together with all those who knew him, I regret his early demise.

This delightful letter has come from Dr. Monroe A. McIver (h.s. *E.S.* 1922), written from the Nemazee Hospital, Shiraz Medical Center, Shiraz, Iran:

I am afraid I have not kept my file at the M.G.H. up to date. For the past year and a half Mrs. McIver and I have not been living in Cooperstown. However, I am still the only MGH-er in my town — Shiraz, Iran!

Summer before last, after 26 years as surgeon-in-chief at the Mary Imogene Bassett Hospital in Cooperstown, and, since the affiliation of the two institutions, clinical professor of surgery at Columbia University P. & S., I reached the retiring age. I then accepted a position under the Iran Foundation as chief surgeon of the Nemazee Hospital and Shiraz Medical Center, and Mrs. McIver and I came here in August 1956.

This institution is staffed by Americans and Iranians. It is devoted to training young Iranian doctors, and also, broadly speaking, to such projects as contribute to the health of Iran. The Center is unique in Persia, both because of its character and because it was planned, and given to Shiraz, by an Iranian. Private efforts on behalf of the community are almost unknown in this country, so that Mr. Nemazee's far-sighted generosity is outstanding. The hospital itself is modern, both in construction and in equipment, and except for the American University Hospital in Beirut there is nothing to compare with it in the Middle East. There is a school of nursing for Iranian girls that is turning out graduates in increasing numbers who meet American standards and will soon relieve the principal obstacle to running the hospital at full capacity. My work involves, in addition to clinical duties, the teaching not only of our house staff, which is perhaps my principal duty, but also of fourth year students at the Shiraz Medical School.

Shiraz is a delightful place in which to live. It is situated on the Iranian plateau, some 5,000 to 6,000 feet high, and is surrounded by mountains which, as I write, have snow on their tops, although our garden flowers bloom throughout the year. For those who have archeological interests — and who has not! — Persepolis and its surrounding antiquities are only 30 miles away. The Iran Foundation (Empire State Building, New York) is constantly looking for suitable men for most of the clinical and laboratory departments. Perchance some of the MGH graduates might be interested in working in this part of the world.

My 2-year term in Shiraz is up in May and we are returning to Cooperstown, where I shall continue my interest in the Bassett Hospital as trustee and surgeon-in-chief *emeritus*.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 177 Boston, Mass May 1958

THE HOWE LABORATORY OF OPHTHALMOLOGY

Thirty years ago, on October 1, 1927, the Howe Laboratory of Ophthalmology began to function actively as a research unit, in a single room provided by the Harvard Medical School. The staff consisted of Lucien Howe, M.D., the director; Clyde E. Keeler, Sc.D., research fellow; Harry Messenger, clinical investigator; and 2 laboratory assistants and 1 stenographer.

Today, April 1958, the Howe Laboratory occupies an entire floor of the Research Center of the Massachusetts Eye and Ear Infirmary. This area, with 4,500 square feet of floor space, is divided into 18 rooms that are utilized as laboratories, examining rooms, offices, machine shops, animal room, and storage space. Including the director, Dr. David G. Cogan, the staff consists of 6 full-time investigators. These investigators are aided by 6 laboratory and technical assistants, 3 secretaries, and 1 machinist. From time to time the Laboratory staff is augmented by investigators holding temporary appointments. During 1957 there were 9 such investigators.

In contrast with the world of today, the world of 1927 was a calm, peaceful, and unhurried place. Lucien Howe, then in his 80's, could look back over a useful career of more than 50 years devoted to private research and to the clinical practice of ophthalmology. It was, of course, impossible for him to look forward and envisage any of the great changes that would place extraordinary demands on the ophthalmic research laboratory he had endowed and established.

Nowhere is this more evident than in the notes he kept for the first few months of the Laboratory's life. Never dreaming there would be a profound change in the value of the U.S. currency, he wrote that the salary of a junior investigator should be $1800 a year and that a technical assistant should be paid $25 a week. He felt that senior investigators should receive $4000 a year. This, he said, was the salary most university professors of the time received.

Because the Laboratory was a neophyte organization, he limited the research activities to two fundamental lines of research: (1) hereditary blindness, and (2) physiological optics. He decided that the problems which were most pressing — such as those of cataracts, glaucoma, and one or two other diseases — should be left to others to deal with. In making this decision, Dr. Howe must have been influenced in part by his own experiences as a research worker. For many years he had been actively concerned with the two investigative problems he laid before his staff.

Dr. Howe had served as director for a little over a year when death came to him. However, his term of service, while brief, left its mark on the Laboratory. As a result of his interests, 35 papers on the subject of genetics and heredity in ophthalmology were published in the next few years by staff members; and physiological optics is a problem which has been dealt with continuously in the Laboratory since Dr. Howe's time.

But Dr. Howe's principal concern was with the fact that progress in medicine was painfully slow when the sole source of information was clinical experience. He knew from his own experiences as a private research worker that for research to succeed it should be done in a permanent laboratory, staffed with full-time investigators. He also knew that for a research enterprise to have an assured life it should be attached to a larger and permanent institution. This was his basic philosophy, but he could not put it into effect because he was hampered by lack of adequate space, the task of assembling a staff, and his own age and general professional background.

In 1931 Dr. Frederick H. Verhoeff was named director of the Howe Laboratory. The impact of a personality broader in experience, younger, and more vigorous was immediately apparent. No one in Boston was more admirably suited to head the Laboratory than Dr. Verhoeff. He had served as pathologist at the Infirmary for 30 years and had directed that small laboratory. He was uniquely equipped, in that he had an excellent grasp of ophthalmic surgical and clinical problems as well as the mind and interests of a researcher. He could write a paper on binocular vision, direct an investigation on experiments in the treatment of herpes zoster, and then devise a new surgical instrument.

The idea of full-time career investigators in ophthalmic research was a new one. It had to be "sold". As a salesman, Verhoeff was first rate. He was able to arouse first the interest, then the enthusiasm, of at least half a dozen young men. These he took into the Howe Laboratory — some as full-time investigators, some as part-time investigators and assistants. There he provided them with problems which would last them a lifetime.

Dr. Verhoeff reached the compulsory retirement age in December of 1940. At his urging, the then 33-year-old Dr. David G. Cogan was named acting director and then director of the Howe Laboratory. The ink on Dr. Cogan's appointment letter was hardly dry when the United States was enmeshed in World War II. Plans and programs — many of which had been in the process of development for several years — had to be abandoned in favor of projects that were vital to the welfare and defense of the nation.

One of the great fears of the time — one that never materialized — was that toxic war gases might be used in battle. To prepare for this, the Howe Laboratory, along with other laboratories, was assigned the task of studying the effects of such gases — particularly mustard and lewisite — on the eye. The Howe Laboratory was selected because the staff had been working on the physiology of the cornea for several years. Later, this work was to win for them the coveted Warren Triennial Prize.

Another wartime problem given to the personnel of the Howe Laboratory was the devising of visual aids for pilots, to be used in training and combat. The final blow of the war (the atomic bomb blasts at Japan) brought out another ophthalmic problem — the atomic bomb cataracts. The investigation of this problem became a task for the Howe Laboratory.

The three directors of the Howe Laboratory — Dr. Howe, Dr. Verhoeff, and Dr. Cogan — have all recognized that the Howe Laboratory has two prime functions, equally important. The first function, of course, is research into the problems of ophthalmology; the second is the training of career investigators. The first graduating class, if that term may be used, consisted of Elek Ludvigh and V. Everett Kinsey. These two investigators had been brought into the Laboratory by Drs. Verhoeff and Cogan. Dr. Ludvigh's interests were in the field of physiological optics, and Dr. Kinsey's were in ophthalmic biochemistry. By 1950 these two men had reached mature stature in the ophthalmic community. Their work — much of it of a pioneer nature — had been incorporated in the new theories concerning the physiology and biochemistry of the eye. When the Kresge Eye Institute of Detroit was founded, these two men were invited to become members of the staff — Dr. Ludvigh as Director of Research and Dr. Kinsey as Assistant Director of Research. There is no question but that the careers of these two men were molded by the years of experience and opportunity they had enjoyed in the Howe Laboratory.

After a time, a second (the present) group of career investigators took their places in the Laboratory. These men were W. Morton Grant, M.D., David D. Donaldson, M.D., Jin H. Kinoshita, Ph.D., Toichiro Kuwabara, M.D., and Harold L. Kern, Sc.D.

The Howe Laboratory has never been large enough or wealthy enough to accommodate a large group of investigators. Because of this, it has been deemed wise to limit the permanent staff to a small number of investigators and to invite as many temporary investigators into the Laboratory as possible, to work with the permanent staff members for short periods of time. Like so many experiments in medical education, it will be a long time before the value of this experiment can be truly assayed.

For more than a generation it has been recognized that men who are contemplating entering ophthalmology should have, in addition to their residencies, training in the basic sciences of ophthalmology. There was much said but little done about this problem until 1938, when the Howe Laboratory staff, in conjunction with the Harvard Medical School's Department of Ophthalmology, established a postgraduate course in the ophthalmic sciences. The program was an immediate success. Despite an interruption caused by the war, the course has continued to be popular. Each year a group of 20 to 25 young men, all planning to enter ophthalmology, enroll. Personnel of the Howe Laboratory continue to be active members of the teaching staff. The course is now directed by Dr. Henry F. Allen — himself a product of the Laboratory's training program.

To return to the research function of the Laboratory—in 1927 Dr. Howe specifically excluded two investigative problems that are now leading projects in the Howe Laboratory. These problems are the age-old ones of glaucoma and cataract. They are now being studied by methods and devices that were unheard of 30 years ago.

One of these new methods is tonography — a method for the clinical measurement of aqueous outflow that was introduced by Dr. Grant in 1950. The instruments used are an electronic tonometer amplifier and a recording galvanometer. Briefly, the procedure may be described as one in which the drop in ocular tension is observed continuously while an electronic Schiötz tonometer is applied continuously to the anesthetized cornea for a period of 4 to 6 minutes. The recording galvanometer records the findings graphically. It has been shown by this method that simple glaucoma is associated with increased resistance to outflow of aqueous from the eye and that this subnormal facility of aqueous outflow may continue to be subnormal even at those times when the intraocular pressure itself is normal. Further studies, using tonography, have led to the thought that the site of resistance to outflow is unrelated, at least basically, to the general circulatory or nervous system.

In evaluating glaucoma therapy, tonography is useful in determining the adequacy of treatment — be that treatment surgery, the use of miotics, or the use of systemic carbonic anhydrase inhibitors such as Diamox.

When the value of tonography as a diagnostic aid had been proved and accepted, it was decided to transfer the routine work of tonography to the newly established Glaucoma Consultation Service in the Infirmary's Out-Patient Department. Dr. Robert R. Trotter, who had served as research assistant to Dr. Grant for several years, was appointed chief of this new service.

This release from routine diagnostic work gave the Howe Laboratory staff the time and facilities necessary to pursue studies on the physiology and histology of the trabecular meshwork — that anatomical area of the angle of the anterior portion of the eye that is known to be in part responsible for aqueous outflow.

Another technique that was unknown to the men of Dr. Lucien Howe's generation is the use of radioactive isotopes — a direct product of the atomic age. In the Howe Laboratory these valuable substances have been used to study the metabolic pathways of the crystalline lens. These studies have revealed that the metabolism of glucose in the lens proceeds mainly by means of the glycolytic mechanism. However, the aerobic phase is different from that of other tissues. The production of carbon dioxide is largely effected through the direct oxidation pathways, with little participation by the citric acid cycle. These findings naturally lead to the thought that cataract formation may be linked to this peculiarity of metabolism.

In 1951 the Howe Laboratory staff became interested in the pathological condition known as arcus senilis. Arcus senilis is a fatty degeneration of the cornea met with in old people. Investigation of the condition led to the experimental production of fat by cells of the cornea. The ease with which this experimental fat formation could be elicited and controlled in the cornea led to broader studies on experimental fat formation in other cells of the body. These studies give promise of having particular significance in the fields of atheroma formation and fatty degeneration. The name "aberrant lipogenesis" has been given to this phenomenon, which has been found to be an intracellular, enzymatic process of many (but not all) cells of the body. It occurs only in the presence of serum and an oleate-containing substrate. It can be induced *in vitro*.

Mention has been made here of only three recent investigative endeavors of the Howe Laboratory staff: those concerned with tonography, lens metabolism, and aberrant lipogenesis. There have been and are many more.

One unit of the Laboratory has for a number of years been assembling a collection of stereophotographs of the eye in health and disease. This began in the Laboratory with Dr. Donaldson's designing of a special stereocamera capable of taking these unique pictures.

Another unit of the Laboratory has been concerned with finding effective means for treating chemical injuries of the cornea; with the testing of the efficacy of new and experimental drugs; and with defining the toxicity to the eye of various industrial chemicals and rare earths.

There have been recent studies on the physiology and histology of the crystalline lens, the cornea, and the retina; on the neurology of the ocular muscles; on microwave cataracts and radiation cataracts; and on specific entities such as retinitis pigmentosa, third nerve palsies, cystinosis, herpetic iritis, uveitis, and periarteritis nodosa.

And, as if to swing back to Dr. Howe's interests of 30 years ago, genetic studies have recently been done on the eyes of twins, on the eyes of mentally retarded children, on heredo-familial degenerations of the cornea and the retina, and on the inheritability of retinoblastoma.

This, then, is a summary of 30 years of research and training endeavor in the Howe Laboratory of Ophthalmology. Like so many other scientific research laboratories, this Laboratory has been primarily a place of opportunity — opportunity to work, to study, and, whenever possible, to add to the sum total of scientific knowledge. The results of the work and study done in the Howe Laboratory have never resulted in violent overthrowing of existing opinions. Instead, there has been a steady flow of well-authenticated facts that have quietly been incorporated in today's ophthalmology. It is in this fashion that the staff has lived up to the hopes of the Laboratory's founder—Dr. Lucien Howe.

Charles Snyder,
Librarian, Howe Library

* * *

ARTHUR W. ALLEN

Dr. Arthur W. Allen died on March 18, 1958. Despite a long illness, he had maintained his professional activities until a few weeks before his death.

He was born on November 30, 1887, in McKinney, Kentucky. He graduated from Georgetown College, and then from Johns Hopkins Medical School in 1913. Immediately afterward he became a house pupil in the Massachusetts General Hospital, where he rose progressively through the ranks until at the time of his death he was a trustee of the Hospital.

The greatest interest in his life, besides his small and devoted family, was the Massachusetts General Hospital. His most important contributions were made during the years 1936 to 1948, when he was the last Chief of the East Surgical Service. On his retirement, the amalgamation of East and West Services marked the end of an era. Successive generations of house officers, residents, and assistants will never forget his strict attention to detail, his abhorrence of any technique that was less than perfect, his all-seeing eyes, and his ability to penetrate directly to the heart of a question as he discarded all irrelevant data in the hot pursuit of a solution. His surgical intuition was extraordinary, because it was based on experience. All house officers will recall forecasts of calamities which would follow certain procedures; if he predicted they were to appear forty days later, they did so.

In his professional life he preserved an intensely personal relationship with his patients in a way that now is almost forgotten. At times patients who were doing well might catch pneumonia, they said, from the wind stirred up as he whistled in and out of the room; but when time permitted, literally hours would be spent in cheering the sick. Certainly, concern with the care of the patient as the primary duty of the doctor was vital to him. In this he recognized the great contributions of the nursing staff. They were his co-workers; he supported them; they loved and admired him.

In 1940 it was discovered that he had malignant lymphoma. From that time on until his death he was forced to interrupt periods of intensive professional activity for recuperation and treatment. Notwithstanding, he carried out his greatest contributions to surgery under the shadow of death that was believed to be imminent during most of the last 18 years of his life.

Of the members of the Massachusetts General Hospital community, many will remember him because of his original surgical techniques in the fields of gastric surgery, peripheral vascular disease, and common duct reconstruction. Not many realize that his contributions to many other societies have been as remarkable as those to the Massachusetts General Hospital.

He was an extremely active member of many surgical organizations and played a very important role in the elevation of the standards of surgery throughout the past 40 years. He was President of the American College of Surgeons in 1947-1948, and Chairman of the Board of Regents from 1948 to 1951. He was President of the Boston Surgical Society in 1942, of the Massachusetts Medical Society in 1949, of the Society of Vascular Surgery in 1948, and of the Pan-Pacific Surgical Society from 1954 to 1957. In addition, he was Chairman of the Surgical Section of the American Medical Association in 1942, and of the United States Committee of the International Society of Surgery in 1950. He also was a member of the American Surgical Association, the Southern Surgical Association, the New England Surgical Society, the Society of Clinical Surgery, the Surgical Research Society, and the Eastern Surgical Society.

He had received many honors both at home and abroad. The honorary degree of Doctor of Science was given to him by Georgetown College in 1943, and by Harvard in 1952. He was awarded the Bigelow Medal by the Boston Surgical Society in 1956—an honor bestowed on only 14 surgeons in the past 40 years. He was a member of the American Academy of Arts and Sciences, of the French Academy of Surgery, and an honorary member of the Royal College of Surgeons of England and of Edinburgh.

In his later years he became deeply interested in the Boston Medical Library. Largely due to his efforts, and to those of an active Committee that he appointed, the library was revitalized as one of the most important in the country.

Because of his intense interest in the Massachusetts General Hospital, a memorial fund has been established in his memory to be designated for a project in the forthcoming Hospital expansion program. In this way his spirit will continue to mold the Massachusetts General Hospital of the future. He would have asked for no finer reward.

C. E. W.

[Claude E. Welch, M.D.]

WILLIAM JASON MIXTER

1880-1958

The main currents of Jason Mixter's life ran deep and strong until the end. His was a life of fine continuity of purpose and devotion to all that he held most dear. The four major ingredients of the good life were his—deep satisfaction in professional work, love of family and friends, rich and rewarding religious life, and joy in play.

Entering Massachusetts Institute of Technology with its class of 1902, he worked hard as an undergraduate (everyone works hard at M.I.T.), and then did likewise at the Harvard Medical School from which he graduated in 1906. This was followed, of course, by an internship at the Massachusetts General Hospital (*South Surgical,* 1907). Thus, in the footsteps of his surgeon father, Samuel Jason Mixter, was William Jason Mixter launched on his long and distinguished career in surgery. He started at once in private practice, along with his brother Charles Galloupe Mixter, and under the leadership of his father, who was affectionately known as "The Chief". Although for some years Jason Mixter did much general surgery, very early he developed his attachment to neurosurgery, in which later he was to ascend the heights. It is interesting that when the Surgical Executive Committee was formed at the M.G.H. in 1911, one of its early actions was to give a special assignment in the surgery of the central nervous system to Drs. S. J. and W. J. Mixter. In neurosurgery, Dr. Jason took over, so to speak, where his father left off. He started at once vigorously to develop and perfect himself in this field. Early attention was given to improving the treatment of patients with fractured skulls. Another early interest was that of tumors of the spine and cord. The technique of laminectomy was improved. Close collaboration with the Neurological Service proved to be a fertile liaison. Especially Dr. Mixter worked with Dr. James B. Ayer, the inventor of cistern puncture, in the localization of lesions involving the spinal cord.

The first World War interrupted all this for several years. Even before the United States entered this war, Jason Mixter had taken off to do his bit for the allied cause. In February of 1915 he went to France to serve on a civilian basis as a surgeon to the American Ambulance Hospital B (the Harry Payne Whitney Hospital) at Juilly, thirty miles east of Paris. Here he remained for about three months, during which time he had an intensive experience in military surgery. Battle casualties came in directly from advanced stations. After Juilly, Dr. Mixter was moved still nearer the front, to Château Annel, where a hospital was being run by the British Red Cross, in which he found still more serious cases to treat. He returned to the United States in June 1915.

Dr. Mixter went overseas again in the early summer of 1917, this time on a military basis, as a surgeon to the MGH Army Unit, Base Hospital #6, which became stationed at Talence near Bordeaux. Here he had some general surgery and some neurosurgery to do, but also a certain number (perhaps more than his share) of military chores, all of which he accomplished with characteristic devotion and effectiveness.

In the spring of 1918, at the request of Colonel F. A. Washburn, he was transferred to England, through which many American troops were passing. There, until his return to the United States early in 1919, he demonstrated that he had competence in the field of military medical administrative problems. At first he served as Commander of Camp Hospital #35 at Winchester and later as District Surgeon of the Winchester district, an area containing several American hospital installations. His final assignment in England was that of Commanding Officer of Base Hospital #204 at Hursley Park near Winchester. During his command there, this hospital, like many others, became engulfed by the dreadful influenza epidemic in the autumn of 1918, the like of which has not been seen since; but under Mixter's leadership, our sick and dying troops received the best care existing knowledge permitted.

Back at the M.G.H. and private practice when the war was over, Mixter got into the full stride of his work in neurosurgery, which was maintained throughout his active service at the Hospital and for some years in private practice thereafter. In 1933, having already attained the rank of Visiting Surgeon, he was likewise given the title of Chief of Neurosurgery. Finally, in 1939 a special service of Neurosurgery was created and he was made its Chief.

Increasingly close relations developed with the Neurology and Ophthalmology Services, and a bit later with the Orthopedic Service as well. The last was in the matter of lesions of the intervertebral discs. Of brain and of cranial and peripheral nerve surgery Mixter did a plenty, but perhaps his most outstanding work was on the spinal cord. Interest in intervertebral discs at the M.G.H. and elsewhere goes back at least as far as the twenties, but it was probably the paper of Mixter and Barr in 1934 that brought the matter into the limelight and led to the general use of a surgical procedure which cured or relieved great numbers of sufferers from low-back pain and sciatica.

Mixter continued as Chief of Neurosurgery until he reached the Hospital's retiring age for part-time members of the staff in 1941. He was succeeded by Dr. James C. White. World War II, however, presently began and Dr. White went off on Naval duty, so Mixter was called back to his old job and served as Acting Chief from 1941 to 1946.

During this war, also, Mixter served as Senior Consultant in Neurosurgery to the Surgeon General of the Army, in which capacity he spent much time in Washington and in visiting neurological centers in many parts of the country.

In 1911 Jason Mixter married Dorothy Fay, who survives him, as do also three brothers, four children, and twelve grandchildren. The long and happy marriage of the Jason Mixters gave rise to a closely knit and stable family life of a sort becoming all too infrequent in present-day American society. Indeed from "Chief Mixter" on, the Mixter family in the large approached the pattern of a Scottish clan. The Mixter farm at Hardwick, Massachusetts, is the country estate where the clan has gathered on frequent happy occasions, and clan life also blossomed in the years when "Chief Mixter" was alive at Galloupe's Point, Swampscott, Massachusetts, the family summer place of Jason's mother, Wilhelmina Galloupe Mixter. Here royal hospitality, expressed sometimes in the form of magnificent clambakes, was offered without stint to innumerable friends. There was similar cohesiveness in the Fay family, which had impressive land holdings in Woods Hole and Falmouth, Massachusetts, particularly the grand old summer establishment at Nobska Point. Jason and Dorothy Mixter spent much of their vacation time there, and after living for many years in Brookline, at Jason's retirement from active practice they built in 1953 their own charming house at Nobska and made it their year-round home.

Jason Mixter's religious life has been so eloquently and beautifully defined by the Reverend Theodore P. Ferris that it need only be said here that he served on the vestry of Trinity Church, Boston, the incredibly long period of nearly forty years, from 1919 until his death. Also from 1949 until his death he was Senior Warden. It was a very happy circumstance that when the new Neurosurgical Laboratories in the Warren Building, named for Jason, were dedicated on October 16, 1957, he was there to hear Dr. Ferris's wonderful tribute.

Finally, coming to his play, we find it also, though secondary, was an important feature in the whole life picture of Jason Mixter. Together with his father, his brothers, and his children, he was always an ardent sportsman. Fish, ducks, quail, and partridge were his favorite quarry, and Grand Lake Stream, Maine, a favorite hunting ground.

There were many other facets to this well-ordered life of which space does not permit mention. His many professional societies, committees, and all that sort of thing cannot even be enumerated. It should be recorded here, however, that he was appointed a trustee of the Massachusetts General Hospital in 1946 by Governor Robert F. Bradford, and in that capacity served until 1954. Also in the forties he was a term member of the Corporation of Massachusetts Institute of Technology, and for some years was also a member of the Institute's Advisory Committee on the Medical Department. At the time of his death he was an Honorary Surgeon to the Massachusetts General.

The emotion uppermost in the hearts of his multitude of friends at this time of his departing is most likely that of thankfulness for having known him. He died full of years, of both happiness and devoted service. For this life we can all be very grateful.

J. H. M.

[J. Howard Means, M.D.]

An Edward Peirson Richardson Lecture was delivered at the Hospital on April 2 by Dr. Jethro Gough, Professor of Pathology at the Welsh National School of Medicine, Cardiff, Wales. His subject was "The pathology of emphysema".

The Board of Trustees, at their meetings on February 21, March 7 and 21, and April 4, voted:

To accept with regret the resignation of Dr. Milton H. Clifford from the position of Associate Physician, effective as of February 28;

To rescind the Trustees' vote of December 27, 1957, appointing Dr. John A. Warden as Assistant in Radiology, beginning July 1;

That the Dental Service be granted an additional Intern, making a total of three;

That Dr. Jethro Gough, Professor of Pathology at Welsh National School of Medicine, Cardiff, Wales, be invited to give a Richardson Lecture early in April;

That Dr. John McMichael, Professor of Medicine, Postgraduate Medical School, London, be invited to give a Richardson Lecture some time during April or May;

That Dr. E. F. Scowen of Saint Bartholomew's Hospital, London, be invited to give a lecture at the Hospital during April.

To appoint:

Dr. Harrison C. Anderson as Intern in Pathology for one year, beginning July 1;

Dr. George H. Collins as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1;

Dr. Louis J. du Preez as Assistant Radiologist, beginning on or about May 15;

Dr. Donald J. Glotzer, who completed his assistant residency in Surgery on December 31, 1957, as Acting Assistant Resident in Pathology, beginning January 1, 1958;

Dr. William T. McCoy as Second Assistant Resident in Radiology, beginning July 1;

Dr. James L. Reynolds as an Exchange Assistant Resident on the Children's Medical Service, for the months of April and May;

Dr. Lewis Sherman as Associate Psychologist, part-time, at McLean Hospital;

Dr. John B. Stokes as Visiting Physician pro tempore, for a period of two weeks in May.

The Trustees voted to appoint the following Interns on the Medical Service for one year, beginning July 1:

Dr. Arthur K. Asbury
Dr. Caesar Briefer, Jr.
Dr. William T. Butler
Dr. Cecil H. Coggins
Dr. Myron A. Hofer, II
Dr. George A. Jacoby, Jr.
Dr. Myron Lotz
Dr. Robert H. Schapiro
Dr. Robert T. Schimke
Dr. Rodman D. Starke
Dr. William E. Strole, Jr.
Dr. Hibbard E. Williams

The Trustees also voted to appoint the following Interns in Surgery for one year, beginning July 1:

Dr. Stanley P. Bohrer
Dr. Mortimer J. Buckley, Jr.
Dr. Willard M. Daggett, Jr.
Dr. Lewis P. James, Jr.
Dr. John W. Madden
Dr. Anthony S. Patton
Dr. Don C. Pearl, Jr.
Dr. John T. Porvaznik, Jr.

At their meetings on February 26 and during March, the General Executive Committee voted:

To reappoint Mary D. Albert, Ph.D. as Research Fellow in Medicine, retroactive to November 1, 1957;

To extend the appointment of Dr. Pablo E. Fletcher as Clinical Fellow in Medicine, from March 1 through April 30.

To appoint:

Dr. Gaston Chamorro as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period January 6 through May 31;

Dr. Ruth K. Freinkel as Clinical and Research Fellow in Dermatology, effective as of March 1;

Dr. Wayne M. Hebertson as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;

Dr. Henry P. Pendergrass as Clinical Fellow in Radiology, for a period of six months, beginning April 1;

Dr. Flaviu C. A. Romanul as Fellow in Neuropathology for one year, beginning July 1;

Dr. Richard L. Rovit as Clinical Assistant in Neurosurgery, effective immediately, this appointment to run concurrently with his appointment as Resident in Neurosurgery;

Dr. Elihu M. Schimmel as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Herbert Schunk as Clinical Fellow in Radiology, beginning July 1;

Dr. Robert G. Spiro as Research Fellow in Medicine for one year, beginning July 1;

Dr. Jack R. Starrett as Clinical Fellow in Radiology, beginning July 1;

Dr. John B. Tallon as Clinical Fellow in Orthopedic Surgery, for the period April 18 through June 30, with the privilege of assisting Dr. Aufranc in the care of his private patients. It was further voted that on July 1 Dr. Tallon be promoted to the position of Senior Resident in Orthopedic Surgery.

IMPORTANT NOTICE

ESPECIALLY FOR THOSE MEMBERS OF THE HOUSE STAFF WHO WILL BE LEAVING THE HOSPITAL ON JUNE 30

Since 1951, the Directory section of our *Annual Report* has been prepared in the Archives Department. We make every effort to keep addresses up to date and accurate, but there is no way for us to achieve this goal unless we are notified by each individual when there is a change in his address. We feel it is too risky to revise our records, in many instances, on the say-so of a third person, until we check directly with the person involved.

Such needless demands on our time would be obviated if each individual would notify us promptly of any change in his address.

An illustration of what we mean comes to mind. Not so long ago we published in THE NEWS a letter from one of our alumni in South Africa, in which he told us that another alumnus was practising medicine in the same locality. The most recent address we had for the alumnus mentioned in the letter had come to us two or three years previously, when he had given us a Boston address. And so his record had remained, incorrect, for quite some time.

This is only one of several such instances which have come to our attention. Therefore, whenever you change your present office address or open a new office, please notify Cora F. Holbrook, Archivist and Editor of THE NEWS. Otherwise, it will remain unchanged in the Directory section of the *Annual Report*. Each intern or resident *must* (a word we seldom use) leave with us his new temporary or permanent office address upon completion of his service at the Hospital.

Your cooperation in this very important matter will be greatly appreciated.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated. As an illustration—an article written by a member of the Children's Medical Service may concern a problem in General Medicine, Anesthesia, or Laboratory Science.

The following new titles have been received:

Biological Chemistry

Klein, E., Lever, W. F., and Fekete, L. L.
Inhibitors of lipemia clearing in tissues.
J. Invest. Dermat. 30:41-42.

Dentistry

Trieger, N., Ship, I. I., Taylor, G. W., and Weisberger, D.
Cirrhosis and other predisposing factors in carcinoma of the tongue.
Cancer 11:357-362.

General Surgery

Churchill, E. D.
Wound surgery encounters a dilemma.
J. Thoracic Surg. 35:279-290.

Grillo, H. C., Watts, G. T., and Gross J.
The marginal localization of the contraction mechanism in open wounds.
In Surgical forum, Chicago, Ill., American College of Surgeons, vol. 8, pp. 586-589.

Raker, J. W.
Tumors of the adrenal glands.
Am. J. Surg. 95:353-358.

Scannell, J. G., and Grillo, H. C.
Primary tumors of the heart: A surgical problem.
J. Thoracic Surg. 35:23-36.

Neurology, Neurosurgery, and Psychiatry

Richardson, E. P., Jr.
Late-life epilepsy.
In M. Clin. North America, Philadelphia, W. B. Saunders Company, vol. 42, no. 2, pp. 349-359.

Robinson, C. V., and Selverstone, B.
Localization of brain tumors at operation with radioactive phosphorus: An improved technique using a proportional counter.
J. Neurosurg. 15:76-83.

Otolaryngology

Hirsch, O.
Pathology of the sphenoidal sinus.
A.M.A. Arch. Otolaryng. 67:85-92.

Physical Medicine

Watkins, A. L., and Liao, S. J.
Rehabilitation of persons with bilateral amputation of lower extremities.
J.A.M.A. 166:1584-1586.

Books

Morris, J. McL., and Scully, R. E.
Endocrine pathology of the ovary.
St. Louis, The C. V. Mosby Co.

Watkins, A. L.
A manual of electrotherapy.
Philadelphia, Lea & Febiger.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American Association for the Advancement of Science, Publication No. 39.
Antimetabolites and cancer: A symposium presented on Dec. 28-29, 1953, Boston, Massachusetts.
Washington, D.C., American Association for the Advancement of Science, 1955.
(13V)

American Medical Association. Council on Drugs.
New and nonofficial drugs.
Philadelphia, J. B. Lippincott Company, 1958.
(22F)

Anson, M. L., and others. (Editors)
Advances in protein chemistry, vol. 12.
New York, Academic Press, Inc., 1957.
(5B)

Cold Spring Harbor Symposia on Quantitative Biology, vol. 22.
Population studies: Animal ecology and demography.
Cold Spring Harbor, L. I., New York, The Biological Laboratory, 1957.
(2As)

Fischer, A.
Biology of tissue cells.
Copenhagen, Nordisk Forlag, 1946.
(4F)

Frey-Wyssling, A.
Macromolecules in cell structure.
Cambridge, Mass., Harvard University Press, 1957.
(2Am)

Hall, V. E., and others. (Editors)
Annual review of physiology, vols. 19-20.
Palo Alto, Calif., Annual Reviews, Inc., 1957-58.
(4A)

Hamilton, H. L.
Lillie's development of the chick, ed. 3.
New York, Henry Holt and Company, 1952.
(3G)

Levine, S. A.
Clinical heart disease, ed. 5.
Philadelphia, W. B. Saunders Company, 1958.
(15E)

Methods in medical research, vol. 7.
Chicago, The Year Book Publishers, Inc., 1958.
(2As)

Murphy, Q. R. (Editor)
Metabolic aspects of transport across cell membranes.
Madison, Wis., University of Wisconsin Press, 1957.
(5M)

Neuman, W. F., and Neuman, M. W.
The chemical dynamics of bone mineral.
Chicago, University of Chicago Press, 1958.
(18C)

Patten, B. M.
Early embryology of the chick, ed. 4.
New York, McGraw-Hill Book Company, Inc., 1951.
(3G)

Romanoff, A. L., and Romanoff, A. J.
The avian egg.
New York, John Wiley & Sons, Inc., 1949.
(3G)

Shubik, P., and Hartwell, J. L.
Survey of compounds which have been tested for carcinogenic activity, suppl. 1, United States Public Health Service, Publication No. 149.
Washington, D.C., United States Government Printing Office, 1957.
(13V)

Thompson, R. H. S., and King, E. J.
Biochemical disorders in human disease.
New York, Academic Press, Inc., 1957.
(8N)

Dr. Henry C. Everett, III, Assistant Resident in Psychiatry — born in Boston, Massachusetts, February 14, 1928; B.S., Harvard College, 1950; military service: Pfc, 6th M.P. Division, Pusan, Korea (18 months' interruption during college); Research Assistant to Dr. William H. Sweet in the Department of Neurosurgery, Massachusetts General Hospital, 1950-51; Johns Hopkins School of Medicine, 1951-55; Intern, rotating, and Resident in Medicine, Rhode Island Hospital, Providence, Rhode Island, 1955-57.

Dr. David M. Klein, Assistant Resident in Neurosurgery — born in Washington, D. C., November 30, 1928; University of Maryland, 1946-49; George Washington University School of Medicine, Washington, D. C., 1949-53; Intern, rotating, Philadelphia General Hospital, 1953-54; military service: Captain, MC., USAF, Misawa AFB, Japan, 1954-56; Assistant Resident in General Surgery, Beth Israel Hospital, 1956-57; Clinical and Research Fellow in Neurosurgery, Massachusetts General Hospital, 1957.

Dr. Clinton B. Seeley, Assistant Resident in Radiology — born in New York City, August 28, 1927; U. S. Army: Sergeant, Honor Guard to General MacArthur, GHQ, AFPAC, Tokyo, 1945-47; B.S., Massachusetts Institute of Technology, 1951; M.D., University of Rochester, Rochester, N.Y. , 1955; Intern, rotating, Strong Memorial Hospital, Rochester, N. Y., 1955-57; married; home: Stamford, Connecticut.

Dr. Barbara E. Waud, Assistant Resident in Anesthesia—born in Kitchener, Ontario, Canada, May 18, 1932; University of Western On-

DR. DAVID G. COGAN—DIRECTOR OF THE HOWE LABORATORY OF OPHTHALMOLOGY

tario, 1950-56; M.D., University of Western Ontario, 1956; married; home: London, Ontario, Canada.

Dr. Sanford D. Weinert, Assistant Resident in Urology—born in Providence, Rhode Island, December 13, 1925; Boston Latin School, 1943; military service: Holy Cross College Navy V-12, 1943-44 and Ensign, Pacific and Atlantic Fleets, 1943-46; B.S., Boston College, 1948; A.M., Harvard College, 1950; M.D., Chicago Medical School, 1954; Intern, District of Columbia General Hospital, 1954-55; Junior Assistant Resident in Surgery and Assistant Resident in Urology, Boston Veterans Administration Hospital, 1955-57; married; one daughter; home: Newton, Massachusetts.

Dr. Peter M. Yurchak, Intern in Medicine, born in Wilkes-Barre, Pennsylvania, December 21, 1932; A.B., University of Pennsylvania, Philadelphia, 1953; Temple University School of Medicine, Philadelphia, 1953-55; M.D., Harvard Medical School, 1957.

Dr. Irving Zieper, Assistant Resident in Neurology—born in Worcester, Massachusetts, September 26, 1928; B.S. in Biology, Boston College, Chestnut Hill, Massachusetts, 1948; Teaching Fellow, University of Notre Dame, Notre Dame, Indiana, 1948-49; M.S. in Physiology, Yale University, 1952; M.D., University of Pennsylvania Medical School, 1956; Intern in Medicine, Grace-New Haven Community Hospital, 1956-57.

VOLUNTEER GROUPS

DISTAFF CLUB

The Commonwealth Country Club in Newton will be the setting for our fifth Annual Spring Formal Dance. This event, which is organized by the Distaff Club and sponsored also by the Massachusetts General Hospital Trustees and General Director, and the MGH Staff Wives Association, will take place on Friday evening, May 9. Harry Marshard and his orchestra will provide music for dancing from 9 until 1 o'clock.

The dance committee, headed by co-chairmen Mrs. Bruce J. Sams, Jr. and Mrs. John L. Lewis, Jr., is composed of members of both the Distaff Club and the Staff Wives Association.

Invitations have been sent out, but out-of-towners who wish to attend the dance may get in touch with Mrs. William L. Morgan, Jr., 2 Poplar Place, Boston.

Our final food sale of the season will be held on May 2 in the Brick Corridor, under the supervision of Mrs. Edward L. Ferguson. Proceeds from this sale will help defray the expenses of the Spring Dance and other Distaff projects.

The Club looks forward to June 8, when it will have an outdoor family gathering in Concord. A similar event was so enjoyable last year, we have decided to repeat it. It will be something of a farewell party for the many members of the house staff who are leaving the Hospital this coming summer.

New addresses:—

Dr. Joseph J. Barlow (r.p. 1955), Presbyterian Hospital, 620 W. 168th St., New York, N. Y.
Dr. William P. Boger (a.r.p. 1942), Dept. of Research Therapeutics, Norristown State Hospital, Norristown, Pa.
Capt. Carl N. Brownsberger, MC, USAR (a.r.p. 1957), 121st Evacuation Hospital, APO 20, c/o Postmaster, San Francisco, Calif.
Dr. Harvard H. Crabtree (*E.S.* 1913), 1101 Beacon St., Brookline, Mass.
Dr. David S. Dann (h.p. *R.* 1922), 701 E. 63d St., Kansas City, Mo.
Dr. James F. Donovan (sr.r.s. *Or.* 1957), 85 Jefferson St., Hartford, Conn.
Dr. Arvil J. Hinshaw (*E.S.* 1947), 308 Doctors Bldg., 3155 Stagg Drive, Beaumont, Tex.
Dr. Robert W. Hopkins (*S.* 1948), Dept. of Surgery, Cuyahoga County Hospital (formerly City Hospital of Cleveland), Cleveland 9, Ohio
Dr. Edwin H. Mulford, II (a.r.s. *N.S.* 1947), 1 Atlantic St., Stamford, Conn.
Dr. William R. Owen (*M.* 1950), 643 Hermann Professional Bldg., 6410 Fannin St., Houston, Tex.
Dr. John B. Stetson (a.r.p. *An.* 1953), 827 W. Locust St., Johnson City, Tenn.
Dr. Beth Vincent (*W.S.* 1903), 939 Boylston St., Boston 15, Mass.
Dr. C. Gene Wheeler (*S.* 1956), PHS Indian Hospital, Lawton, Okla. (until September).

Brief bit:—

Dr. Bradford Cannon, who is president of the American Association of Plastic Surgeons, will preside at the meeting of the Association in Dallas, on May 22-24.

* * *

It was not only a pleasure, but a relief, to receive this letter from Dr. Charles G. Craddock, Jr. (a.r.p. *Psychiat.* 1950). For several years Dr. Craddock's name has appeared in the Directory section of the *Annual Report,* followed by "address unknown". None of our many efforts at locating him had succeeded. Along in February we made one last attempt, which proved fruitful. From the University of California Medical Center, Los Angeles 24, California, where Dr. Craddock is Associate Professor of Medicine, he writes:

> I apologize for not corresponding with you sooner. However, I have moved several times in the last two years and your letter was delayed in reaching me.
>
> I have been at the above address for the last six years, but was called back into military service for a year and a half, from July 1955 through January 1957.
>
> It is always nice to hear again from people at the General.

THE NEWS

No. 178 Boston, Mass. June 1958

THE MEDICAL ACOUSTICS RESEARCH LABORATORY

April 23, 1958

Dr. David McK. Rioch
Walter Reed Army Medical Center
Washington, D.C.

Dear Dave:

I greatly enjoyed chatting with you at the meeting of the Harvey Cushing Society in Washington last week. It is difficult to realize that more than five years have passed since you first suggested that our Medical Acoustics Research Group explore the possibilities inherent in the use of focused ultrasound for investigation and treatment of the central nervous system. During our recent conversations you expressed some curiosity as to the history of the Medical Acoustics Research Laboratory at the Massachusetts General Hospital. For this reason, I am setting down these remarks in the hope that you will find them of interest.

My introduction to that branch of physics known as "ultrasound" came about quite by accident. In October 1948, Professor John Trump of the Massachusetts Institute of Technology forwarded to Dr. Milford Schulz, Department of Radiology at M.G.H., an article typewritten in German by Dr. Karl Theo Dussik of Bad Ischl, Austria. In this communication Dr. Dussik stated that he had been able to visualize by the use of transmitted ultrasonic waves the ventricles of the brain and, in certain cases, even the presence of brain tumors. He further stated that this method could be employed without the necessity of filling the cerebral ventricles with air (as is the case when a pneumoencephalogram is performed) and that no discomfort or risk was incurred by the patient undergoing the examination. Milford Schulz thought that this report was of sufficient interest to warrant further investigation and turned it over to me.

Since my knowledge of German was limited, I had first to obtain a translation of Dussik's paper and after that to relearn a little physics. I found that the term "ultrasound" was applied to those mechanical vibrations of a frequency above that which the human ear can receive and interpret as "sound". The upper limits in frequency for the ear are about eighteen thousand to twenty thousand cycles per second. The vibrational waves which Dr. Dussik was using were of the order of one million cycles per second. At these higher frequencies the waves travel only an infinitesimal distance in air but can still be propagated fairly well in fluid or semisolid media.

It was obvious that the ultrasonic method of depicting the intracranial contents had many potential advantages over our current x-ray procedures, but it was also evident that such a new technique as described by Dr. Dussik would have to be explored by a team of investigators. Accordingly, I attempted to enlist the aid of Dr. Richard Bolt, Director of the Acoustics Laboratory, Massachusetts Institute of Technology. We talked over the personnel and instrumentation required and Dr. Bolt came regretfully to the conclusion that his laboratory had neither the manpower nor the space nor the funds to be of help in investigating the use of ultrasound for neurological diagnosis.

In February 1949, I was told that at a German Trade Exposition then being held in New York City a young German physicist from the Siemens Company, Erlangen, Germany had been exhibiting certain ultrasonic devices aimed toward producing heat deep within the human tissues for the treatment of aches, sprains, and strains. My informant also told me that this young man seemed to have an excellent background in medical physics. Accordingly, I went to New York and met Theodor Hueter, Ph.D. I told him of Dr. Dussik's work and he expressed interest in it and in coming back to the United States to work on the problem.

Through the early months of 1949, Dick Bolt and I discussed many times the problem of further investigation of the neurological uses of ultrasound. One day in July he told me that he would be attending an acoustics society meeting in England. It occurred to me that this might be an ideal opportunity to gain firsthand information concerning the work then being conducted in Bad Ischl, Austria. I wrote to Colonel William Stone, Chief of Research and Development for the Surgeon General of the Army, and asked if he could be of any assistance. To my great delight Colonel Stone was able to authorize for me a flight to Austria under Army auspices.

The trip to Bad Aschl encompassed only ten days from the time I flew out of this country until my plane touched down in Springfield, Massachusetts once again. During that period I saw Dr. Hueter in Erlangen, Germany and persuaded him to take leave of absence from his firm to come to the Acoustics Laboratory at M.I.T. to work on our project. Then, there was a quick trip to Munich where Dick Bolt and Ted Hueter joined me and we took off for Salzburg, Austria. From that city we drove to Bad Ischl, talked with Dr. Dussik and his brother, who was working with him, and came back full of enthusiasm. In December of 1949, Ted Hueter joined the Acoustics Laboratory, M.I.T., the Research Committee of M.G.H. gave us $6500 for "preliminary exploration of the use of ultrasound in neurological diagnosis", and we were off!

During the next four years, with the help of funds from the American Cancer Society and the Cancer Institute of the National Institutes of Health, we learned a great deal about the interaction of ultrasound with human tissue. During our first year we had advice and assistance from Dr. George Ludwig, then an Assistant Resident on the Surgical Service at M.G.H. and now Assistant Professor of Medicine at the Hospital of the University of Pennsylvania. We found that it was indeed possible to pass a beam of ultrasound from one side of the skull to the other without damage to the intervening brain. Furthermore, differences in attenuation of this beam of ultrasound as it passed through the brain made it possible to detect a rough outline of the cerebral ventricles. Unfortunately, however, the variations in thickness of the skull cast unwanted "shadows" in the ultrasonograms which we obtained by scanning the brain. These shadows in too many instances obscured the vital information which we were seeking in reference to the position of the cerebral ventricles. We felt, therefore, that although the use of an unfocused beam of ultrasound offered many advantages over x-rays so far as ease of procurement of information was concerned, the method did not have a sufficiently high degree of reliability to warrant its routine use. I should say, however, that further investigations, notably by Douglas Howry at the University of Colorado, and further refinements of ultrasonic instrumentation have again introduced the possibility that a thin beam of ultrasound may eventually be useful as a diagnostic tool.

During the years that we worked on this use of ultrasound, William J. Fry at the University of Illinois had been investigating the possibility that ultrasound could be used to destroy small areas of the central nervous system. This possibility had been explored in 1944 by Dr. Tracy Putnam and his collaborators in New York. They, however, had attempted to produce focal areas of destruction in experimental animals by irradiating with a beam of focused ultrasound through the scalp and skull. Unfortunately, this method had produced undesirable damage to the scalp and skull, and for this reason Dr. Putnam had apparently abandoned his investigations.

Nevertheless, there seemed to be no question about the fact that a beam of ultrasound could be focused (in the same way that light can be concentrated) into a small volume of very high intensity, and it seemed logical to assume that it might be possible to choose an intensity at the point of origin of the beam of focused ultrasound, together with an irradiation time, which would result in damage only to those tissues in the focal region of the ultrasonic beam.

On March 26, 1953, I received a letter from you which read in part as follows: "The project which we need help on is the development of apparatus—including testing the apparatus out in animal experiments—for the purpose of destroying tissue by focused ultrasonic sound waves. There seems to be fair evidence that by using this technique it is possible to make experimental lesions in the central nervous system of a moderately well-localized character. Also, it seems possible that with proper regulation of the energy different cell types may be selectively destroyed, or all of the constituents of the area may be involved. This would represent an extremely powerful tool for experimental work and also promises the possibility of placing lesions in selected sites in the human brain for the control of pain, etc. We seriously need a method for making experimental lesions which will not involve extensive operative procedures, as the latter always introduce a complicating factor in both the physiological and anatomical results of experiments."

The possibility of developing a relatively simple method for using focused ultrasound fired our imaginations, and Ted Hueter and I went to work immediately to draw up plans for such a project. It was apparent, however, that this work should be done at the Massachusetts General Hospital rather than at the Acoustics Laboratory, M.I.T., since experimental animals would be involved and the therapeutic use of such a method was not beyond the realm of possibility. We were fortunate in securing permission to use certain space in the White Building, M.G.H., and within a few weeks had transferred our activities from the diagnostic uses of ultrasound to the destructive use of this energy, and our facilities from the Massachusetts Institute of Technology to the Massachusetts General Hospital. Throughout the year 1954, we experimented with various ultrasonic generators, crystals and focusing lenses, using white mice as our experimental animals. We found that a high degree of accuracy was possible in the use of focused ultrasound. For example, one-half of the spinal cord of a mouse could be damaged while the other seemed to function perfectly. Moreover, this could be done by irradiating the spinal cord through the skin and the soft bones of the spinal column.

In September 1954, Dr. Walle Nauta came up from your laboratory and we began our first experiments on the brains of cats. I do not remember the exact date, but I do recall that we worked long and earnestly through a day which seemed, as we looked out the window from time to time, to be a rather stormy one. Much to our consternation, when we tried to leave the laboratory that evening, we found that we had been working right through a rather severe hurricane!

During 1954-55, our attention was directed primarily to the instrumentation necessary for the production deep within the brains of experimental animals of small lesions whose location, size, and shape we could predict before irradiation. We found that this method required a scalp incision and removal of a portion of the skull of the animal but that it was not necessary to open the dura covering the brain. Ted Hueter contributed most significantly to this phase of our investigation and we had, as well, the help of Dr. Walter Cotter, who went on to become a Resident in Neurosurgery and who, at the time of this writing, is anxiously awaiting a grant from the U.S. Public Health Service in order that he may continue his neurosurgical education in London.

In July 1955, Dr. Dagoberto Sosa came to work with us and he, too, is now a member of our Neurosurgical Resident Staff. During this period we began a painstaking investigation of the pathological changes which take place within the focal region when a destructive intensity of ultrasound is employed. In September, Jane Rosenthal and Betty Francis joined the Group and have continued to be invaluable to us as technical assistants. Dr. Raymond Adams very kindly offered us the facilities of his experimental neuropathological laboratory and, a year later, the help of Dr. Karl Aström, a Research Fellow in Neuropathology, from Stockholm.

Many interesting and unique findings came from this neuropathological study, but the most important to us were the facts that (1) a lesion once made never enlarges beyond its original confines, (2) it is possible to concentrate damage into an area which lies remote from the point of entry of the beam of ultrasound into the brain, and (3) this area of damage may be at least as small as 0.02 mm.^{3}. Some of our lesions were, in fact, so small that it was very difficult to identify them in the gross.

During 1956, we made two other valuable additions to our Group. Eugene Bell, Ph.D. came to us from Brown University in July. He is a biologist who is interested in the interaction of embryonic tissues with ultrasound, and now holds dual appointments as Assistant Professor of Biology, M.I.T. and Associate Biologist, M.G.H. When, in 1957, Dr. Hueter accepted a research position with the Raytheon Corporation, Dr. Bell became Technical Director of our Medical Acoustics Research Laboratory.

In July 1956, Dr. Erik Heidensleben came to Boston for a year's appointment as Research Fellow in Neurosurgery at M.G.H. Due to his efforts, we were able to confirm statistically the fact that an ultrasound lesion could be placed deep within the brain of the cat with extreme accuracy.

Dr. Louis Bakay (Instructor in Surgery, H.M.S.) began to contribute to our research effort late in 1955. He had long been interested in the "blood-brain barrier"—that mechanism which normally prevents certain substances from passing out of the brain capillaries into the brain tissues. In order to identify easily in the gross our very small ultrasound lesions we had routinely injected trypan blue immediately after irradiation. This dye would pass the blood-brain barrier only where the tissue had been damaged and impart a blue color to that area. With Dr. Bakay we have expanded this technique and are now using radioactive isotopes as well as vital dyes in an investigation into the nature and location of this blood-brain barrier.

At this juncture our investigative efforts had gone far ahead of our laboratory facilities. Fortunately for us, the Mixter Laboratories for Neurosurgical Research were then in the process of construction, and our research was transferred to the fourth floor of the Warren Building when that floor was virtually an empty shell. Although our neuropathologic studies were continuing, we felt at this point that it was possible to begin certain neurophysiologic investigations. Accordingly, we joined forces with Dr. Mary Brazier, Neurophysiologist at M.G.H., and with the aid of a grant from the Air Force began to investigate the effect of focused ultrasound upon the function of the central nervous system. We used as our test apparatus the visual pathway of the cat and found that it was possible to derive valuable information concerning the manner in which impulses were transmitted along the visual pathway.

In reference to support, I should have stated earlier that the Department of the Army had generously come to our assistance in the early stages of our investigation of focused ultrasound but that the main bulk of our support after 1955 had come from the National Institutes of Health.

In July 1957, our neuropathology was sufficiently well studied to allow Dr. Karl Aström to give a paper before the 1st International Congress of the Neurological Sciences in Brussels. While his was the *pièce de résistance,* I, too, gave a paper concerning our total investigations up to that time.

During the past year we have paid more and more attention to neurophysiologic studies, in particular the changes in function secondary to small lesions in the midbrain. This is an extremely busy area of the brain, as you well know, and the functions of small specific structures are not well known. We have been able not only to throw some light on function of various regions of this portion of the brain but to find evidence that (1) a small "dose" of focused ultrasound can be used to stimulate nervous activity, (2) a larger dose of ultrasonic energy may temporarily affect function of a given area of the brain, and (3) a still larger dose of ultrasound will irreversibly affect function and produce tissue damage as well. These findings lead us to the conclusion that ultrasound is an ideal tool for the neurophysiologist and that it holds great promise in the field of neurological therapy as well. These investigations have been greatly aided by the efforts of Dr. David Klein, who has just completed a year with us as Research Fellow in Neurosurgery.

At the present time we are very busy on a number of projects. Dr. Bakay is continuing his investigations of the blood-brain barrier by the use of vital dyes, radioactive isotopes, and the lesions made with focused ultrasound. Our Neuropathology Laboratory, under the capable direction of Miss Charlotte Merrill, is studying the possible demyelinating effect of ultrasound with the help of Dr. E. P. Richardson of the Department of Neuropathology and Dr. Dagoberto Sosa, who has temporarily rejoined our Group. In July of 1958, Dr. C. Norman Shealy will hold a joint appointment as Research Fellow in Neurosurgery at this Hospital, and in the Department of Neurophysiology, Harvard Medical School. With his help we hope to use focused ultrasound to further investigate the nature of spinal cord reflexes and to gather more data concerning the reversible depression of function within the central nervous system.

Also beginning in July, Dr. J. S. Manlapaz will begin what may well prove to be the most exciting phase of our years of study, namely the use of ultrasound as a method of treatment. We are currently engaged in the construction of a compact, easily transportable ultrasonic generator with an irradiating "head" which can be simply attached to a human stereotactic instrument. With this apparatus we plan to begin the application of focused ultrasound to deeply situated, inaccessible brain tumors in patients.

I believe that within the next two or three years the techniques of focused ultrasound will be routinely employed by neurophysiologists and that there will be a growing body of neurosurgeons who will use this method for treatment of disease of the central nervous system. Other fertile fields for the method will be ophthalmology and otology. We should like to help workers in those fields begin their own specialized research efforts. It is also our hope that we may provide an interesting field for a trained neurophysiologist, so that in our clinical investigations we may have the benefit of his knowledge. Finally, we hope to go back to exploring the use of unfocused ultrasound as a diagnostic tool. We have recently been fortunate in securing fairly long-range support for our activities, and I can see no lack of problems to be attacked.

These investigative efforts have constituted a challenge and an adventure for me for which I am most grateful. The work of the Medical Acoustics Research Laboratory is, however, a true team effort. Without the cooperative spirit which exists within the Laboratory all would be chaos and confusion. I could not close this letter, moreover, without a word of sincere thanks to those individuals and granting agencies and particularly you, David Rioch, for the support and enthusiasm for this project through the years.

Always yours,
Tom

[**H. Thomas Ballantine, Jr., M.D.,**
Associate Visiting Neurosurgeon]

* * *

IMPORTANT NOTICE

The Massachusetts General Hospital Alumni Association has not held a formal meeting since October 1946. With the 150th Anniversary of the Hospital coming up in 1961, the officers of the Association are taking this opportunity to urge every MGH alumnus to come to a meeting at the Hospital on October 16 of this year. We hope that all alumni will immediately put this date on their calendars and plan to come with their wives this autumn. There will be light and serious entertainment and, of course, a scientific program.

* * *

Dr. Henry K. Beecher was one of five alumni of the University of Kansas to receive citations for distinguished service to mankind, conferred during the Commencement exercises of the University on June 2. The citations were voted by a secret committee, on the basis of an individual's contribution to the welfare of mankind. The University of Kansas does not grant honorary degrees, but the citations carry a similar distinction.

Their Annual Award for 1957 has been conferred upon Dr. George L. Nardi by the R. Franklin Carter Foundation, Inc. This honor is given to the individual who, in the opinion of the Advisory Scientific Committee of the Foundation, has made the most significant contribution to research on diseases of the biliary tract each year.

At the Annual Convocation of the American College of Physicians, held in Atlantic City on April 30, Dr. Chester M. Jones was elected to Mastership in the College, for his "professional attainments and the force of his example to younger men in the arts of medicine". This is an honor conferred by the College on those of its members who have attained special distinction and eminence in their profession. The accompanying citation read as follows: "Dr. Jones, a graduate of Williams College, received his degree of Doctor of Medicine from Harvard Medical School in 1919. In his distinguished medical career he has been continuously associated with the Massachusetts General Hospital. His valuable medical contributions, in the field of gastroenterology particularly, have given him a national reputation and brought him membership in the more important national medical societies. Dr. Jones has served an arduous term, first as Secretary-Treasurer and later as Chairman of the American Board of Internal Medicine—a most generous donation of time and strength to the future of internal medicine. As a Fellow since 1928, First Vice President in 1956 and now as a Regent, he has given valuable service to this College."

The Board of Trustees, at their meetings on April 4 and 18, and May 2, voted to appoint:

Dr. David W. Bailey as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. Niels E. Brandstrup as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. John M. Brogden as Acting Assistant Resident in Urology, for the period April 1 through June 30;
Dr. Thornton Brown as Acting Chief of the Orthopedic Service, from April 1 through May 17;
Dr. Humberto A. Fernandez-Moran (Villalobos) as Associate Biophysicist in Neurosurgery, effective as of March 17;
Dr. David W. Florence as Assistant Resident in Orthopedic Surgery for one year, beginning April 18;
Dr. Herbert A. Haessler as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Jordan S. Ruboy as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Bal M. Sahay as Assistant Resident in Psychiatry, beginning July 1;
Dr. R. Wyman Sanders as Intern on the Children's Medical Service for one year, beginning July 1;
Dr. John W. Saville as Assistant Resident in Orthopedic Surgery for one year, beginning July 1.

At their meetings on April 2, 9, 23, and 30, the General Executive Committee voted:

To promote:

Dr. D. Glyndwr Millard from the position of Second Assistant to that of First Assistant Resident in Radiology. beginning June 1;
Dr. Stefan C. Schatzki from the position of Acting Resident to that of First Assistant Resident in Radiology, beginning July 1.

To reappoint:

Dr. John F. Bertles for one year, beginning July 1, with a change in title from Clinical and Research Fellow to that of Clinical Assistant in Medicine;
Dr. George Kaldor as Research Fellow in Medicine for one year, beginning March 15;
Dr. Arthur Klein as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning April 1.

To continue the appointment of:

Dr. John Q. Durfey as Assistant Resident in Anesthesia, through June 30.

To appoint:

Dr. Jose N. Astacio as Graduate Student Assistant in Pathology for one year, beginning April 7;
Dr. David A. Drachman as Clinical Fellow in Neuropathology for one year, beginning July 1;
Dr. Daniel D. Federman as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Lamont W. Gaston as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. William E. Karnes as Clinical Fellow in Neuropathology for one year, beginning July 1;
Dr. Charles S. Keevil, Jr. as Clinical Fellow

in Medicine, assigned to Cardiology, for one year, beginning July 1;

Borge Larsen, M.S. as Research Fellow in Medicine for one year, beginning April 15;

Dr. Paul R. McHugh as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Harilaos T. Sakellarides as Clinical Fellow in Orthopedic Surgery for one year, beginning April 7, with the privilege of assisting in the care of the private patients of Drs. Cave and Rowe;

Dr. Bruce J. Sams, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Charles A. Sanders as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Nathan T. Sidley as Clinical and Research Fellow in Psychiatry for one year, beginning September 1;

Dr. Robert T. Spalding as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Mary J. Spiro, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Lloyd B. Tepper as Clinical Fellow in Medicine, assigned to Occupational Medicine, for one year, beginning July 1;

Dr. John H. Wulsin as Research Fellow in Surgery, for the period April 7 through May 29;

Dr. Irving Zieper as Clinical Fellow in Neurology for one year, beginning July 1.

* * *

SURGICAL RESEARCH

DISEASES OF THE LIVER AND PORTAL CIRCULATION

The work in this laboratory, which has been focused primarily on diseases of the liver and portal circulation, breaks down into several categories which will be covered separately. In this brief survey of the past five years, it is apparent that the studies to be described represent a collaborative effort not only by personnel, permanently or transiently working in this laboratory, but also with many individuals in other departments of the Hospital.

I. The clinical and biochemical effects of portal-systemic venous shunts

For many years it had been apparent to the medical profession that massive hemorrhage from the esophageal varices which develop as part of the portal-systemic collaterals attendant upon a portal bed block, was one of the major causes of death from cirrhosis of the liver. In 1945, Dr. Allen Whipple demonstrated the feasibility of surgically constructing a portal-systemic shunt. Subsequently Drs. Blakemore, Linton, Child, and others applied this surgical approach extensively and showed that a high degree of protection against hemorrhage could be achieved in this way. Our interest in this problem began in 1953, when two patients, in whom portacaval shunts had been constructed following resection of the portal vein for invasive cancer of the pancreas, developed repeated bouts of central nervous system derangements. These episodes resembled the clinical and electroencephalographic disorder of "hepatic coma". Ultimately these episodes were shown to be related to a disorder in ammonia metabolism. Gradually a pattern evolved which makes it clear that in the presence of portal-systemic shunts (either spontaneously developed or surgically constructed) the absorption of ammonia (and very probably other products) formed by the action of intestinal bacteria on ingested nitrogenous material eventuates in a disorder of cortical function which fits into the somewhat nondescript category of "hepatic coma".

It is always important for us to realize that it is improved techniques which permit better metabolic definitions of clinical syndromes rather than any expansion of the powers of observation and perception of the human race. In 1883 Pavlov and his colleagues recognized this phenomenon in the Eck fistula dog and referred to it as "meat intoxication". William Shakespeare has been recognized as one of the keenest observers and recorders of human oddities. It is interesting to follow in *Twelfth night* the activities of Sir Andrew Aguecheek and Sir Toby Belch, whose lives were so closely associated with alcohol in one form or another. Although there is no histopathological evidence of cirrhosis, Sir Toby suggests (in reference to Sir Andrew) that "if he were opened, and you find so much blood in his liver as will clog the foot of a flea, I'll eat the rest of his anatomy". The phenomenon of "meat intoxication", which is gradually being defined, is not described in detail by Shakespeare, but Sir Andrew does say of himself: "I am a great eater of beef, and I believe that it does harm to my wit". These observations of Shakespeare led W. H. J. Summerskill, from the Postgraduate Medical School of London, who spent a year in Boston studying liver disease, to suggest that the clinical and biochemical abnormality, to which we have referred briefly, be called "Aguecheek's disease".

Much of the information accumulating in this field has come from this Hospital. Dr. Mary Ellen Jones, working under Dr. Fritz Lipmann, has contributed tremendously to the understanding of the Krebs-Henseleit cycle of urea synthesis. Don C. Pearl, Jr., a fourth year student at Harvard Medical School, has studied in this laboratory the effects of an ammonia load on this cycle, and the results suggest that in cirrhosis a rate-limiting step exists in the conversion of citrulline to arginosuccinic acid, and interferes with the normal clearance of ammonia.

In this same general area, related studies on the effects of ammonia and L-glutamic acid on the tricarboxylic acid cycle and of arginine and aspartic acid on urea synthesis are in progress.

II. Ascites and cirrhosis

While not as catastrophic nor as rapidly lethal a complication as bleeding esophageal varices, the intractable accumulation of fluid in the abdominal cavity of patients with cirrhosis is a frequent and distressing sequela of the disease. In many instances, improvement in nutrition and attendant increase in serum albumin level will result in disappearance of the ascites. In others, severe restriction of salt intake, and the use of diuretics are required in addition. There remains, however, a group of patients in whom ascites is intractable and persists despite all known forms of treatment. The volume of medical literature available on this problem attests to its complexity. The existence of an abnormal collection of fluid in a body cavity presents an obvious challenge to the surgeon, but the history of the innumerable techniques devised to deal with this problem represents a record of failure. Although related in some way to portal hypertension, it has become apparent that the correction of portal hypertension does not of necessity improve the ascites, and, experimentally, obstruction of the portal vein does not result in ascites. Recent experimental and clinical studies have focused on the metabolic pattern of salt and water retention and hyperaldosteronism in the patient with cirrhotic ascites. Again, however, the available evidence would indicate that this pattern is a secondary and not a causative factor.

If one surveys the literature on this subject, one is impressed with the possible importance of an intra-hepatic "outflow block" as an initiating mechanism in the formation of ascites. This concept relates, then, the case of cirrhotic ascites to the experimental or clinical development of the Budd-Chiari syndrome and to the recently described phenomenon of "bush-tea poisoning". It is this concept which we are exploring and studying experimentally, and we have been able to apply this information with apparent success in man. One year ago, a "double" portacaval shunt (decompressing the liver as well as the portal bed) was constructed in a patient with well-compensated cirrhosis but intractable ascites. Preoperatively, this patient showed the now well-recognized pattern of "hyperaldosteronism". Postoperatively, not only did the ascites disappear completely but the metabolic pattern was completely reversed. One year later, this first patient is completely free of ascites, is in excellent health, and, on an unrestricted salt intake, handles sodium in a way indistinguishable from the normal individual.

In order to study in more detail this hemodynamic and metabolic abnormality, we are attempting in dogs to reproduce with alkaloid extracted from *Crotolaria spectabilis* the syndrome of "bush-tea poisoning" seen in man in the Caribbean area.

(Incidentally, neither Sir Toby Belch nor Sir Andrew Aquecheek appeared to have developed ascites during the period covered by *Twelfth night.*)

III. Biophysics and trace metals

The concentration of copper in the liver and zinc in the pancreas is a natural stimulus to the curiosity of anyone interested in the normal and morbid physiology of these organs. Both of these trace metals have positron-emitting isotopes. The pioneering work of Drs. Gordon L. Brownell and William H. Sweet in isotopic arsenic encouraged us to exploit these isotopes as possible clinical tools. Dr. Richard M. Thors, from Iceland, a Research Fellow in Surgery, spent the better part of a year studying Cu^{64} and Zn^{62}

in laboratory animals with Dr. Brownell and Dr. Saul Aronow in the Physics Laboratories of this Hospital. The information obtained was encouraging enough to warrant construction of a total body scanner. The ultimate clinical objective of this work is the accurate delineation of the liver and pancreas in man and very possibly the identification of "cold" nodules of malignant disease.

IV. Organ hypothermia in hepatic surgery

During their tours of duty in the Navy, Dr. Charles E. Huggins and Dr. Edwin L. Carter of the resident staff of this Hospital, were stationed at the Naval Medical Research Institute in Bethesda, where they studied and reported on a technique of differential hypothermia in experimental hepatic surgery. This technique was subsequently employed at the Massachusetts General Hospital and proved to be an effective way of maintaining viability of the liver in man during total inflow occlusion. The instances when this technique is necessary in clinical surgery are relatively rare, but when the occasion does arise, this should prove to be a valuable tool in a traditionally difficult surgical area.

V. Liver blood flow

A survey of the work done in this field in this department illustrates the cooperative nature of the investigations. In collaboration with the clinical and biochemical studies in this laboratory on patients with liver disease and with portal-systemic shunts, Dr. Hugo M. Palazzi, a Research Fellow in Surgery, from Bolivia, has been measuring liver blood flow with a method introduced by Dr. George L. Nardi. Although this and other investigations are independent studies, a coordinated program incorporates much information from various sources, the correlation of which has proved to be very important.

Personnel

It has been interesting to me in writing this report to recall the persons who have been involved in the studies of liver disease carried out in this laboratory. We have had the stimulus of association with a number of surgeons from other countries: Mr. Athol G. Riddell (Manchester, England), Dr. Jacques H. Lebrun (Neuilly-sur-Seine, France), Dr. Daniel Joly (Buenos Aires, Argentina), Dr. Richard M. Thors (Reykjavik, Iceland), Dr. Hugo M. Palazzi (Cochabamba, Bolivia), and Dr. Rafael M. Casas (Bogotá, Colombia). Medical students from various universities have brought fresh outlooks to old problems: Parker Small (University of Cincinnati), Rosemary Freytag (Heidelberg University), Don C. Pearl, Jr. (Harvard Medical School), and Daniel C. Collins (Columbia-Presbyterian). Of the research associates and technicians, Phyllis Nachod, Joan Wareham, and Claude Laumont have left to study for doctorates; while Irene Palatine and Julia Farrelly are the present assistants in the laboratory.

William V. McDermott, Jr., M.D.,
Associate Visiting Surgeon

An Edward Peirson Richardson Lecture was delivered in the Bigelow Amphitheatre at the Hospital on May 14 by Dr. Erwin Uehlinger, Professor of Pathology at the University of Zurich, Switzerland. His subject was "Osteomalacia and the milkman syndrome". Dr. Uehlinger also gave an informal talk on "Late primary tuberculosis and its development", in the Ether Dome on the morning of May 13.

A tea for Dr. Uehlinger was given by Dr. Castleman in the Mallory Library on May 14 for a small group of doctors.

On April 15, Dr. E. F. Scowen, Chief of the Medical Professional Unit and Director of the Dunn Laboratories at Saint Bartholomew's Hospital, London, lectured in the Ether Dome on "Oxalosis and hyperoxaluria". He was the guest of the Medical Services at the Hospital.

Dr. Scowen gave a distinguished discussion on a topic he has long been interested in and on which he has done much research. He likes to call the field which it represents "biochemical genetics".

BIOGLET

Dr. John Q. Durfey, Assistant Resident in Anesthesia—born in Springfield, Ohio, October 28, 1929; Texas Military Institute, 1944-46; Amherst College, 1946-50; Columbia University College of Physicians and Surgeons, 1950-54; Cincinnati General Hospital, 1954-55; military service: Flight Surgeon on the U.S.S. *Coral Sea* and in Pensacola and Jacksonville, Florida, 1955-58.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear each month in this column. The purpose of this listing is to report, month by month and as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

General Surgery

Nardi, G. L., and Lees, C. W.
Serum trypsin: A new diagnostic test for pancreatic disease.
New England J. Med. 258:797-798.

Pearl, D. C., and McDermott, W. V., Jr.
A vulnerable and rate-limiting step in urea synthesis in patients with hyperammoniaemia.
Proc. Soc. Exper, Biol. & Med. 97:440-443.

Neurology, Neurosurgery, and Psychiatry

Long, R. T., Lamont, J. H., Whipple, B., Bandler, L., Blom, G. E., Burgin, L., and Jessner, L.
A psychosomatic study of allergic and emotional factors in children with asthma.
Am. J. Psychiat. 114:890-899.

Laboratory Science

Leonsins, A. J., and Waddell, W. R.
Inhibiting effect of norepinephrine on gastric secretions in human subjects.
J. Appl. Physiol. 12:334-338.

Morgan, W. S.
Affinity of neutral red for cells with basophilic cytoplasm.
Nature 181:1132-1133.

Morgan, W. S.
A cytoplasmic neutral red-ribonucleic acid component not influencing protein synthesis.
Exper. Cell Research 14:435-439.

Murray, D. B., and Ditzel, J.
The effect of CO_2 inhalation on the conjunctival vessels, blood pH, and pCO_2 in young diabetic subjects.
J. Lab. & Clin. Med. 51:370-380.

Schmid, K., MacNair, M. B., and Bürgi, A. F.
The chromatographic separation and purification of acidic proteins on carboxylated ion exchange resins.
J. Biol. Chem. 230:853-864.

Waksman. B. H.
Cell lysis and related phenomena in hypersensitive reactions, including immunohematologic diseases.
Prog. in Allergy 5:349-458.

Ophthalmology

Donahue, H. C.
Some current concepts of headache, especially ocular.
A.M.A. Arch. Ophth. 59:489-494.

Otolaryngology

Kelemen, G.
Congenital deafness: Analysis of pathological findings.
Tr. 6 Int. Cong. Otolaryng.: 253-254.

Kelemen, G.
Otitic reinfection: An experimental study.
A.M.A. Arch. Otolaryng. 67:257-267.

Books

Means, J. H.
Ward 4.
Cambridge, Mass., Harvard University Press.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Advances in virus research, vol. 5.
New York, Academic Press, Inc., 1958.
(8G)

Annual review of medicine, vol. 9.
Palo Alto, Calif., Annual Reviews, Inc., 1958
(1J)

Annual review of psychology. vol. 9.
Palo Alto, Calif., Annual Reviews, Inc., 1958.
(19L)

Fieser, L. F.
Experiments in organic chemistry, ed. 3.
Boston, D. C. Heath and Company, 1957.
(5P)

Henry Ford International Symposium.
The dynamics of virus and rickettsial infections.
New York, The Blackiston Company, Inc., 1954.
(11A)

Henry Ford International Symposium.
Hepatitis frontiers.
Boston, Little, Brown and Company, 1957.
(16K)
Irving, J. T.
Calcium metabolism.
London, Methuen & Company, Ltd., 1957.
(5F)
Martin, G. J. (Editor)
Chemical enzymology.
Boston, Little, Brown and Company, 1958.
(5C)
Methods of biochemical analysis, vol. 6.
New York, Interscience Publishers, Inc., 1958.
(5A)
Morris, J. M., and Scully, R. E.
Endocrine pathology of the ovary.
St. Louis, The C. V. Mosby Company, 1958.
(24O)
Muller, A. F., and O'Connor, C. M. (Editors)
An international symposium on aldosterone.
Boston, Little, Brown and Company, 1958.
(5K)
Robinson, G. C.
Adventures in medical education.
Cambridge, Mass., Harvard University Press, 1957.
(1N)
Roskam, J.
Arrest of bleeding.
Springfield, Ill., Charles C. Thomas, 1954.
(23Lk)
Society for General Microbiology. Fifth Symposium.
Mechanisms of microbial pathogenicity.
Cambridge, Eng., At the University Press, 1955.
(9A)
Stefanini, M., and Dameshek, W.
The hemorrhagic disorders.
New York, Grune & Stratton, 1955.
(14B)
Walton, J. N., and Adams, R. D.
Polymyositis.
Edinburgh and London, E. & S. Livingstone, Ltd., 1958.
(18D)
Watkins, A. L.
A manual of electrotherapy.
Philadelphia, Lea & Febiger, 1958.
(22O)
Wolstenholm, G. E. W., and O'Connor, C. M. (Editors)
Ciba Foundation Symposium on the chemistry and biology of mucopolysaccharides.
Boston, Little, Brown and Company, 1958.
(5D)
Worden, A. M., and Lane-Petter, W. (Editors)
The UFAW handbook on the care and management of laboratory animals, ed. 2.
London, The Universities Federation for Animal Welfare, 1957.
(2B)

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PROPOSED AMBULATORY CLINIC BUILDING

In the past the approach of the Hospital to medical care might have been termed "centripetal", in that attention was centered largely upon patients whose illnesses required Hospital admission. In recent years this approach has subtly but firmly become more "centrifugal" with the expanding concept of the Hospital as a community health center whose responsibilities are not merely intramural but community-wide. It is through the MGH Clinic that the Hospital most directly extends its medical care into the community. Almost 200,000 patients are seen annually in the various Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary.

In August 1955, the Board of Trustees appointed a committee — known as the Clinic Committee — to determine what the function of the Clinic should be in the expanding community role of the Hospital. This is not a problem peculiar to the Massachusetts General, but one that is nation-wide in this era of rapid change in the economics and distribution of medical care.

The Clinic Committee, consisting of the 33 members representing all services at the Hospital, has made the following recommendations.

1. The establishment of an efficient appointment system to reduce the prolonged waiting period to which most clinic patients are subjected;

2. Adjustment of all payment systems, in order that patients may know what expenses to expect and make one inclusive postpayment;

3. Abandonment of the policy of trying to differentiate between patients who can pay for medical care and those who cannot, and the establishment of an open-door policy which would permit all patients to receive care of comparable quality and allow flexible use of Hospital facilities;

4. Inclusion of an automatic communication mechanism, accessible diagnostic facilities (such as X-ray), well-arranged admitting areas, adequate waiting rooms, modern examining rooms, conference rooms, and dining facilities in the construction of a new building to house all of the Clinics of the M.G.H.;

5. Its own ancillary diagnostic and therapeutic facilities to be included in the proposed new building;

6. Construction of the new building to be carried out in such a way that additional professional office space could be added later, if this should become desirable. The advantages to the Hospital and to the individual staff members of having private offices close to the Hospital are evident to all. It is assumed that X-ray and laboratory facilities initially constructed would be of sufficient size to permit their use by ambulatory private patients.

The Committee is unanimously of the opinion that the pre-eminent purpose of the MGH Clinic is to bring into being the best possible medical care for all members of the community who seek its aid, and that all other functions, however important and valuable, are ancillary to this challenge.

It is not only important that patients be given the best medical care in a strictly scientific sense, but that this care be given with due regard for the dignity of the individual. The Clinic, which is dependent upon the composite skills of its participating medical workers, must be organized to insure maximal utilization of these skills in an environment conducive to the best in medical care and teaching. Interchange of knowledge lies at the core of a good clinic, where there are unique opportunities to define the life history of disease and to carry out carefully controlled therapeutic trials in chronic illnesses.

Over and beyond the internal functions of patient care, teaching, and research, the ideal clinic must endeavor to serve as a community health center. In this role the Hospital, primarily through its Clinic, reaches out beyond its formal frontiers to find new and varied ways to contribute to total medical care.

The Hospital has already been called upon to provide through its Clinic direct medical care of patients, teaching, opportunities for research, and leadership as a community health center. In the light of current trends in American medicine, it will undoubtedly play an increasingly important role in the future.

* * *

Dr. Faxon has assembled the following dates and other interesting data concerning the various plantings on the Hospital grounds:

The earliest photograph of the Hospital on file in the Archives Department is dated ca. 1846. This was before the flats were filled in and the sea wall built. It shows trees between the Harvard Medical School and the Hospital, but it is impossible to make out what they were. The next photographs are dated 1880 and 1889. Both show the horse chestnut tree standing well toward 50 feet tall. For a tree of this variety to have grown as high as this must have taken at least 20 years. I think it is safe to say that it could not have been planted before 1859 when the flats were filled in, and that it probably was planted in the early 1860's. A framed picture of the chestnut tree, in full bloom, hangs in the Archives Room.

The 1880 and 1889 pictures do not show the elm trees, which have been such a feature in the Bulfinch Yard for many years. They do show shadows of what must have been fairly large trees—probably the elms in question—so I think we can estimate that the elm trees also were planted in the 1860's.

A few years before World War I (I am not sure of the date but think it may have been 1912), these elms along with most of the other elm trees in Boston, including those in the Harvard Yard, were infested with the leopard moth and were in bad shape. Several of our elms had to be cut down, and, to save the others, practically all the limbs were cut off (the infection being toward the extremities), leaving the trees truncated and bare. However, new limbs grew, and today one would never suspect the extent of the mutilation. Dr. Washburn showed me sections of some of these limbs, with tunnels chewed by the grubs just under the bark of the trees.

In the 1880 photograph, ivy appears on all the columns of the center section of the Bulfinch Building, and growing up to the top of the most western column. Flower beds are shown along the top of the banking and in the center of the lawn. By 1901 ivy had grown nearly to the top of both the east and the west wings of the Bulfinch. It was very lovely, but it harbored sparrows that awakened patients at dawn with their chirping, and mosquitoes. It also crept over the windows onto the screens and had to be cut back at intervals. The decision was finally made to discourage it except on the central section of the building.

After the leopard moth episode, Mr. John R. Macomber (a Trustee of the Hospital from 1919 to 1942, Vice-President of the Institution from 1942 to 1944, and President from 1944 until his death in 1955) donated many oak trees to be spaced between the remaining elms. It was believed that the oak would be more resistant to diseases than any other variety of tree. This gift is an early example of the interest Mr. Macomber took in the trees, shrubs, and grounds of the Hospital—an interest which led to his making more gifts of this sort than can be readily enumerated.

The catalpa trees in front of the Moseley and O.P.D. Buildings, at the main entrance to the Hospital, were planted in 1938 when the White Building was completed. I am not sure, but I think the two elms—one on each side of the entrance—were planted when the Moseley was built in 1916.

The trees and shrubs in the yard between the White Building and the Phillips House were the gift of Mr. Macomber and were planted in 1939 after the White Building was finished. Mr. Macomber took great interest in planning the development of that area.

Markers, for easy identification, have now been placed on all our trees.

New addresses:—

Dr. Julian F. Chisholm, Jr. (a.s. *Oph.*), 330 Dartmouth St., Boston, Mass.
Dr. Milton H. Clifford (a.r.p. 1935), Union Central Life Insurance Co., Cincinnati, Ohio
Dr. Albert Damon (*M.* 1952), Dept. of Industrial Hygiene, Harvard School of Public Health, 1 Shattuck St., Boston 15, Mass.
Dr. Robert H. Fennell, Jr. (sr. r.p. *Path.* 1949), Presbyterian Hospital, Pittsburgh 13, Pa. (after June 30).
Dr. Kenneth E. Liffmann (*Dn.* 1956), 168 Lloyd Ave., Providence 6, R. I.
Dr. Kiyokazu J. Momose (clin. fel. *R.* 1956), Montreal Children's Hospital, 2300 Tupper St., Montreal 25, Quebec, Canada
Dr. Federico Mora (*M.* 1951), 17 Ave. 18-66, Zone 10, Guatemala City, Guatemala
Dr. Jack Spencer (r.p. *R.* 1934), 31 Deering St., Portland, Maine
Dr. Clifford J. Straehley, Jr. (*W.S.* 1947), 713 E. Genesee St., Syracuse, N. Y.
Dr. Masao Yatsuhashi (*W.S.* 1945), Pondville Hospital, Walpole, Mass.

Brief bits:—

Dr. Mary A. B. Brazier has returned from a three months' leave of absence which she spent as Visiting Professor in the Department of Anatomy at the University of California Medical Center in Los Angeles.

Dr. Erich Lindemann will deliver the opening address at a conference concerning psychological and physiological stress, to be held at Oxford University, England, on July 15. The conference has been summoned by the British National Mental Health Research Council.

Dr. Robert S. Schwab was elected Chairman of the Medical Advisory Board of the Myasthenia Gravis Foundation, Inc. at the last Annual Meeting of the Foundation.

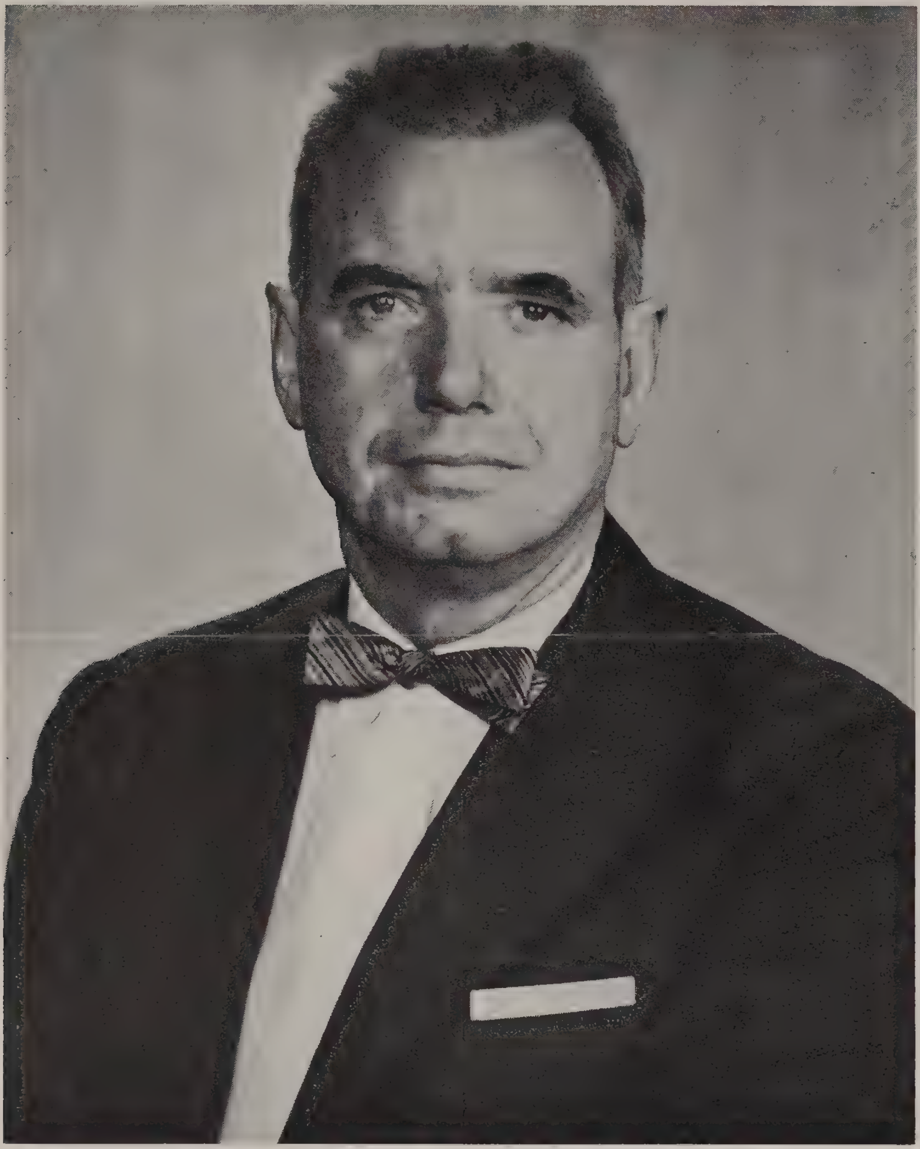
Dr. Richard P. Stetson (*W.M.* 1928) was named to the Board of Governors of the American College of Physicians at the College's 39th annual convention, held in Atlantic City in May.

Dr. Robbins has very kindly passed on to us this letter he received from Dr. Fleming McConnell (r.p. *R.* 1956). It was written in London on April 5, and reads:

> Thank you for your letter and for the news that the colitis article is finally off.
>
> Tomorrow sees the beginning of my tour of the Continent, with the starting point in Paris; then up to Munich and probably Berlin before going on to Scandinavia. This sounds pretty good, but if you could see the whacking great bundle of forms needed to get myself and the car across the frontiers involved you perhaps might think otherwise. (And if you could see the car I am sure you would!)
>
> This, plus the month of June in England, should send me back home early in July. Then for a try at the Canadian examinations this fall. After that, perhaps some work would be in order, but I don't yet know where.
>
> So far this trip has been worth while, but I have yet to see general Radiology approaching the quality of Boston's product. Mind you, I have seen only a couple of London's hospitals and perhaps when I visit the others in June the light will dawn.
>
> I do hope the Department is continuing to prosper and that the troops are behaving themselves.

A most interesting letter has come from Colonel Milton S. Thompson (*Or.* 1934). It was written in Taipei, Taiwan, on April 12, and reads:

> This tour of duty has brought me so many reminders of the Harvard Medical School and the Massachusetts General Hospital that a letter seems in order. The Army sent me here to give a 3-months' course in Orthopedic Surgery at the Chinese Army's First General Hospital, in the capital of Nationalist China, Taipei, Taiwan, and at its Branch Hospital at Peitou, 8 miles out of town. The class is composed of 24 officers of the Army, Navy, and Air Force who have, with the exception of one, been graduated from the National Defense Medical Center during the 9 years it has been on Taiwan. This class was graduated in 1943, when the NDMC was located in Yunnan, near the Burma border. The Center gives 6 years of medical school training, with well-equipped laboratories and a good faculty, but is authorized by the Ministry of Education to confer only a B.M. degree. The National Taiwan University can, for comparable learning, confer an M.D. degree. Graduates of NDMC must serve in the Armed Forces for a payback period which, until recently, was of indefinite length of time, but is now set at 10 years. This, if I can trust my memory, is exactly the same period required of graduates of the French Navy Medical School at La Rochelle. Military pay here sounds unbelievably small to Western ears. A Lieutenant gets $7.50 per month; a Lieutenant Colonel, $15; a Lieutenant General, $36 (or National Taiwan Dollars 1200). They also get 30 kg. of rice a month and their version of quarters, uniforms, and a food allowance (this latter varies with the size of the family, but a couple with 2 children might get about $2.70). One can live here cheaply if he is willing to forego comforts of living and pleasures of dining. An ethnologist at the Academia Sinica, Mme. Inez Beauclaire, told us that 3 meals a day there cost $3.60 per month, or 12¢ a day. For that she gets rice, soups, salads, and vegetables, with very little fish, meat, or fruit. The one luxury hotel, the Grand Hotel, on the other hand, charges $10 per day for a room, and 3 meals would be about as much.
>
> To return to the NDMC—about half the faculty came with it when it left Shanghai for Formosa in 1949, with the Communist armies at its heels. Classes were held out-of-doors or in tents until the Japanese quartermaster stables could be made over to house them. An incentive to the faculty was the establishment of the "Center Clinic" where they are permitted to see private patients for 2 hours a day. The average consultation fee is NT 50 (US $1.50). This enables them, however, to supplement their pay and live quite respectably. The Clinic has 15 or 20 "departments", each headed by the respective professor. It also has a small operating room, about 20 beds, X-ray equipment, a clinical laboratory, etc. About 40% of the proceeds reverts to the NDMC for construction and repair, and the rest is divided among the department heads who must in turn take care of the residents and junior staff men who may help them. If an emergency case arrives and all beds are occupied, the patient is referred to the University Hospital or Provincial Hospital, which makes for good public relations with the other doctors in town. The Center Clinic enjoys a good reputation for high professional skill and patient care. The American Embassy, for example, sends to the Clinic prospective visitors to the United States for health clearance before a visa is granted.
>
> The First General Hospital is mostly of one story, brick, sometimes with a Nissen hut type of second floor, built by the Japanese as a military hospital during their 51-year occupation of this island. The windows are small, and even the occasional 10 watt bulbs don't overcome the impression of dinginess and gloom. I find the professional care of patients, diagnostic skill, laboratory facilities, and surgical ability of quite high order. There aren't nearly as many nurses or trained attendants as are needed. I see relatives of the patients making beds, feeding patients (even via jejunostomy tube), and doing various other ward chores. A high ranking officer may occupy a ward bed, but he will have brought his orderly along. One general's daughter, in a private room, has her two amahs who special her round the clock except when they are relieved by her mother. The patients seem most grateful, even for a ward visit, and the personnel are most hospitable, even to the extent of a loud speaker which sometimes blares across the nurses' basketball court the strains of, believe it or not, "We'll fight for the name of Harvard till the last white line is passed".
>
> New buildings are going up, of 2-story stucco, with large light and airy wards. The finished ones are occupied by the medical service, but the dental clinic and OB ward should be ready soon.
>
> The Orthopedic ward is of the old type and has 10 four-bedded rooms. The chief of the Service is Lt. Col. Teng, Shu-wei (M.G.H. 1951-52). He and his staff are doing superb work under difficulty and are getting excellent results, all of which compensates to some extent for the lack of plaster, soap and water, paint, light, and nurses. Their conservative treatment of fractures is as good as I have seen anywhere; they remove disks and perform all the usual orthopedic procedures. They have a fair number of children as patients, with all the deformities and trauma and disease we see, and, of course, much more tuberculosis than most of us encounter in the U.S. They use streptomycin, PAS, isonicotinic acid, they evacuate abscesses of Pott's disease via paravertebral routes, and do fusions of spines, hips, etc. They nail fractured hips, using 2 portable X-ray machines, and obtain perfect lateral views. Needless to say, they know what they're doing and they do it well.
>
> Orthopedic out-patient clinics are held Wednesday afternoons with usually about 100 patients. Two current cases of clubfoot are being treated by weekly cast changes. Most of the patients are adults, and in general the cases are what we'd see in our own clinics, but there are very few backaches. Some of the most severe deformities have been of the feet, as the result of shell fragment wounds. These will require months of skin grafting before any correction can be done. One great gap in treatment is the absence of any physical therapy. The doctors show the patient or the parent what to do, and the rest is a matter of chance. The unavailability of braces taxes their ingenuity. The doctors do what they can with plaster, felt, and shoe corrections, and know all about tendon transplants, but braces must be bought by the patient. There seem to be no charities to which to appeal as we used to do through "divers good causes" in the *Boston Transcript*. The brace shop,



No. 75 in a series of Staff photographs
Dr. H. Thomas Ballantine, Jr., Associate Visiting Neurosurgeon

> however, makes excellent braces (and limbs). For example, bilateral long leg braces, nickel plated, with hip control, knee lock, ankle stop, drop-foot spring, T-strap, and shoes cost only $18, but that is NT 600 or 15 months' salary for a private. Thus, braces are out of the question for most patients. The brace shop is manned by Lt. Col. Chen, Chi-shien and a Captain Yang who began making limbs and braces about 30 years ago in the shop organized by Dr. Van Gorder at the Peking Union Medical College. The workmanship is marvelous, but their only source of material is the open market.
>
> I find the work really stimulating because of the interest the doctors show in all phases of orthopedics and trauma, and I am particularly proud to be able to answer in the affirmative when the veteran doctors from the mainland ask if I know Dr. Van Gorder. There is Dr. Lu, Kwang-Shun, Chief of Thoracic Surgery (M.G.H. 1950-51); Dr. Cheng, Bu-fei, Chief of Urology (M.G.H. 1954-55); Lt. Col. Lee, Hsing Ya, Chief Surgeon of the Air Force Hospital at Tainan, who is sitting in on our course (M.G.H. 1955-56). I've met lots of others that I can't begin to remember. Many people know Dr. J. Huang Liu (A.B. 1909, M.D. 1913, who interned at B.C.H., not M.G.H.), who is the "Elder Statesman" here, having had many government jobs, and who at present, although retired, heads the Chinese Red Cross, the Anti-Tuberculosis League, the Blood Bank, the Coordination Committee for Foreign Aid in Medicine and Health, and I don't know how many other things.
>
> Dr. Joseph Barr has made a terrific impact on all those who have been at the M.G.H., and I will admit that I am impressed with the frequent quotations from him, offered when I say something they don't agree with. They have all paid attention to Barr and Van Gorder. Perhaps some day they'll quote me.
>
> To answer the frequent question—no, I do not have to lecture in Chinese. They all speak English and understand it fairly well, too, if reaction to innuendoes is a test.
>
> I have enjoyed this temporary duty assignment over here and am loath to leave on May first to resume my duties at Walter Reed.

We were glad to receive this letter from Dr. George B. Murphy, Jr. (*S.* 1952), written from 221 21st Place, La Crosse, Wisconsin:

> My subscription money for The News is enclosed. I am pleased that I can afford it!
>
> The Gundersen Clinic has kept me active enough to delay atrophy of the scissors callus on my right thumb.
>
> There are so many MGH-ers here now that plans for the new hospital wing will doubtless resemble a miniature White Building.
>
> I find the weather cold, with plenty of snow, and I have almost succumbed to skiing.
>
> The Clinic has suggested changing my first name to Sven, to fit better with the rest of the staff, but I have not quite agreed to that.
>
> We miss Boston and the M.G.H., but find the practice good fun and the new life stimulating.

We are always particularly pleased to receive letters from MGH-ers who have returned to their homes in other lands. This letter has come from Dr. Benjamin D. Canlas, Jr. (r.p. *Path.* 1956). It was written on December 16, from the College of Medicine, University of the Philippines, Manila, P.I., and reads:

> I was certainly glad to hear from someone at the Massachusetts General Hospital and to know that even when we have severed our official connections with the Hospital we are still considered as members of the MGH family. I was greatly elated, for example, when about a year ago I received an invitation to the inauguration of the new Pathology Laboratory from Dr. Castleman — impossible though it was for me to attend the ceremonies. I have had correspondence with friends at the M.G.H. Although the letters have been few and far between, I have enjoyed them immensely. This is just to show you how much I have valued my stay at the General. As a matter of fact, I have considered Boston my second home, and every now and then I feel a little "homesick" for the old MGH crowd. I certainly hope there will come a time when I shall have a chance to renew my old acquaintances there.
>
> I am not now the "singleton" you thought me to be here in Manila. Another MGH-er — Dr. Remedios Rosales (r.p. *N.P.* 1952 & a.r.p. *Path.* 1954), "Rose" to her MGH friends — is now with the University of Santo Tomás College of Medicine. Unfortunately, we are associated with different institutions, so we have not seen much of each other.
>
> A lot of water has passed under the bridge in the year and a half since I returned to my country. I have found my training in the M.G.H. to be an excellent background for the work I am doing at present. I wish Dr. Castleman would take note of this: I owe it to him and his staff that I have attained even the humble position I now hold in our University. Because I was trained in a medical center like the Massachusetts General Hospital, many of the methods I learned in the Pathology Laboratory there have been adopted here. I was appointed Assistant Professor in Pathology when I got back home in 1956. There is a scarcity of medical men here who pursue academic medicine, including pathology, so a year later I found myself promoted to Associate Professor, which position I now hold.
>
> There is still a lot of room for improvement in pathology and medicine as a whole in our country, but I believe we are taking the right steps in this direction. The amount of our material is tremendous, but a lot of it is being wasted in many instances. Various institutions in the United States are helping us, but we must help ourselves if we really want to stand on our own feet.
>
> These, I believe, are some of the general conditions peculiar to my country, which you have asked me to tell you about.
>
> Finally, I should like to send my regards to everyone at the M.G.H. — especially the friends whom I have so miserably failed to correspond with.

Dr. Zvi Laron (r.p. *C.M.* 1955) is now with the Pediatric Metabolic Service at the Beilinson Hospital in Petah Tiqva, Israel. In response to a copy of The News which we sent to Dr. Laron, he wrote:

> Thank you very much for the December issue of The News. I am very interested in what is going on at the M.G.H., where I spent two pleasant and instructive years. I am sorry that because of foreign currency restrictions I cannot subscribe to your paper at the present time. [Perhaps someone would like to subscribe as a gift to Dr. Laron.—*Editor*]
>
> I have started to work in the Department of Pediatrics and Rogoff Institute for Medical Research of the Beilinson Hospital. As soon as I shall be a little settled, I shall write you a long letter telling you about medicine here. Until then, thanks again and best regards to all my friends at the M.G.H.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 179 Boston, Mass October 1958

NEUROSURGICAL SERVICE AFFAIRS

The last report on the Neurosurgical Service appeared in the June 1954 issue of THE NEWS. Much has happened in the last four years. Of particular concern to the entire Massachusetts General Hospital family was the loss of Dr. W. Jason Mixter, who died on March 16, 1958, of an illness which happily caused him no serious prolonged incapacity. Obituary notices, written by Drs. J. H. Means, W. H. Sweet, and J. C. White for the *Harvard Medical Alumni Bulletin*, the MGH NEWS, and to appear also in the *Journal of Neurosurgery*, stress so well his unique personality and distinguished career that nothing more need be said here except how much we miss him.

A number of changes in the staff have taken place. Dr. Merrill C. Sosman, for thirty-five years radiologist at the Peter Bent Brigham Hospital and associated with Dr. Harvey Cushing throughout the latter's work in neurosurgery, has recently come to us as Consultant in Neuroradiology. When Dr. Joseph Hanelin, who had been particularly interested in neurosurgical problems in radiology, left this Hospital to become Chief of Radiology at the Newton-Wellesley Hospital, Dr. Sosman had just retired from his post at the Brigham. With Dr. Robbins's enthusiastic backing he has been appointed Consultant to our Service and is giving us the help of his vast experience and outstanding ability as a teacher. Dr. Louis Bakay, after five years as the junior member of the full-time staff, has joined the Hospital Associates, with an office in the Warren Building. Dr. Alfred J. Luessenhop, on completion of four years' training as resident, is associated with Dr. Jost J. Michelsen in his private practice here at the Hospital and elsewhere. To replace Dr. Bakay on the full-time staff, Dr. Vernon H. Mark, a former resident, has returned after two years of military service as Chief of Neurosurgery at the Air Force hospital at Wiesbaden. New appointments to the research staff are mentioned below.

In October of 1955 our reconstructed operating rooms Nos. 1 and 2 on the third floor of the White Building were opened. Rebuilt for the special requirements of surgery of the brain and spinal cord, these are now fulfilling their purpose in a most gratifying fashion. Both have special ventilation and lighting. Room 1, in addition, is electrically screened, so that stereotactic placement of electrodes with recording of spontaneous and evoked potentials can be carried out without interference from nearby elevators, x-ray apparatus, and outside high-frequency waves. This permits more efficient electrocorticographic localization of epileptic foci and electrophysiological investigation of the human brain in the course of craniotomies for the control of tremor and pain.

The latest and perhaps the most important development has been the opening of the new research laboratories on the fourth floor of the Warren Building. These were named the Mixter Laboratories for Neurosurgical Research and were dedicated with appropriate ceremonies on Ether Day last October. Dr. Mixter, who helped so much in raising the necessary funds, was able to be there and hear the moving tribute paid him by Mr. Ferris, rector of Trinity Church. Every foot of floor space in these laboratories has been put to intensive use for the investigation of the following subjects:

1) The development of focused ultrasound for making accurately controlled deep lesions in the brain is being explored by Dr. Ballantine with Dr. Eugene Bell, who is Associate Biologist in Neurosurgery here as well as Assistant Professor of Biology at Massachusetts Institute of Technology. Sound waves vibrating 2.7 million times per second can be focused like light and thus used to make discrete lesions of any desired size without injury to overlying brain substance. These can be placed in deep centres such as the basal ganglia, sensory nuclei in the thalamus, and areas in the brain stem without destruction of surrounding areas, which cannot be avoided by any method of surgical approach. Dr. Ballantine recorded the historical development and possibilities opened up by the use of ultrasound in the June 1958 issue of THE NEWS.

2) Drs. Sweet, Mark, and Kjellberg are developing another method of making focal deep lesions by the use of Dr. Sweet's adaptation of the Horsley-Clarke stereotactic instrument to human surgery. With this instrument it is possible to place tiny electrodes with great accuracy in any part of the brain with only minimal damage to superficial structures from the passage of the electrodes. Carrying out these procedures in the new electrically screened operating room, they are able to locate the position of an electrode in a structure such as the sensory nucleus of the thalamus and then destroy any desired amount of tissue by means of a new radiofrequency lesion-maker constructed for this purpose by Dr. Saul Aronow of the Physics Department.

3) Dr. Albert H. Soloway, Assistant Chemist in Neurosurgery, has been the

M.G.H. HOUSE PUPILS ASSOCIATION REUNION

This year, on October 16—well known to the Hospital as Ether Day—the Massachusetts General Hospital House Pupils Association will meet for the first time since the 100th Anniversary of the first use of ether for major surgery in a public demonstration, and on this occasion will celebrate the 100th Anniversary of the Treadwell Library. The program for that day may be found below.

Mrs. Grace W. Myers wrote in one of her many publications, "Within the hub of the wheel of organization which keeps a great hospital running, there is a certain small spring which if touched into action, produces a force which gradually spreads and spreads until it reaches the outermost rim of the wheel, and so wakes to life an influence previously undreamed of. . . . This spring opens the door of the medical library."

Although the founders of the Massachusetts General Hospital had a medical library in mind when the by-laws were drawn up in 1811 and a committee was appointed in 1823 to collect a library for each department of the Hospital, it was not until 1844 that any financial support for a medical library was voted by the Trustees. By 1847 interest, stimulated by a letter from Dr. Henry I. Bowditch, had grown, and more money was allocated to the medical library with provision for an annual appropriation. In 1848 Dr. Bowditch was appointed librarian, and a bookplate was designed and engraved for use in indicating the ownership of the books. In 1858, when the Trustees voted to accept the bequest of Dr. John Goodhue Treadwell of Salem, the library was named for him, and Dr. Benjamin S. Shaw, Resident Physician (the title given the Directors from 1858 to 1922), became the librarian. Since the Treadwell collection contained some 2500 volumes, the Physicians' and Surgeons' Room on the first floor of the Bulfinch Building was adapted for use as a library. Dr. Shaw acted as librarian until some time after 1863. Soon after this the chairman of the library committee acted as the librarian—the post being held successively by Dr. Norton Folsom and Dr. Arthur T. Cabot.

By 1893 the collection had grown to such an extent that the library was

(Continued on page 2)

key figure in an attempt to develop the use of slow neutrons from a nuclear reactor in the treatment of brain tumours. A crucial feature of this method is the use of a compound containing the stable isotope boron^{10}. The chemistry as well as the reactions in the body of most boron compounds are poorly understood. Dr. Soloway has been synthesizing new compounds of boron and then, with the help of Dr. Simon Thiry of Liége, Belgium, and of Dr. Derek S. Gordon of Belfast, Ireland, has been testing these compounds. The biological responses are being studied, first in mice bearing gliomas, in tissue cultures of human tumours, and finally in patients at operation.

4) Dr. Gordon L. Brownell, Associate Physicist, and Dr. Saul Aronow, Assistant Physicist in the Division of Medicine, continue their work with Dr. Sweet on the use of radioactive isotopes in localizing brain tumours and studying physiological processes such as the secretion of cerebrospinal fluid. What is known as coincidence counting of the special paired gamma radiation arising from isotopes which emit positrons has been put to especially valuable use in localizing focal lesions of the brain, especially abscesses and tumours. The biological properties of compounds of arsenic and rubidium, elements which have positron-emitting isotopes, have been studied in the past. More recently Dr. John Mealey, Jr. (a.r.s.*N.S.*) has been studying zirconium and gallium.

5) The metabolism of water and electrolytes in nervous tissue is being studied by Dr. Adelbert Ames, III, Associate Biochemist in Neurosurgery. These investigations are concerned with factors affecting the movements of inorganic ions and water across nerve cell membranes, with particular attention to the relationship of these ionic movements to the maintenance of nerve cell function. The studies are being performed on a thin sheet of nervous tissue, the retina of the eye, removed from the body and maintained in an artificial medium.

6) Dr. Humberto Fernandez-Moran, Associate Biophysicist in Neurosurgery and a distinguished electron microscopist, has been recently appointed to the research staff to set up a special laboratory for studying the finer histological structure of the brain and other nervous tissues by means of this new technique. Working with the Siemens electron microscope will permit him to study nerve cells, glia, and neurofibrils at a resolution of 10 angstrom units, or one-millionth of a millimeter, which is over a thousand times better than the best light microscopes. Dr. Moran has already made outstanding contributions on electron micrography of myelin, brain tumours, and the retina, a field of study which dovetails well with investigations already under way on the Neurosurgical and Neurological Services of the Hospital.

7) With the appointment of Dr. Frank R. Ervin and Dr. Thomas P. Hackett to the Psychiatry Service, we now have invaluable help in investigating the relationship of psychological factors to the problems of pain and in dealing with formerly intractable painful conditions associated with cancer in the upper portion of the body that cannot be interrupted by dividing the spinothalamic pain pathway or regional sensory nerves. New procedures for giving relief that are under investigation consist of electrolytic destruction by means of inlying electrodes of the fibres connecting the frontal lobes with the dorsomedial nucleus of the thalamus, or primary destruction of this structure or the main sensory nucleus. These methods have shown promise of relieving not only chronic pain and need for narcotics, but also the mental suffering so often seen in the advanced stages of malignant disease. Unlike the earlier crude attempts to relieve pain by surgical lobotomy, these methods produce no serious psychological deterioration.

The various members of our visiting staff, with the help of the Research Committee of the Hospital, have been extraordinarily successful in obtaining the grants necessary to finance this broad program of investigation from the National Institutes of Health, the American Cancer Society, the National Foundation for Infantile Paralysis, and from numerous grateful patients. In addition, a generous grant from an anonymous medical foundation has been received each year since the war. This has given us the opportunity to finance pilot projects to test the value of new experimental methods, as well as clinical follow-up studies and publications. This has been of incalculable value, as the Harvard Medical School has never been able to contribute funds for research or secretarial help. Funds are now being sought to rebuild the top floor of the Burnham wards into laboratories for investigation of the special problems of neurology, psychiatry, and neurological surgery in children.

There has been no noteworthy change in the number of ward patients since the last report, with the exception of a gradual build-up of pediatric cases. With the assignment of Dr. Philip R. Dodge as a full-time pediatric neurologist and Dr. Vernon H. Mark concentrating on the care of neurosurgical problems in children, this interesting subspecialty is certain to expand. The number of private patient beds in the Phillips House and Baker has also been increasing, and this is likely to continue with the recent transfer to the associate staff of Dr. Louis Bakay and Dr. Alfred Luessenhop.

A noteworthy improvement in handling out-patient cases has recently been instituted. By making each of the four visiting men responsible for a day each month in the out-patient clinic, it is now possible to give each patient an appointment and thereby reduce the waiting time. This also enables him to be seen by the surgeon who was on duty at the time of his house admission, as well as to afford the visiting staff an opportunity to follow their own cases. In view of the present increase in the number of neurosurgeons in the Greater Boston area and all over New England, it is of vital importance to make the ambulatory clinic attractive and efficient in order to maintain an adequate number of patients for training our house staff and for ward teaching. The need for this is clear when one realizes that twenty years ago there were only four neurosurgical clinics and seven neurosurgeons in the area of Greater Boston. Now there are nine hospital services and nearly four times the number of surgeons engaged in this specialty.

A final point that deserves comment is the change in the type of neurosurgical patients. This has resulted from the admission of increased numbers of traumatic cases with serious injuries to the brain and spinal cord, as these are now brought to the M.G.H. from this portion of the city by the police ambulances; also from present day improvements in surgical technique which permit intervention on Parkinsonism and other disorders of movement, as well as on many cases of subarachnoid haemorrhage due to ruptured aneurysms and vascular malformations within the brain. While the mortality rate in these latter cases is high, it is distinctly lower than the previous formidable rate incurred under palliative treatment. Operation under hypothermia, which was first applied to neurosurgery in this Hospital in 1953, has added a valuable factor of safety in operating on these cases. Not only does body cooling to 80° (27° centigrade) permit complete arrest of circulation through the brain for periods of up to ten minutes, but it also results in a reduction in volume of the brain, thereby permitting better exposure of deep lesions. This is of particular help in the approach to vascular tumours and others in unusually difficult locations. While the mortality of the invasive malignant tumours of the brain still remains high, death has occurred after only 4.4% of the operations performed in a series of 25 parasagittal meningiomas recently reported from this clinic, and this mortality should be reduced to an even lower rate when more of these patients have been operated upon with the increased use of hypotensive drugs and hypothermia.

James C. White, M.D.,
Chief of Neurosurgical Service

(Continued from page 1)

moved to the rooms formerly occupied by the Resident Physician on the second floor of the Bulfinch Building. Also, there was enough work involved to warrant the appointment of a full-time assistant to Dr. Cabot. Consequently, in 1897 Mrs. Grace Whiting Myers became assistant librarian. She cataloged the entire collection, compiled bulletins on specific subjects, and started a reprint and pamphlet collection. In addition, she was the Medical Record Librarian. Mrs. Myers became librarian in 1911 and, upon her retirement in 1924, Librarian *Emerita.* During her tenure the Treadwell Library was moved, in 1916, to the newly constructed Moseley Memorial Building. Here it was in the heart of the Massachusetts General Hospital, since the administrative offices were at that time in the Moseley Building.

Miss Carrie L. Williams became librarian in 1925, and retired as Librarian *Emerita* in 1941. Her successor was Miss Eleanore A. Lewis, who served as librarian for the next fifteen years. Miss Genevieve Cole was appointed librarian in 1957.

Advance notices for the Massachusetts General Hospital House Pupils Association Reunion were mailed in July. Second notices over the signature of Dr. James Howard Means, Chairman of the Committee on Arrangements, were sent to all the pupils at the best address available in August. Many alumni, however, may not have received their notices due to the fact that the Association members are such a fast-moving group and forget to give the Hospital their most recent addresses. If you are a member of the Association or believe yourself to be a member and have not been invited, please get in touch with Dr. James Howard Means, Box 100, Massachusetts General Hospital, Boston 14, Massachusetts.

M.G.H. HOUSE PUPILS ASSOCIATION REUNION PROGRAM

Thursday, October 16, 1958

9-9:30 A.M. White Lobby
REGISTRATION
9:35-10 A.M. Moseley Rotunda
BUSINESS MEETING
10 A.M.-12 NOON Moseley Rotunda
SCIENTIFIC PROGRAM
Gordon L. Brownell, Ph.D.
Melvin J. Glimcher, M.D.
Alexander Leaf, M.D.
Robert S. Shaw, M.D.
12 NOON-12:30 P.M. Treadwell Library
SHERRY
IN OBSERVANCE OF
THE LIBRARY'S 100th ANNIVERSARY
12:30 P.M. Bulfinch Lawn
LUNCHEON
2-3:30 P.M. Moseley Rotunda
PANEL DISCUSSION
"FUNCTION OF THE TEACHING HOSPITAL"
James Howard Means, M.D., Moderator
Raymond D. Adams, M.D.
Walter Bauer, M.D.
Edward D. Churchill, M.D.
Dean A. Clark, M.D.
3:30-5 P.M.
OPTIONAL TOURS OF THE NEW BUILDINGS AT M.G.H.
5-6 P.M. Moseley Rotunda
LOWELL LECTURE
"THE TWO ROADS—SURGERY AND SCIENCE"
Francis D. Moore, M.D.
7-8 P.M. Harvard Club, Library
RECEPTION
8 P.M. Harvard Club, Harvard Hall
DINNER DANCE

JESSIE STEWART

Miss Jessie Stewart, an Assistant Director of the School of Nursing since 1947, died in the Baker Memorial on August 28 after a brief illness.

Miss Stewart was born in Gloucester, Massachusetts, on August 4, 1914. She entered the Massachusetts General Hospital School of Nursing immediately after finishing high school, and graduated in 1935.

Her career in graduate nursing began at the Massachusetts Eye and Ear Infirmary, where she held the position of head nurse for four years. She then filled the position of instructor there for two years.

In 1943 she received the degree of Bachelor of Science in Education from Boston University, and returned to M.G.H. as supervisor and instructor in Medical Nursing. She was appointed an Assistant Director of the School of Nursing in 1947. Without interruption of work, she again attended Boston University on a part-time basis and was awarded a Master's Degree in Education in 1955.

In addition to many administrative functions in the School of Nursing, her responsibilities included the counseling of student nurses and direction of the student personnel program. She was advisor to the Student Nurses' Cooperative Association, and chairman of many faculty committees.

For several years Miss Stewart was chairman of the Committee on Careers in Nursing at the Nursing Council of the United Community Services and the Eastern Massachusetts League for Nursing. As a result of her leadership and imaginative planning, this committee was highly successful in recruiting student nurses for the schools of nursing of Greater Boston.

Another community contribution was made by her when in 1957 she was appointed leader of the Study Staff to Develop a Regional School of Nursing—a part of the Regionalization Program for Health Services conducted by the Health Division of the United Community Services.

Miss Stewart's dedication to nursing, her ability as a teacher, and her unusual understanding of young people will be remembered warmly by members of the M.G.H. family and by countless student nurses and faculty members who benefited from her insight and guidance. The greatest interest in her life, besides her devotion to her family, was the Massachusetts General Hospital.

Anon.

♣ ♣ ♣

The office of THE NEWS has received word from Walter Reed Army Medical Center that Dr. Frank K. Austen (*M.* 1955) was awarded the Walter Reed Certificate of Achievement last June.

The award was made in recognition of Dr. Austen's service from September 1956 to June 1958 as Chief of the Rheumatology Clinic and Consultant in Rheumatology to the various services of Walter Reed Army Hospital. The citation reads in part: "Your professional conduct in the evaluation, diagnosis, and treatment of patients has been of positive benefit to the patient and this hospital. . . . During this period you also distinguished yourself in the field of research, making several original and valuable contributions to medical science. Through your noteworthy endeavors you have brought credit to yourself and the United States Army Medical Service."

♣ ♣ ♣

It is very gratifying to be able to report that Dr. John F. Radebaugh, Jr. (*C.M.* 1954) responded to our suggestion made in the June issue and has subscribed to THE NEWS as a gift for Dr. Zvi Laron.

Because of foreign currency restrictions in Israel, Dr. Laron has been unable to send money out of his country. In a letter from him published in the June NEWS, he expressed regret at not being able to subscribe to the paper. Dr. Laron is most grateful to the donor.

* * *

The Board of Trustees, at their meetings on May 2, 16, and 29, June 13 and 27, July 16, and August 15, voted:

That the appointment of Dr. Elwin W. Donnelly as Assistant Resident in Radiology begin October 1, 1958, rather than January 1, 1959;
That the appointment of Dr. John B. Little as Assistant Resident in Radiology become effective January 1, 1959, rather than October 1, 1958;
That the appointment of Dr. William M. Thurlbeck as Assistant Resident in Pathology be extended from June 30 to August 31.

To promote:

Dr. Hugo W. Moser to the position of Resident in Neurology for one year, beginning July 1.

To reappoint:

Saul Aronow, Ph.D. as Assistant Physicist (Medicine), effective July 20;
Dr. Oscar S. DePriest, III, as Second Assistant Resident in Surgery, beginning October 1;
Dr. Walter E. Klingensmith as Second Assistant Resident in Surgery, beginning July 1;
Dr. Ronald A. Malt as Third Assistant Resident in Surgery, beginning August 1;
Dr. Jens G. Rosenkrantz as Second Assistant Resident in Surgery, beginning November 1;
Dr. C. Gene Wheeler as Third Assistant Resident in Surgery, beginning Julv 1.

To appoint:

Dr. Barry G. W. Arnason as Assistant Resident in Neurology for one year, beginning July 1;
Dr. George E. Battit as Assistant Resident in Anesthesia for one year, beginning July 1;
Dr. Fernando A. Cardenal as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. Pierre M. Dreyfus as Assistant in Neurology, effective July 1;
Dr. H. Robert Dudley, Jr. as Assistant in Pathology;
Ray H. Elling, Ph.D. as Assistant Sociologist, beginning September 15;
Dr. Joachim S. Gravenstein as Associate Anesthetist, for the period June 13 through August 20;
Dr. Helen M. Herzan as Assistant in Psychiatry, beginning July 1;
Dr. Murray L. Janower as Second Assistant Resident in Radiology, beginning July 1, 1959;
Dr. Joan Kazanjian as Out-Patient Resident on the Children's Medical Service, beginning July 1;
Dr. Leo T. Kelly as Assistant Resident in Anesthesia, beginning July 1, 1959;
Dr. P. Herbert Leiderman as Assistant in Psychiatry, beginning July 1;
Dr. Yosh Maruyama as Acting Resident in Radiology, for the period August 1, 1958 through March 31, 1959, and as Second Assistant Resident in Radiology, beginning April 1, 1959;
Dr. Chaim I. Mayman as Assistant Resident in Neurology for one year, beginning July 1;
Dr. J. Gordon Millichap as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;
Dr. Walid A. Mnaymneh as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. John L. Myers as Second Assistant Resident in Surgery, for two months, beginning July 1;
Dr. Joseph C. Oakley as Intern on the Dental Service for one year, beginning July 1;
Dr. James F. Patterson as Assistant in Dermatology, effective July 1;
Dr. Henry P. Pendergrass as Assistant Radiologist, effective July 1;
Dr. Fernand Poirier as Assistant Resident in

Neurology, for the period July 1 through December 31;
Dr. David C. Poskanzer as Resident in Neurology for one year, beginning July 1;
Dr. Maxwell G. Potter as Assistant in Psychiatry;
Dr. Edward F. Rabe as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;
Dr. Sabino J. Sinesi as Assistant in Dermatology, effective July 1;
Kathleen Stratton, Ph.D. as Assistant Physicist (Medicine) for one year, beginning August 1;
Dr. William H. Tingey, Jr. as Intern on the Dental Service for one year, beginning July 1;
Dr. Maurice M. Tolman as Acting Chief of the Dermatology Service, from July 1 until the appointment of a permanent Chief of this Service;
Dr. Gerald F. Winkler as Assistant Resident in Neurology for one year, beginning July 1.

The Trustees also voted:

To appoint Drs. Myles P. Baker and Howard Ulfelder as Members-at-Large on the General Executive Committee, representing the Medical and Surgical Staff, respectively, for one year, beginning July 1;
That Mr. Ronald Belsey of England be invited to give a Richardson Lecture at the Hospital on May 15;
That Dr. David Mollin, Senior Lecturer at the Post-Graduate Medical School, London, England, be invited to give a lecture here at the Hospital on June 16;
That Hans Wandall, Director of the Institute of Experimental Surgical Research, University of Copenhagen, be invited to give a Richardson Lecture at the Hospital on May 9.

At their meetings on April 30, during May and June, on July 2 and 16, and August 13, the General Executive Committee voted:

To accept with regret the resignation of Dr. Winnifred P. Chase from the position of Clinical Assistant in Medicine, effective June 1;
To accept the resignation of Sylvia F. Jackson, Ph.D. from the position of Research Fellow in Medicine, effective as of May 31.

To promote:

Dr. David W. Bailey from the position of Intern to that of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959;
Dr. James H. Duxbury to the position of Senior Assistant Resident in Urology for one year, beginning July 1;
Dr. Herbert A. Haessler to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959;
Dr. H. David Hall from the position of Intern to that of Assistant Resident on the Dental Service for one year, beginning July 1;
Dr. Robert E. Key to the position of Senior Resident in Orthopedic Surgery, effective June 1 rather than July 1;
Dr. Raymond N. Kjellberg to the position of Resident in Neurosurgery, for a period of eight months, beginning September 1;
Dr. Guy W. Leadbetter, Jr. to the position of Senior Resident in Urology for one year, beginning July 1;
Dr. Herbert A. Newman to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959;
Dr. Eugene R. Nobles, Jr. to the position of First Assistant Resident in Surgery for one month, beginning July 1;
Dr. Robert G. Ojemann from the position of Junior Resident at the Veterans Administration Hospital to Assistant Resident in Neurosurgery at the Massachusetts General Hospital, for a period of eight months, beginning September 1;
Dr. Claus W. Reichle to the position of Acting Chief Resident in Anesthesia, holding his present title of Clinical and Research Fellow in Anesthesia, effective as of April 25;
Dr. E. William Rosenberg to the position of Resident in Dermatology for one year, beginning July 1;
Dr. R. Wyman Sanders from the position of Intern to that of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959;
Dr. Dagoberto Sosa from the position of Assistant Resident to that of Senior Resident in Neurosurgery, assigned to the Boston Veterans Administration Hospital, for a period of eight months, beginning September 1;
Dr. Alfred L. Weber to the position of Resident in Radiology, effective July 1.

To reappoint:

James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;
Dr. W. Gerald Austen as Second Assistant Resident in Surgery, beginning July 1;
Bronius Baskys, Ph.D. as Research Fellow in Dermatology for one year, beginning July 1;
Dr. William R. Brewster, Jr. as Clinical and Research Fellow in Anesthesia for one year, beginning July 1;
Dr. Nancy L. R. Bucher as Associate Biologist (Medicine) for one year, beginning July 1;
Dr. Willi Burgi as Research Fellow in Medicine, effective September 1;
Dr. Edwin L. Carter as Second Assistant Resident in Surgery for one year, beginning July 1;
Dr. Herbert S. Cline as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Alan S. Cohen as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. John D. Constable as First Assistant Resident in Surgery, for one month, beginning July 1; it was further voted that he be promoted to the position of Resident in Surgery, beginning August 1;
Dr. Ralph C. Darling, Jr. as First Assistant Resident in Surgery, for the period July 1 through December 31;
Dr. Luis L. de Mola as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Harry B. Ditmore, Jr. as First Assistant Resident in Surgery, beginning July 1;
Dr. Nancy A. Durant, with a change of title from that of Clinical and Research Fellow to that of Clinical Fellow in Psychiatry, for one year, beginning July 1;
Lewis L. Engel, Ph.D. as Associate Biochemist (Medicine) for one year, beginning July 1;
Dr. Joseph W. Ferrebee as Research Fellow in Pathology for one year, beginning June 1;
Dr. Stuart Q. Flerlage, Jr. as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
Dr. Timothy S. Harrison as Second Assistant Resident in Surgery, beginning July 1;
Dr. Stephen E. Hedberg as Second Assistant Resident in Surgery, beginning July 1;
Dr. Mahlon B. Hoagland as Associate Biochemist (Medicine) for one year, beginning July 1;
Gillray Kandel, Ph.D. as Research Fellow in Psychology, in the Department of Anesthesia, for one year, beginning September 30;
Dr. Thomas J. Keenan as Assistant Resident in Anesthesia for one year, beginning August 31;
Elizabeth B. Keller, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;
Dr. William M. Keynes as Clinical and Research Fellow in Surgery, for the period July 1 through September 30;
Dr. David M. Klein as Assistant Resident in Neurosurgery, assigned to Neuroradiology, for the period September 1, 1958 through February 28, 1959, when he will then be assigned to the Boston Veterans Hospital, beginning March 1, 1959;
Dr. Harold L. May as Second Assistant Resident in Surgery, beginning July 1;
Dr. John E. Mazuzan, Jr. as Assistant Resident in Anesthesia for one year, beginning August 15;
Dr. John Mealey, Jr. as Assistant Resident in Neurosurgery, assigned to Neuropathology, for a period of eight months, beginning September 1;
Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery, for a period of six months, beginning July 1;
Dr. Emil J. Pawlowski as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Jan-Henrik Probst as Clinical and Research Fellow on the Children's Medical Service, for the period July 1 through December 31;
Dr. Robert A. Schmidt as Assistant Resident in Anesthesia for one year, beginning July 1;
Dr. Jesse F. Scott as Associate Biophysicist (Medicine) for one year, beginning July 1;
Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;
Dr. Juan F. Sotos as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;
Mary L. Stephenson, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Anne M. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning May 13;
Dr. Dorothy B. Villee as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
Dr. Barbara E. Waud as Assistant Resident in Anesthesia for one year, beginning July 1.

To extend the appointments of:

Dr. Thornton Brown as Acting Chief of the Orthopedic Service, through May 26;
Dr. Elias C. Dow as Clinical and Research Fellow in Medicine, from June 30 through August 31;
Dr. Hyman Gaylis as Clinical and Research Fellow in Surgery, from June 30 through August 31;
Dr. Elliott L. Mancall as Clinical and Research Fellow in Neurology, from June 30 through November 30;
Dr. Yang Wang as Clinical Fellow in Medicine, assigned to Cardiology, through September 30.

To appoint:

Dr. Khalil Abi-Torbey as Clinical and Research Fellow in Urology for one year, beginning July 1;
Dr. Rolf G. Baginsky as Clinical Fellow in Physical Medicine, retroactive to February 1, through July 31;
Dr. Christian Beckers as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Dr. Paul H. Black as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Edgar S. Cathcart as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. James J. A. Cavanaugh as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Jacques de Rougemont as Research Fellow in Neurosurgery for one year, beginning approximaty September 1;
Dr. Franco R. Dinale as Clinical Fellow in Anesthesia for one year, beginning October 1;
Dr. Jacques É. Dumont as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Karl Dus, Ph.D. as Research Fellow in Medicine for one year, beginning April 29;
Dr. Michael H. M. Dykes as Clinical Fellow in Anesthesia for one year, beginning January 1, 1959;
Dr. Howard S. Frazier as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Sidney Gelfand, Ph.D. as Research Fellow in Psychology, effective as of August 25;
Dr. Helen S. Gyftaki as Research Fellow in Physics, for a period of six months, beginning May 12;
Dr. Richard M. Hays as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Helmut F. Hofmann as Clinical and Research Fellow in Neurosurgery for one year, beginning September 1;
Dr. John R. Huckell as Clinical Fellow in Orthopedic Surgery, for the period July 1,

1958 through April 30, 1959, with the privilege of assisting Dr. J. S. Barr in the care of his private patients;
Dr. Guy J. Isaac as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning April 28;
James G. Kelly, Ph.D. as Research Fellow in Psychology, beginning August 25;
Dr. Alexander D. Kenny as Associate Pharmacologist in the Department of Pathology, for a three-year period, beginning July 1;
Keith F. Killam, Jr., Ph.D. as Research Fellow in Neurophysiology on the Neurology Service, pro tempore, for the months of July and August;
Marvin R. Lamborg, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Dr. Melvin Lederman as Clinical and Research Fellow in Surgery for one year, effective as of July 1;
Dr. Barbara Lipowska as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Gisela A. M. Meloy as Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Hans Nevinny-Stickel as Clinical Fellow in Medicine for one year, beginning July 1;
Kirit S. Parikh, Sc.D. as Research Fellow in Orthopedic Surgery, for a period of three months, from June 16 through September 15;
Charles J. Parker, Jr., Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
Dr. Albert McL. Rogers as Clinical Fellow in Orthopedic Surgery, for the period September 1 through November 30;
Ascanio M. Rossi, Ph.D. as Research Fellow in Psychology, beginning August 25;
Dr. Hugues Ryser as Clinical and Research Fellow in Medicine for one year, beginning September 15, or as soon thereafter as he arrives in Boston;
Dr. Ihsan Sahinalp as Research Fellow in Neurosurgery, effective January 1 through December 31;
Dr. Clyde N. Shealy as Clinical and Research Fellow in Neurosurgery, for a period of ten months, beginning July 1;
Dr. Clarence E. Thornton as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Arnold van den Hooff as Research Fellow in Medicine for one year, beginning October 1;
Dr. Markus F. Vest as Clinical and Research Fellow on the Children's Medical Service for one year, beginning September 1;
George R. Weiss, A.M. as Research Fellow in Physics (Surgery), for the period June 9 through September 1.

The General Executive Committee also voted that:

The appointment of Dr. Peter J. Gomatos as Assistant Resident in Medicine be changed to that of Resident in Medicine for one year, beginning July 1;
The appointment of Dr. Judith F. Gould as Clinical Fellow in Anesthesia become effective July 1, 1960 rather than September 1, 1959;
The appointment of Dr. Timothy S. Harrison be that of First Assistant Resident in Surgery, beginning July 1, rather than Second Assistant Resident;
The appointment of Dr. Jan Koch-Weser as Resident in Medicine become effective January 1, 1959 rather than July 1, 1958.

The McLean Hospital has announced the following appointments to its part-time staff:

Dr. Ruth M. Murphy, Clinical Fellow in Psychiatry;
Dr. William D. Temby, Assistant Attending Psychiatrist;
Dr. Elizabeth R. Zetzel, Psychiatrist.

The McLean Hospital also announced the appointments of:

Mr. Robert Schnitzer, Assistant Psychologist;
Dr. Katherine Spencer, Research Associate in Social Anthropology.

The following Residents in Psychiatry have been appointed at McLean:

Dr. Robert Ball
Dr. Barbara Gurd
Dr. Herbert Lazarus
Dr. Egbert Mueller
Dr. Jack Rice
Dr. Phelps Robinson

The Executive Committee of the Massachusetts Eye and Ear Infirmary, at their meetings on May 19 and July 9, made the following appointments:

Dr. Peggy Clark-Roberts—Fellow in Anesthesiology for one year;
Dr. Louis E. Griffey—Assistant in Otolaryngology;
Dr. David Lozano—Special Fellow in Ophthalmology, assigned to the Retina Service for one year, beginning July 1;
Dr. Alexander Papadopoulos—Fellow in Anesthesiology for one year;
Dr. John C. Snow (Hionides)—Chief of Anesthesiology;
Dr. Irvin S. Taylor—Assistant in Ophthalmology.

* * *

IMPORTANT NOTICE

Despite substantial increases in the cost of issuing THE NEWS, no increase has been made in the price of the paper since 1947. Now being faced with the necessity of either raising the price or reducing the number of issues per year, it has been decided to adopt the custom followed by many publications of somewhat similar type, and cover the academic year, only —October through June—when vacations are over for most of our readers.

* * *

SURGICAL RESEARCH

During the past three years research done in my laboratory has centered about the liver and pancreas, with occasional excursions into the fields of carcinogenesis and coronary circulation. I will summarize briefly some of the work we have done and are doing in attempting to apply basic research techniques to clinical surgery.

I. THE PANCREAS

Pancreatic visualization: One of the chief obstacles to early diagnosis of pancreatic disease is the total absence of any method of rendering the gland opaque to x-rays. If some agent could be found which selectively localized or was concentrated and excreted in the pancreas, iodination might result in a compound that would provide pancreatograms.

While a medical house officer here, Dr. Isaac M. Taylor (*M.* 1946 and c.r.p. 1951) called my attention to the fact that certain fluorescent alkaloids derived from colombo root resulted in localized pancreatic fluorescence when injected into animals. We have prepared some of these alkaloids and confirmed this selective localization by fluorescence under ultraviolet light. In order to confirm this finding Dr. John Seipel, while a Harvard Medical student, devised a quantitative gravimetric method for recovery of these alkaloids. He demonstrated that between 15 and 75 percent of the injected alkaloid could be extracted from the excised pancreatic tissue which represented less than 1 percent of the total body weight.

Our endeavors to iodinate these alkaloids have been a collaborative effort with Drs. William Sandusky and Leo Burger at the University of Virginia, and the Mallinckrodt Chemical Company. Although several iodinated complexes have been synthesized, these have unfortunately been exceedingly insoluble. Current efforts are being directed at producing a soluble iodinated molecule which will permit administration of adequate iodine to opacify the pancreas.

We are also attempting iodination with radioactive iodine, since a much smaller amount of iodine would provide adequate radioactivity for body scanning.

Serum trypsin: Determinations of serum amylase and lipase have been of considerable value in the diagnosis of pancreatitis. However, these are often of little value in chronic disease and malignancy. It seemed to us highly desirable to devise a test for the pancreatic proteolytic enzyme, trypsin, which might have the advantage of specific pancreatic origin, lacking in both amylase and lipase determinations.

The availability of synthetic polypeptide substrates with amide linkages vulnerable only to a specific enzyme has enabled us to devise a simple and apparently reliable method for the quantitative analysis of a circulating proteolytic enzyme which is probably trypsin of pancreatic origin.

The specific substrate we have utilized is benzoyl l'arginineamide (BAA) which is commercially available. Incubation of this substrate with the patient's blood results in splitting of amide from the substrate by any trypsin present. The amount split off is proportional to the concentration of trypsin and is measured quantitatively as ammonia. We have been greatly aided in our clinical appraisals by the entire clinical staff of the Hospital, and Dr. Chester Jones and Dr. Marshall Bartlett in particular. The laboratory determinations have been diligently done by Miss Natalie Goregliad. At the present time Joseph Barrie (Harvard Medical School) is revising the technique of the determination to simplify its execution so that it may be done colorimetrically in any clinical laboratory. In addition, we are correlating our findings in approximately 300 determinations with the patient's clinical course.

Preliminary results are most promising. The test has been positive in 10 consecutive cases of carcinoma of the pancreas. The laboratory was awarded the Annual Award of the R. Franklin Carter Foundation, Inc. for 1957 on the basis of this work.

II. LIVER BLOOD FLOW

For several years we have been measuring hepatic blood flow by utilizing a radioactive colloid, chromic phosphate tagged with P-32, which is extracted by the reticuloendothelial system of the liver and spleen. A minute amount of the colloid is injected intravenously and the disappearance rate of the radioactivity from the peripheral blood, which is proportional to the liver blood flow, is determined.

The procedure is harmless, requires only 2 venepunctures, and can be easily repeated.

Our investigations were initially directed with Dr. William V. McDermott, Jr. toward a study of hepatic hemodynamics in cirrhosis and portal hypertension. Dr. Hugo M. Palazzi (Bolivia) has done a great deal of the clinical work with these patients, and during the summer has been aided by Joseph S. Barr, Jr. (Harvard Medical School).

We have found that, in general, cirrhotics do not have a markedly reduced liver blood flow. Splenectomy and shunt procedures usually result in a reduction of hepatic flow which, in some cases, may result in hepatic coma and death. Cirrhotics with reversible ascites have a markedly reduced flow. It is possible that the latter group should have shunt surgery and that determination of flows may eventually help us select the proper patients for surgery or aid in selecting the proper procedure for each patient.

More recently we have applied this technique to a study of liver blood flow in shock. Dr. John P. Bunker and Dr. Marie-Louise Levy of our Department of Anesthesia have initiated a collaborative study of the effect of anesthesia, hypothermia, blood loss, and surgery on hepatic blood flow.

III. CARCINOGENESIS

John Hanley (Boston University Medical School) and John Chacko (Harvard Medical School) have been carrying on a study of amino acid metabolism of human tumors. Sterile tumors and normal tissues are being transplanted into hamster cheek pouches where, under the influence of cortisone, the tissue may grow independently. When the transplant is established, the animals are injected with a radioactively tagged amino acid and the cheek transplant biopsied at various time intervals. The biopsies are then extracted and their amino acid content analyzed by paper chromatography. The chromatograms are then placed on an x-ray film and a radioautograph made. Comparison of the serial radioautographs permits one to trace the metabolic pathway of the injected amino acid in normal and neoplastic tissue. Our experiments here are not yet far enough along for us to draw any conclusions.

IV. CORONARY ANGIOGRAPHY

In cooperation with Dr. Stanley M. Wyman of our Department of Radiology we have been able to demonstrate the coronary arteries of dogs *in vivo*. By using a pressure injector, a bolus of from 5 to 10 cc. of contrast material can be delivered into the ascending aorta in a fraction of a second. This results in rapid and complete coronary filling which can be demonstrated beautifully on films taken on the rapid sequence biplane equipment available in the research suite of the X-ray Department. This form of single rapid injection of small volume accomplishes good filling of the coronaries without the hazards of anoxia and arrhythmias. It is believed that this technique will be necessary in the proper selection of patients for surgery or coronary occlusive disease.

George L. Nardi, M.D.,
Assistant Surgeon

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Goldberg, L. I.
Effects of hypothermia on contractility of the intact dog heart.
Am. J. Physiol. 194:92.
Macris, S. G., Gravenstein, J. S., Reichle, C. W., and Beecher, H. K.
Drug synergism (potentiation) in pain relief in man: papaverine and morphine.
Science 128:84.

Biological Chemistry

Baskys, B., Lever, W. F., and Klein, E.
Separation of heparin-induced lipemia clearing factor from human plasma.
Federation Proc. 17:11.
Klein, E., Lever, W. F., and Fekete, L. L.
Inhibition of lipemia clearing activity by tissue components.
Federation Proc. 17:520.
Klein, E., Lever, W. F., and Fekete, L. L.
Inhibition of lipemia clearing activity by tissue extracts.
Proc. Soc. Exper. Biol. & Med. 98:658.

Cardiology

Shanahan, W. R., Romney, S. L., and Currens, J. H.
Coarctation of the aorta and pregnancy.
J.A.M.A. 167:275.

General Medicine

Irwin, J. W., and Burrage, W. S.
The role of adrenocortical steroids in the treatment of intractable bronchial asthma.
J. Allergy 29:233.

General Surgery

Grillo, H. C., Watts, G. T., and Gross, J.
Studies in wound healing: I. Contraction and the wound contents.
Ann. Surg. 148:145.
Waddell, W. R.
The secretory function of the stomach after denervating operations.
J. Appl. Physiol. 12:468.
Watts, G. T., Grillo, H. C., and Gross, J.
Studies in wound healing: II. The role of granulation tissue in contraction.
Ann. Surg. 148:153.

Laboratory Science

Isselbacher, K. J.
A mammalian uridinediphosphate galactose pyrophosphorylase.
J. Biol. Chem. 232:429.
Jeanloz, R. W., and Stoffyn, P. J.
Chemical structure of *B*-heparin.
Federation Proc. 17:249.
Jeanloz, R. W., Stoffyn, P. J., and Trémège, M.
Sulphated galactosamine-containing mucopolysaccharides.
Ciba Foundation Symposium on chem. and biol. of mucopolysaccharides, p. 85.
Nardi, G. L.
Serum trypsin determination in pancreatic disease.
J. Lab. & Clin. Med. 52:66.
Schmid, K., and MacNair, M. B.
Characterization of the proteins of certain post-mortem human synovial fluids.
J. Clin. Investigation 37:708.
Waksman, B. H.
Discussion du rapport de Elvin A. Kabat.
VI Congres International de Neurologie, 1957, p. 48.

Neurology

Hirsch, O.
Hypophyseal duct tumors (craniopharyngiomas) versus adamantinomas.
J. Neuropath. & Exper. Neurol. 17:305.

Neurophysiology

Brazier, M. A. B.
The development of concepts relating to the electrical activity of the brain.
J. Nerv. & Ment. Dis. 126:303.
Brazier, M. A. B.
Studies of responses evoked by flash in man and cat.
In Reticular formation of the brain, sec. 6, Boston, Little, Brown and Company.

Neuropsychiatry

Benda, C. E., and Melchior, J. C.
Progressive deteriorating diseases of infancy.
J. Neuropath. & Exper. Neurol. 17:205.
Bronner, F., Benda, C. E., Harris, R. S., and Kreplick, J.
Calcium metabolism in a case of gargoylism, studied with the aid of radiocalcium.
J. Clin. Investigation 37:139.

Neurosurgery

Bakay, L.
Results of surgical treatment of intracranial metastasis from pulmonary cancer. Report of a case with five-year survival.
J. Neurosurg. 15:338.
Bakay, L.
Spinal fluid protein in tumors of the sellar region.
Neurol. 8:455.

Ophthalmology

Dunphy, E. B.
Report on the diathermy treatment of retinoblastoma.
Am. J. Ophth. 45:95.
Dunphy, E. B.
The three-year residency.
Tr. Am. Acad. Ophth. & Otolaryng. Mar.-Apr.: 241.

Otolaryngology

Kelemen, G.
Arteria stapedia in bilateral persistence.
A.M.A. Arch. Otolaryng. 67:668.

Physiology

Blank, I. H., Griesemer, R. D., and Gould, E.
The penetration of an anticholinesterase agent (sarin) into skin. II. Autoradiographic studies.
J. Invest. Dermat. 30:187.
Blank, I. H., Jones, J. L., Jr., and Gould, E.
A study of the penetration of aluminum salts into excised human skin.
Proceedings of the Scientific Section of the Toilet Goods Association 29:32.
Griesemer, R. D.
Studies on enzymes in the skin: Their use as a research tool.
J. Soc. Cosmetic Chemists 9:148.

Psychiatry

Gellert, E.
Reducing the emotional stresses of hospitalization for children.
Am. J. Occup. Therapy 7:125.

Sifneos, P. E.
Phobic patient with dyspnea: Short term psychotherapy.
Am. Pract. & Digest Treat. 9:947.
Smith, G. M.
Six measures of self-concept discrepancy and instability: Their interrelations, reliability, and relations to other personality measures.
J. Consult. Psychol. 22:101.
Talland, G. A.
The effect of set on accuracy of auditory perception.
Brit. J. Psychol. 49:117.
Weisman, A. D., and Hackett, T. P.
Psychosis after eye surgery: Establishment of a specific doctor-patient relation in the prevention and treatment of "black-patch" delirium.
New England J. Med. 258:1284.

Books

Adams, F. D.
Adams' physical diagnosis, ed. 14.
Baltimore, Williams and Wilkins Company.
Terracol, J., and Sweet, R. H.
Diseases of the esophagus.
Philadelphia, W. B. Saunders Company.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Benedict, E. B., and Nardi, G. L.
The esophagus.
Boston, Little, Brown and Company, 1958.
(16F)
Berglas, A.
Cancer: nature, cause and cure.
Paris, L'Institut Pasteur, 1957.
(13V)
Bourne, G. H., and Danielli, J. F. (Editors)
International review of cytology, vol. 7.
New York, Academic Press, Inc., 1958.
(2Am)
Brown, I. A.
Liver-brain relationships.
Springfield, Ill., Charles C. Thomas, 1957.
(19C)
Cave, E. F. (Editor)
Fractures and other injuries.
Chicago, The Year Book Publishers, Inc. 1958.
(18J)
Chatfield, P. O.
Fundamentals of clinical neurophysiology.
Springfield, Ill., Charles C. Thomas, 1957.
(19C)
Commission on financing hospital care, 3 vols.
New York, The Blakiston Company, 1954-55.
(32O)
Crane, E. J., Patterson, A. M., and Marr, E. B.
A guide to the literature of chemistry, ed. 2.
New York, John Wiley & Sons, Inc., 1957.
(36Hb)
Dixon, M., and Webb, E. C.
Enzymes.
New York, Academic Press, Inc., 1958.
(5C)
Dock, W., and Snapper, I. (Editors)
Advances in internal medicine, vol. 9.
Chicago, The Year Book Publishers, Inc., 1958.
(6G)
Engström, A., and Finean, J. B.
Biological ultrastructure.
New York, Academic Press, Inc., 1958.
(3J)
Fields, W. S.
Brain mechanisms and drug action.
Springfield, Ill., Charles C. Thomas, 1957.
(22Eh)
Fieser, L. P., and Fieser, M.
Organic chemistry, ed. 3.
Boston, D. C. Heath and Company, 1956.
(36Ho)
Greenstein, J. P.
Biochemistry of cancer, ed. 2.
New York, Academic Press, Inc., 1954.
(13V)
Greenstein, J. P., and Haddow, A. (Editors)
Advances in cancer research, vol. 5.
New York, Academic Press, Inc., 1958.
(13V)
Henderson, D. K., and Gillespie, R. D.
A textbook of psychiatry, ed. 8.
New York, Oxford University Press, 1956.
(19S)
International Cancer Conference, 7th. London, 1958.
Abstracts of papers.
London, Chester Beatty Research Institute, 1958.
(13V)
International Congress of the Society of Hematology, 6th. Boston, 1956.
Program and abstracts of papers.
Boston, International Society of Hematology, 1956.
(14B)
Licht, S.
Electrodiagnosis and electromyography.
New Haven, Conn., Elizabeth Licht, 1956.
(7R)
Low, F. N., and Freeman, J. A.
Electron microscopic atlas of normal and leukemic human blood.
New York, McGraw-Hill Book Company, 1958.
(14A)
Luck, J. M., and others. (Editors)
Annual review of biochemistry, vol. 27.
Palo Alto, Calif., Annual Reviews, Inc., 1958.
(5A)
Massachusetts General Hospital. Social Service Department.
Selected papers and reports presented during the 50th anniversary celebration, Oct. 20-25, 1955.
Massachusetts General Hospital, Social Service Department, 1958.
(36V)
Means, J. H.
Ward 4.
Cambridge, Mass., Harvard University Press, 1958.
(39Ah)
Minz, B.
The role of humoral agents in nervous activity.
Springfield, Ill., Charles C. Thomas, 1958.
(22Eh)
Morawitz, P.
The chemistry of blood coagulation.
Springfield, Ill., Charles C. Thomas, 1958.
(14Am)
Morrell, R. M.
German-English glossary of neurophysiology.
New York, Consultants Bureau, Inc., 1958.
(1Ad)
Pennes, H. H. (Editor)
Psychopharmacology: pharmacologic effects on behavior.
New York, Paul B. Hoeber, Inc., 1958.
(18A)
Pincus, G. (Editor)
Recent progress in hormone research, vol. 14.
New York, Academic Press, Inc., 1958.
(14K)
Potter, E. L.
Pathology of the fetus and the newborn.
Chicago, The Year Book Publishers, Inc., 1952.
(26E)
Society for Experimental Biology Symposia No. 12.
The biological replication of macromolecules.
New York, Academic Press, Inc., 1958.
(2A)
Swenson, O.
Pediatric surgery.
New York, Appleton-Century-Crofts, Inc., 1958.
(26F)
Terracol, J., and Sweet, R. H.
Diseases of the esophagus.
Philadelphia, W. B. Saunders Company, 1958.
(16Fd)
Welch, C. E.
Intestinal obstruction.
Chicago, The Year Book Publishers, Inc., 1958.
(16Cd)
Wolf, S., and Wolff, H. G.
Headaches: Their nature and treatment.
Boston, Little, Brown and Company, 1953.
(19F)
Wolff, H. G.
Headache and other head pain.
New York, Oxford University Press, 1948.
(19F)
Wolstenholme, G. E. W., and O'Connor, C. M. (Editors)
Ciba Foundation Symposium on the cerebrospinal fluid.
Boston, Little, Brown and Company, 1958.
(19Wa)
Wolstenholme, G. E. W., and O'Connor, M. (Editors)
Ciba Foundation Colloquia on Endocrinology, vol. 12. Hormone production in endocrine tumors.
Boston, Little, Brown and Company, 1958.
(14L)

♣ ♣ ♣

VOLUNTEER GROUPS

Distaff Club

The first of this year's Distaff Club meetings was held on September 25, at 8 P.M., in the Pent House, with Mrs. Guy W. Leadbetter, Jr. as hostess. We all enjoyed the opportunity to see old friends again and meet some new ones. Mrs. Soma Weiss took us on a very interesting tour of the Hospital before the meeting.

The October meeting will be a panel discussion on the subject "Work in the community". The panelists will be representatives from the League of Women Voters, the School Committee of Weston, and the Massachusetts Medical Society. The meeting is planned for the 22d of October, at 8 P.M., in the Pent House. It will be of special interest to us all.

Looking far ahead, plans are being made for the November Square Dance. This will not only be great fun, but very good exercise, as well.

This letter came to Dr. Butler from appreciative parents:

> My husband and I would like to thank your entire staff who helped to make our daughter's stay at the Hospital a pleasant one.
>
> Being a nurse, I have had the opportunity of working in pediatrics in several hospitals, and I have never seen such happy and well-adjusted patients as those at Massachusetts General. I think most of the credit should go to the staff, which does so much to make the patient feel "at home".

New addresses:—

Dr. Paulo F. Albuquerque (r.s. *U.* 1944), Rua da Assembleia 51, Rio de Janeiro, Brasil
Dr. Arthur F. Amick (*M.* 1957), Loup City, Nebr.
Dr. Fred B. Ballard, Jr. (a.r.p. 1958), 15 Devon St., Glendale, Mo.
Dr. Florosa A. Bautista (a.r.p. *C.M.* 1958), Chapin Hospital, Providence, R. I.
Dr. Richard F. Bedell (*C.M.* 1958), 1303 York Ave., New York 21, N. Y.
Dr. Robert D. Breer (a.r.p. *C.M.* 1957), 690 B, Route 1, Anniston, Ala.
Dr. Norman K. Brown (*M.* 1957), 596 Delaware Ave., Buffalo, N. Y.
Dr. Bob Bullwinkel (*S.* 1957), NAS Navy #943, Box 62, Agana, Guam, c/o Fleet Post Office, San Francisco, Calif.
Dr. Chung H. Cho (clin. fel. *An.* 1958), Dept. of Anesthesia, Providence Lying-In Hospital, Providence, R. I.
Dr. George O. Clark (*E.S.* 1904), 633 Lilac Drive, Santa Barbara, Calif.
Capt. John P. Connelly, MC, USAF (*C.M.* 1957), 2750th USAF Hospital, Wright-Patterson A.F.B., Ohio
Dr. Daniel Deykin (*M.* 1958), Beth Israel Hospital, Boston, Mass.
Dr. Sylvia Davies Diehle (a.r.p. *C.M.* 1958), 580 W. 215th St., New York 34, N. Y.
Dr. Pierre M. Dreyfus (r.p. *N.* 1955), McLean Hospital, Waverley, Mass.
Dr. Edward Dunn (a.r.s 1956), 1200 E. Genesee St., Syracuse, N. Y.
Dr. John Q. Durfey (a.r.p. *An.* 1958), St. Vincent's Hospital, New York, N. Y.
Dr. Henry C. Everett, III (a.r.p. *Psychiat.* 1958), Student Health Service, University of Illinois, Champaign, Ill.
Dr. Robert P. Fornshell (sr. r.s. *Or.* 1958), 21 Sunrise Rd., Danbury, Conn.

No. 76 in a series of Staff photographs
Dr. George L. Nardi, Assistant Surgeon

Dr. Frank W. Garran, Jr. (*S.* 1951), 40 Lewis Bay Rd., Hyannis, Mass.
Dr. Leon I. Goldberg (*M.* 1957), National Heart Institute, Bethesda, Md.
Dr. Jack J. Greenberg (*S.* 1957), 215 Gerry Rd., Chestnut Hill, Mass.
Dr. Edgar Haber (*M.* 1957), National Institutes of Health, Bethesda, Md.
Dr. Arthur Haut (*M.* 1950), Dept. of Medicine, University of Utah, Salt Lake City, Utah
Dr. Jeannette A. Hovsepian (a.r.p. *R.* 1958), 599 W. 190th St., New York 40, N. Y.
Dr. Mary Ellen Jones (assoc. biochem. *Res. Chem.* 1957), Brandeis University, Waltham, Mass.
Dr. John W. Josse (*M.* 1957), Washington University School of Medicine, St. Louis, Mo.
Dr. Herbert J. Levine (a.r.p. 1958), Peter Bent Brigham Hospital, Boston, Mass.
Dr. John A. Malcolm (*S.* 1953), Bellevue Hospital, New York, N. Y.
Dr. John A. Mannick (*S.* 1954), Mary Imogene Bassett Hospital, Cooperstown, N. Y.
Dr. William M. O'Brien (*M.* 1957), National Institutes of Health, Bethesda. Md.
Dr. John H. Peters (*W.M.* 1943), 44 E. 23d St., New York, N. Y.
Dr. John F. Radbaugh, Jr. (*C.M.* 1954), 26 S. Goodman St., Rochester, N. Y.
Dr. James A. Rose (*M.* 1957), National Institutes of Health, Bethesda, Md.
Dr. Carter R. Rowe (*Or.* 1939), 705 Warren Bldg., 275 Charles St., Boston, Mass.
Capt. Allan I. Sandler, MC, USAF (*M.* 1956), 4231 USAF Hospital, Hunter A.F.B., Ga.
Dr. Charles L. Schepens (a.s. *Oph.*), 99 W. Cedar St., Boston, Mass.
Dr. R. Neal Schneiderman (r.p. *D.* 1958), Apt. 5 K, 577 Ave. Z, Brooklyn 23, N. Y.
Dr. Tetsuo Sugiyama (j. r. s. 1944; r.s. *U.* 1946), 604 Metz Bldg., Grand Rapids, Mich.
Dr. John F. Tannheimer (r.p. *Path.* 1945; a.r.p. 1948), 525 Lafayette St., Ionia, Mich.
Dr. Douglas G. Tompkins (sr. r.s. *Or.* 1958), Gundersen Clinic, La Crosse, Wis.
Dr. Arnold N. Weinberg (*M.* 1957), National Institutes of Health, Bethesda, Md.
Dr. Louis Weinstein (assoc. p. *C.M.*), N. E. Medical Center, Harrison Ave. and Bennet St., Boston, Mass.
Dr. Carl T. Wolff (*M.* 1958), Massachusetts Mental Health Center, 74 Fenwood Rd., Boston, Mass.
Dr. Kazuo Yanagisawa (*Or.* 1944), 216 E. 50th St., New York, N. Y.

Brief bits:—

Dr. Henry K. Beecher was the Peter T. Bohan Lecturer at the University of Kansas Medical Center, Kansas City, Kansas, last June. His subject was "Pain".

Dr. Edward B. Benedict attended a joint luncheon meeting of the Editorial Board of Gastroenterology and the Governing Board of the American Gastroenterological Association in Washington, D.C., on May 23. He also took part in the meeting of the American Gastroscopic Society and presented a paper on "Gastroscopic biopsy". He went to the meetings of the World Congress of Gastroenterology held in Washington, May 25-31, and took part in the discussion of a series of papers on carcinoma of the stomach presented by physicians from Denmark, Japan, Argentina, Spain, Poland, Switzerland, Italy, France, Great Britain, and the United States. The World Congress of Gastroenterology was initiated by the International Society of Gastroenterology, founded in Brussels in 1935 by Dr. Georges Broheë. The recent meeting in Washington was quite an affair and included an Inaugural Ceremony at Sheraton Hall, a Grand Reception at the Pan American Union Building, a National Symphony Orchestra Concert in Constitution Hall, an American Gastroscopic Society Banquet at the Shoreham Hotel, a World Congress Banquet, an American Gastroenterological Association Banquet, and a Dinner Dance—all at Sheraton Hall, besides official tours to the Capitol, White House, Mount Vernon, Bethesda, etc.

Among the grants announced by the Rockefeller Foundation for the first quarter of 1958 was one to Dr. Mary A. B. Brazier.

Dr. Bradford Cannon presided at the annual meeting of the American Association of Plastic Surgeons, held in Dallas, Texas, and delivered the presidential address on May 23.

Dr. James A. Halsted (*W.M.* 1932), Director of Professional Services, Syracuse V.A. Hospital, and Associate Professor of Medicine, State University of New York Medical Center at Syracuse, N. Y., has received a Fulbright Award to be Visiting Professor of Medical Science at the University of Shiraz, Iran. for the academic year 1958-59. Dr. and Mrs. Halsted left for Iran in September, and will return next June.

Dr. Oscar Hirsch has been appointed Consultant in Experimental Pathology to the Children's Cancer Research Foundation, and Consultant in Pathology in the Department of Pathology of the Children's Medical Center for one year, beginning last July 1.

Dr. Varaztad H. Kazanjian attended the annual meeting of the American Association of Plastic Surgeons, held in Dallas, Texas. On May 22 he presented a paper on "The repair of eyelid defects" before the Society.

Dr. Rita M. Kelley, who is in charge of the Breast Clinic at the Pondville Hospital, is Senior Investigator at Pondville, under a grant from the Cancer Chemo-Therapy National Service Center, and is Tumor Consultant at Newton-Wellesley Hospital, has delivered several lectures to various hospital and medical society groups and to lay groups, under the auspices of the American Cancer Society.

Dr. George L. Nardi was the guest of Dr. Roger E. Wilcox (*S.* 1949) at the Miner's Memorial Hospital in Beckley, West Virginia, last June. Dr. Nardi spoke on "Esophageal reconstruction" and "Diagnosis and treatment of chronic pancreatitis" while he was there. At the Northeast Regional Meeting of the College of American Pathologists. held in Swampscott, Massachusetts, on June 14, Dr. Nardi delivered a talk on "Measurement of serum trypsin in pancreatic disease".

Dr. Arthur S. Spangler gave a paper on "Fibrin foam treatment of depressed scars—three and one-half years' experience". Dr. Spangler prepared a scientific exhibit for the same meeting, with the same title as the paper. His exhibit won honorable mention, out of more than 400 exhibits.

Miss Mary Ruth Wolf, Director of Volunteers at M.G.H., served as Chairman of the Instructional Conference at the American Hospital Association Convention, held in Chicago last August. The topic under discussion was "Pilot studies for new volunteer services". Miss Dorris Hamm, Senior Evening Nursing Supervisor, and Mrs. Stephen J. Lent, Jr., a volunteer, were also speakers at this session. Miss Dorothy Bartol represented the Ladies' Visiting Committee, and Mrs. Francis G. Barnum, Jr. the Staff Wives Association.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 180 Boston, Mass. November 1958

SURGICAL RESEARCH

THE TRANSPLANTATION OF LIVING TISSUE

Except for the transplantation of living cornea and the transfusion of properly typed blood, the transplantation of living tissue in ordinary medical practice is only a hope for the future. The tempting array of possibilities which might be opened to medicine if tissue transplantation could be made workable would become of greatest interest to the surgeon, whose tools could be given new scope. These possibilities have prompted a great deal of work on a clinical level for many years and there remain many ardent claims for clinical successes of various kinds—particularly in the field of endocrine transplants—successes which have never been adequately refuted. Nevertheless, as work progresses under controlled laboratory circumstances, it seems quite clear that any graft of living, nucleated cells (i.e., not erythrocytes) which is vascularized by the tissues of a host other than the identical twin of the donor will be doomed to a sure death in less than two weeks' time from transplantation. There may be special exceptions to this rule in that some tissues may be peculiarly resistant to the response of the host. Cartilage is probably one example.

On the other hand, some sites within the recipient may be unusually hospitable to foreign tissue, as for example the anterior chamber of the eye and the region within the blood-brain barrier. The developing embryo is also a special case of great theoretical importance. In fact, the science of experimental embryology would be far poorer if embryos had not been found to support the growth of tissue grafts from other embryos, and from adults, for relatively long periods. Such transplants have taught us much of what is known about embryonic organizer substances.

The recent history of the now fast-moving transplantation field goes back to only about 1944. At that time the air was still filled with exorbitant claims of men like the notorious Voronoff, who recommended transplants of monkey testes for the waning vigor of old age. The most authoritative treatise on the general subject was less hopeful, however. In it, Leo Loeb concluded, after long and careful study, that homografts (a graft from one individual to another) would not in fact survive. This was attributed to certain tissue "incompatibility factors" which could be found throughout all higher organisms and which were closely regulated by the animal's genetic constitution.

Here the matter rested until new impetus was indirectly generated by the pressing medical needs of the second World War. During the London blitz the incendiary bombs resulted in a large number of casualties which involved extensive burns. At this time, the Medical Research Council recognized once again the desirability of covering burned areas in such patients with permanent homografts. A brilliant young zoologist, Peter Medawar, was commissioned to look into the problem, and here it is that the modern history of the subject begins.

I shall not attempt even to outline the rapid development of theoretical knowledge in the field of transplantation since then. It would involve forays into genetics, embryology, immunology, and radiology, at least, as well as surgery. Suffice it to say that the last fifteen years of activity both in Medawar's laboratory and in an increasing number of other places have seen an immense amount of progress in the understanding of the complex mechanisms involved in what appears to be a grossly simple event—the rejection of a graft of living tissue by a homologous host.

The reaction is now believed to be an example of a special class of sensitivity or immunologic response. It is a highly specific affair in that the rejection of a bit of tissue from a given donor by a host imparts a state of heightened sensitivity to subsequent grafts from the same source only. The reaction appears to require the participation of host leukocytes which must come in very close contact with the graft for a proper reaction to occur. Circulating antibodies of the conventional type may well be involved but do not appear to be able to bring about graft rejection on their own. So far as is known, all nucleated cells are antigenic in the transplantation system, and they appear to be active even during embryonic life in this respect. On the other hand, an animal's ability to respond to foreign tissue develops only at about the time of birth, as suggested above. Tissue presented to developing animals up until this time often settles down to become permanently incorporated in the maturing recipient, imparting to it a specific, permanent state of "actively acquired tolerance" to later grafts from the same donor.

The antigens which are released by cells to provoke the transplantation reaction have not been characterized. There is reason to believe, however, that they are under close control of the genes and that the actual genetic material, the DNA proteins, or closely related complex molecules may be involved.

It is into this general field that our surgical laboratory has stepped.

After returning to the M.G.H. in 1955 from a year of apprenticeship under Professor Medawar in London, I again took up full-time clinical work as Resident on the East Surgical Service. Thereafter the work of assembling the new laboratory was begun. Valuable stockroom space was generously relinquished by the Huntington Laboratory on the third floor of the Research Building. Following a fine job of remodelling, largely according to a scheme drawn up by Dr. Hermes Grillo, whom the laboratory also houses, it has been designated the Ira T. Nathanson Memorial Laboratory.

The personnel, in addition to the writer, have so far been two in number—Elizabeth M. Sparrow, Ph.D., and R. F. Gittes, a third year Harvard Medical student. Dr. Sparrow and I worked together in Professor Madawar's laboratory in London, where she was a full-time research worker after finishing her doctorate with him at Birmingham University. We have been most fortunate to have her, a circumstance which we partly owe to the excellence of Harvard's School of Architecture, to which her husband came for postgraduate work.

Dr. Sparrow and I have been pursuing a variety of lines of investigation, all related to the general field of tissue specificity. With the idea of learning a little more of the behavior of the nuclear substances in grafts, one series of experiments has involved transferring grafts of skin previously labeled radioactively in the DNA fraction. These are grafted to other animals both of the same and of different inbred strains from the donor. We have followed the changes in radioactivity in such grafts and the appearance of activity in various locations within the recipient animal. There are some significant differences between autografts and homografts measureable by this technique which we are endeavoring to learn more about.

Another project revolves about the fascinating experimental tool introduced by the late Glenn Algire of the National Institutes of Health. He found that small bits of tissue from one animal could be made to live in an unrelated recipient if shielded by a thin, porous, plastic envelope. The critical feature of this arrangement appeared to be that the size of the pores had to be sufficiently small to prevent completely the influx of any host leukocytes which will attack a graft if allowed to come in close contact with it. Careful experiments by Algire and subsequently by others have failed to uncover any evidence that such protected tissues release detectable amounts of transplantation antigens. This question has important bearing on the problem of how the homograft response is brought about, and Algire's results in this regard seemed to require confirmation or denial. We are accordingly performing a careful series of experiments with rabbits in which suspensions of enzymatically dissociated epidermal cells are tested for their antigenicity when implanted in Algire chambers.

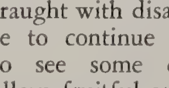
Another line of work in the laboratory has been the particular project of Ben Gittes. He has reopened the question of the difference in antigenicity of various tissues. This has been done using parathyroid grafts as compared with skin. The status of the grafted parathyroid can be very nicely followed by means of its influence on the serum calcium of the recipient, which is kept on a standard low calcium diet, so that the tempo of response to the two tissues can be closely compared. He has so far found some striking differences which may lead us to reconsider the presently held concept that virtually all nucleated cells in the same animal have roughly equivalent antigenic properties in the transplantation system.

Running parallel to this have been some pilot experiments on a clinical level. With Byron Waksman and W. H. Baker a series of experimental skin homografts have been done on patients with Hodgkins disease. The prolonged survival time of such grafts suggested a variable degree of anergy in this condition, a phenomenon probably related to the impairment of lymphoid tissue activity coincident with the disease. This finding has recently been reported in the literature (by Good and Varco), who have apparently had some interests similar to ours, so we cannot claim to have come across it first. At present we hope to go on with similar studies in other conditions.

Another project is being done with Dr. Joseph J. M. McGovern, who has plans for treating leukemia in children with autologous and homologous bone marrow infusions.

Altogether the work has proved a source of endless stimulation. Progress is slow and fraught with disappointments, but we hope to continue and perhaps eventually to see some developments which will allow fruitful applications in the clinical surgery of the future.

Paul S. Russell, M.D.,
Assistant in Surgery



The Board of Trustees, at their meetings on August 15, and September 12 and 26, voted:

To accept with regret the resignation of Dr. Robert L. Berg from the position of Associate Physician, effective September 30;

To accept with regret the resignation of Dr. Gaston E. Blom from the position of Associate Psychiatrist, effective as of July 15;

To accept with regret the resignation of Dr. Philip H. Henneman from the position of Assistant in Medicine, effective August 31;

To accept the resignation of Dr. Elizabeth B. Keller from the position of Assistant Biochemist (Medicine), effective September 30;

To accept with regret the resignation of Dr. John D. Reeves from the position of Associate Radiologist, effective September 30.

To appoint:

Dr. Luis L. de Mola as Second Assistant Resident in Pathology, for the period September 1, 1958 through June 30, 1959;

Dr. Robert E. Dinsmore as Second Assistant Resident in Radiology, beginning October 1, 1959;

Dr. Murray L. Janower as Second Assistant Resident in Radiology, beginning July 1, 1959;

Dr. Leo T. Kelly as Assistant Resident in Anesthesia, beginning July 1, 1959;

Dr. Sidney W. Klein as Exchange Resident on the Children's Medical Service, for a period of six weeks, beginning October 20;

Dr. Francis C. Lowell to the position of Physician, effective November 1;

Dr. Yosh Maruyama as Acting Resident in Radiology, for the period August 1, 1958 through March 31, 1959, and as Second Assistant Resident in Radiology, beginning April 1, 1959;

Dr. Jan Mellgren as Visiting Pathologist pro tempore for one week, beginning October 10;

Dr. Clarence L. Morgan as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959;

Dr. Edward C. Parkhurst as Assistant in Urology, effective August 1;

Dr. Robert H. Richie, Jr. as Assistant to the Children's Medical Service, effective as of July 1;

Dr. John T. Sharp as Assistant in Medicine, effective October 1;

Dr. Frederick S. Tomchik as Assistant Radiologist, beginning December 1;

Dr. Michael P. Tristan as Assistant to the Children's Medical Service, effective September 1;

Dr. Mark McN. Walter, Jr. as Assistant Psychiatrist at McLean Hospital, effective September 15;

Dr. Sarita G. Walzer as Assistant in Anesthesia, beginning September 15;

Dr. Edwin T. Wyman, Jr. as Assistant Resident in Orthopedic Surgery for one year, beginning September 11;

Dr. Nicholas T. Zervas as Junior Resident in Neurosurgery, beginning September 1.

The Trustees also voted:

That Dr. Winfield S. Morgan, Assistant Pathologist, be granted a leave of absence beginning September 1;

To invite Dr. John Edwards, Lecturer in Social Medicine at the University of Birmingham, England, to give a Richardson Lecture at the Hospital on September 18;

To establish a Treadwell Award, to be given from time to time by the Hospital to an outstanding graduate of the Hospital's internship-residency program, the winner to be selected by the Trustees on the recommendation of the House Pupils Association and the General Executive Committee; that Dr. Robert F. Loeb, Professor of Medicine at Columbia University, College of Physicians and Surgeons, and a graduate of the West Medical Service 1920, be chosen as first recipient of this award; that the award this year be made on the occasion of the House Pupils Association meeting, held on October 16; that a design of a suitable scroll for the award be referred, with power, to the Treadwell Library Committee.

At their meetings on September 10, 17, and 24, the General Executive Committee voted:

To accept the resignation of Gillray L. Kandel, Ph.D. from the position of Research Fellow in Psychology in the Department of Anesthesia, effective September 1;

To accept the resignation of Dr. Hermann K. Schueler from the position of Clinical Fellow in Urology, effective August 31.

To promote:

Dr. Clinton B. Seeley to the position of First Assistant Resident in Radiology for one year, beginning October 1;

Dr. D. Albert Young to the position of Clinical Assistant in Surgery, assigned to the Tumor Clinic;

Dr. George D. Zuidema from the position of Second Assistant to First Assistant Resident in Surgery, beginning November 1, for a period of two months; it was further voted to promote him to the position of Resident in Surgery, beginning January 1, 1959.

To reappoint:

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. C. Bremner Cameron as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Anthony M. Dawson as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Edwin H. Eylar, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Richard F. Jackanich as Assistant Resident in Anesthesia for one year, beginning October 16;

Dr. Susanne J. Lamdin as Assistant Resident in Anesthesia for one year, beginning September 20;

Dr. Charles I. Levene as Research Fellow in Medicine for one year, beginning September 1;

Dr. Marie-Louise Levy as Clinical and Research Fellow in Anesthesia for one year, beginning October 29;

Dr. LeRoy H. Maffly as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Antal M. Martonosi as Research Fellow in Medicine for one year, beginning October 1;

Dr. Pierre A. Maurice as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Thomas Nussbaumer, Ph.D. as Research Fellow in Medicine for one year, beginning September 15;

Dr. Edwin W. Salzman as Second Assistant Resident in Surgery, effective October 1;

Dr. Adalbert F. Schubart as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Elizabeth M. Sparrow, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Pierre J. J. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. A. Dennis Surtees as Clinical Fellow in Anesthesia for one year, beginning July 25;

Zofia Tarasiejska, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Alejandro H. Villegas as Clinical and Research Fellow in Surgery for one year, beginning September 1.

To appoint:

Dr. Scott Adler as Clinical Fellow in Orthopedic Surgery, for the period September 11 through December 31, with the privilege of assisting Dr. Otto E. Aufranc in the care of his private patients;

Dr. Juan M. Arizaga as Clinical Fellow in Pathology for one year, beginning October 1;

Dr. Ann B. Barnet as Clinical Fellow on the Children's Medical Service for one year, beginning September 26;

Dr. Frederick A. Horner as Clinical and Research Fellow in Neurology, assigned to Electroencephalography, for the period September 1 through December 31;

Dr. George F. Kwass as Clinical Fellow in Pathology, for the period September 1, 1958 through June 30, 1959;

Dr. Ezra Lamdin as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. John K. Leach as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning October 1;

Dr. Federico G. Lopez as Research Fellow in Neuropathology for one year, beginning September 1;

Dr. Sanford I. Roth as Clinical Fellow in Pathology, for the period September 1, 1958 through June 30, 1959;

Richard W. Sagebiel, A.B., as Research Fellow in Pathology for one year, beginning September 1;

Dr. Rudolf E. Siebenmann as Research Fellow in Pathology for one year, beginning December 1;

Dr. Peter Waisberg as Graduate Student Assistant in Orthopedic Surgery for one year, beginning September 2.

The General Executive Committee also voted that Dr. Károly (Charles) Balogh's title be changed from Research Fellow to that of Clinical and Research Fellow in Pathology, beginning September 1.

The McLean Hospital announces the following part-time appointments to its medical and psychiatry staff:

Dr. Ruth B. Buescher, Clinical Assistant in Psychiatry;
Dr. John G. Clark, Clinical Assistant in Psychiatry;
Dr. John H. Dwyer, Clinical Fellow in Psychiatry;
Dr. William A. Hall, Clinical Assistant in Medicine;
Dr. P. Stefan Kraus, Associate Attending Psychiatrist;
Dr. Theodore Sack, Clinical Fellow in Psychiatry;
Dr. Alan A. Stone, Clinical Fellow in Psychiatry.

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THE MIXTER BRAIN STEREOTACTIC LABORATORY

Man has always been interested in his physical measurement. He has compiled the dimensions of his bones and other parts of his body in relation to every imaginable category, and is ever seeking new ways of comparing himself with himself. The mirror image he examines, however, scarcely reflects his internal anatomy. The external landmarks which have been used to compute his skeletal and bodily growth and proportion usually serve only as reference points to deeper structures.

The phrenologist used to propound your I.Q. and personal aptitude by qualifying the bumps on your head. The fissures of the cortex were once considered to be a likely index of cerebral development. But the porpoise was found to clearly outfissure man. So what made the human brain so remarkable?

The skull, especially, was considered by early anthropologists to correlate closely with the form and function of the organ it held. One could derive brain size from the weight of lead pellets that would fill the cranial cavity. Cerebral shape and configuration could be guessed from the topography of the inner calvaria. Actually, the size and shape of the skull is determined more by the growth pattern of the brain itself.

As the actual recording device of the physical indices it has invented, the human brain knows surprisingly little about its own living dimensions. One can weigh the brain and describe its gross appearance at necropsy; and after hardening in fixating solutions, cutting, and allowing 10% for shrinkage, anatomists like Dr. Paul Yakovlev have been able to estimate accurate reconstructions of internal relationships by studying whole brain sections of post-mortem specimens. Such data gradually developed the basic knowledge needed for human stereotactic brain surgery. Compilation of measurements on fresh frozen whole brain slices by Drs. Bailey, Amador, and Blundell proved beyond doubt the remarkable range of internal variation and indicated that every living brain must be regarded as a unique problem with respect to the geometry of its nuclear structures and connecting systems. Central reference points have to be identified in each patient at the start.

One laboratory on the Mixter Floor of the Warren Building, having the formidable title "Anthropometric Radiophotography and Stereotaxy", is assigned as the present headquarters of the Central Nervous System Stereotactic Department. The application of its equipment and information to the patient, however, may be performed in several parts of the M.G.H., notably on the O.R. and x-ray floors. This involves the invaluable help and patience of personnel in these departments as well as of the principal operators (Drs. W. H. Sweet, V. H. Mark, and R. N. Kjellberg). An instrument to locate and reach a foreordained area within the human brain has been designed and built by Paul A. MacPherson (over a six-year period and still undergoing modification). The device has been applied to patients for the purpose of interrupting pain pathways, to ameliorate tremor and rigidity in dyskinesias and Parkinsonian states, and to implant electrodes to study the electrophysiology of special types of epilepsy with a view toward surgical treatment. The laboratory houses electronic recording and stimulating equipment, and contains a shielded roomette that electrically isolates the patient under observation.

In order to plot a projected point in the living brain, laborious preliminary x-ray study is conducted with the stereotactic instrument attached to the head of the patient, who is usually under anesthesia. The scalp is then marked, incised, and the skull trephined to permit placement of electrode or cannula, which is rechecked before a test lesion and a subsequent therapeutic lesion is attempted. A number of such efforts may be required to obtain the maximum beneficial effect.

Work is in progress to try to devise a radiological method that can be performed as a separate maneuver, individually derived from basic craniocerebral x-rays taken with the head of the subject fixed constant with respect to position and distance. The designated area is thereby determined at the intersection of three planes within the brain of the patient. These data are then transposed at another session to the stereotactic instrument. Success in this direction will reduce the time and stress for everyone involved with the procedure. It is also likely that radiologic data obtained from x-rays of an increasing series of heads exposed under standard conditions may provide additional anthropometric information on the living brain.

Thus man continues his quest for self-measurement.

Hannibal Hamlin, M.D.,
Assistant in Neurosurgery

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Bunker, J. P., Bendixen, H. H., Murphy A., and Rand, W. M.
The evaluation of a new and inexpensive carbon dioxide analyzer.
Anesthesiology 19:97.

Bunker, J. P., and Goldstein, R.
Coagulation during hypothermia in man.
Proc. Soc. Exper. Biol. & Med. 97:199.

Malt, R. A.
Effect of preanesthetic medication on cardiovascular force.
Anesthesiology 19:353.

Bacteriology

Blank, I. H., and Dawes, R. K.
The water content of the stratum corneum. IV. The importance of water in promoting bacterial multiplication on cornified epithelium.
J. Invest. Dermat. 31:141.

Cardiology

Malt, R. A.
Ballistocardiogram during paralysis with succinylcholine.
Am. Heart J. 56:245.

General Medicine

Benedict, E. B.
Bronchial adenoma in a ninety-two-year-old man.
New England J. Med. 258:1157.

Shamma'a, M. H., and Benedict, E. B.
Medical progress: Esophageal webs.
New England J. Med. 259:378.

General Surgery

Churchill, E. D., Sweet, R. H., Scannell, J. G., and Wilkins, E. W., Jr.
Further studies in the surgical management of carcinoma of the lung.
J. Thoracic Surg. 36:301.

McDermott, W. V., Jr.
Management of hepatic coma.
Am. J. Gastroenterol. 30:51.

McDermott, W. V., Jr.
The role of ammonia intoxication in hepatic coma.
Bull. New York Acad. Med. 34:357.

Laboratory Science

Isselbacher, K. J., and McCarthy, E. A.
Identification of a sulfate conjugate of bili-

rubin in bile.
Biochim. et Biophys. Acta 29:658.

Waddell, W. R.
Effect of tolbutamide on serum cholesterol levels in hypercholesterolemic patients.
Proc. Soc. Exper. Biol. & Med. 98:280.

Medical Education

Churchill, E. D.
Annual Discourse: Reflections on the challenge to the medical profession in India. (Presented at the annual meeting of the Massachusetts Medical Society, Boston, May 20, 1958.)
New England J. Med. 259:551.

Pathology

Aström, K.-E., Mancall, E. L., and Richardson, E. P., Jr.
Progressive multifocal leuko-encephalopathy: A hitherto unrecognized complication of chronic lymphatic leukaemia and Hodgkin's disease.
Brain 81:93.

Cope, O., Keynes, W. M., Roth, S. I., and Castleman, B.
Primary chief-cell hyperplasia of the parathyroid glands.
Ann. Surg. 148:375.

Josse, J. W., and Zacks, S. I.
Thymoma and pancytopenia.
New England J. Med. 259:113.

Richardson, E. P., Jr.
Degenerative diseases of the nervous system.
In Principles of Internal Medicine, New York, McGraw-Hill Book Company, Inc., chapter 259.

Rosen, S. H., Castleman, B., and Liebow, A. A.
Pulmonary alveolar proteinosis.
New England J. Med. 258:1123.

Russfield, A. B.
Hypophyseal changes in hypothyroidism induced by radioactive iodine in man.
A. M. A. Arch. Path. 66:79.

Russfield, A. B., and Byrnes, R. L.
Some effects of hormone therapy and castration on the hypophysis in men with carcinoma of the prostate.
Cancer 2:817.

Zacks, S. I.
Chemodectomas occurring concurrently in the neck (carotid body), temporal bone (glomus jugulare) and retroperitoneum.
Am. J. Path. 34:293.

Psychology and Psychiatry

Benda, C. E.
Divorce from a psychiatrist's point of view.
Pastoral Psychol. 9:86.

Chafetz, M. E.
The role of psychiatry in the treatment of Parkinson's disease.
Geriatrics 13:435.

Mendelson, J., Solomon, P., and Lindemann, E.
Hallucinations of poliomyelitis patients during treatment in a respirator.
J. Nerv. & Ment. Dis. 126:421.

Talland, G. A.
Sex differences in self assessment.
J. Social Psychol. 48:25.

Books

Benedict, E. B., and Nardi, G. L.
The esophagus: Medical and surgical management.
Boston, Little, Brown and Company.

Churchill, E. D. (Editor)
To work in the vineyard of surgery — The reminiscences of J. Collins Warren (1842 - 1927), with Appendices, Notes, and Comments.
Cambridge, Mass., Harvard University Press.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Alvarez, W. D.
Live at peace with your nerves.
Englewood Cliffs, N. J., Prentice-Hall, Inc., 1958.
(19F)

Biochemical Society Symposia, No. 15
Metals and enzyme activity, edited by E. M. Crook.
New York, The Cambridge University Press, 1958.
(5A)

Breed, R. S., Murray, E. G. D., and Smith, N. R.
Bergey's manual of determinative bacteriology, ed. 7.
Baltimore, The Williams & Wilkins Company, 1957.
(9A)

Harrison, R. T., Adams, R. D., and others (Editors)
Principles of internal medicine, ed. 3.
New York, McGraw-Hill Book Company, Inc., 1958.
(6G)

Katz, L. N., and Cain, A. S., Jr.
World trends in cardiology, V: Instrumental methods in cardiac diagnosis.
New York, Paul B. Hoeber, Inc., 1956.
(15E)

Langston, H. T., Pantone, A. M., and Melamed, M.
The postoperative chest: Radiographic considerations after thoracic surgery.
Springfield, Ill., Charles C. Thomas, 1958.
(20K)

Levine, S. Z. (Editor)
Advances in pediatrics, vol. 10.
Chicago, The Year Book Publishers, Inc., 1958.
(26A)

Myers, G. B.
The interpretation of the unipolar electrocardiogram.
St. Louis, The C. V. Mosby Company, 1956.
(15E)

Nelson, T. G.
Tracheotomy: A clinical and experimental study.
Baltimore, The Williams & Wilkins Company, 1958.
(20J)

Rosenbaum, F. F.
Clinical electrocardiography.
New York, Oxford University Press, 1951.
(15E)

Sodi-Pallares, D., and Calder, R. M.
New bases of electrocardiography.
St. Louis, The C. V. Mosby Company, 1956.
(15E)

* * *

Under the aegis of the National Institutes of Health, I journeyed through many countries of other lands during the latter part of 1956 and the spring of 1957. The purpose of my trip was to visit centers where respiratory diseases of environmental origin were being studied. This took me for brief visits to the United Kingdom, Germany, Belgium, Switzerland, Luxembourg, and France, and for longer stays in certain parts of Africa, including the Union of South Africa, the Belgian Congo, Northern Rhodesia, French Equatorial Africa, and, in transit, through French West Africa. Finally, I experienced a breath-taking trip over the Andes, from Rio de Janeiro, Brazil, to Lima, Peru, where I had the opportunity of studying dust disease in men working at high altitudes.

While I learned much about the chemical pneumonias, sudden deaths from smog in London, and pneumoconiosis, you will see from what follows that I also learned a great deal about the political, economic, and social affairs of the countries I visited. Here, in retrospect, is a brief account of conditions as I saw them and as they impressed me.

Cape Town is a beautiful city. It seemed to be a reasonably settled community, whose color problems should be slowly solved by the Europeans there of mixed national backgrounds. However, it was quite a shock to learn that the *apartheid* approach is used by the pure Afrikaners (who are of Dutch origin) in the Transvaal in their dealings with Europeans of British origin. Several spoke with horror of eventual intermarriage (of white and black), but of its being likely in the future. One physician said that by schooling and the building of houses for the natives the Government was working toward its own destruction. He said that the example of the Dutch being thrown out of Indonesia by the natives and the fact that South Africa is the last "Western" stronghold in this part of the world make suppressive measures reasonable, because of the few whites and many blacks. Squalor, overcrowding, tuberculosis, malnutrition, and no sewage disposal were freely admitted. Throughout, I was lectured on the U.S. responsibility for anti-colonialism—with some justice, if we think of the slave trade during our early history, and the alcohol, disease, and destruction brought by us to the native American Indian. True, there has been a change in our behavior, marked by our trying to make amends, 300 years later, by giving civil liberty to the Indian and the Negro.

But—back to Cape Town. The people there live pleasantly—some in what I (perhaps mistakenly) considered a colonial manner. The women never work. (Several confessed they were bored, and they asked with interest about women in the United States.) I saw wonderful gardens, much outdoor life, swimming, etc. —all very enjoyable. The medical people seemed to me to be efficient (those I saw)—but too modest, in a way, and too deferential to overseas medicine, especially that of the United States. Perhaps I was just getting the V.I.P. treatment!

In Johannesburg hostility was evident everywhere, on people's faces and in incidents I read of in the local papers—not only white against black and vice versa, but white (Afrikaners) against white (English). While I was there, a boycott of native buses reached its crisis, and the buses were removed (March 1957). Some said they thought the natives would in time start a general strike. This would seriously cripple Johannesburg, which is completely dependent on black labor. There were riots and murders, and black people were arrested for almost any excuse—e.g., "interfering" with the police. The English-language newspapers were *very* critical of the Nationalist Party in power. Also, while I was there, a law was about to be passed forbidding any meetings of black and white people without permission of the Minister of Native Affairs—this to include the churches and the well-established Institute for Race Relations. A much-beloved Protestant Bishop died during my stay, having just finished a letter to the Prime Minister begging him not to push this law, saying that the Church could not obey. In his will he had written, "Bury me where there is no color bar." The day before I left, apropos of such laws, I saw an organization of women, called the "Black Sash", lined up outside the Johannesburg City Hall. They wore white dresses, with black sashes over their shoulders and tied at the waist. They stood silently in a straight line for some distance on either side of the main entrance, where there were huge banners, in both Afrikaans and English, reading "We oppose tyranny. Every new law is a link in the chain of slavery." The great silence was an effective instrument of real embarrassment to the officials.

Very dramatic to me, personally, were the physicians I met who were planning to migrate with their families because of fear of certain bloodshed. Children begged their parents not to go out at night. There were accounts of shots in the dark, by frightened constables, at lovers in parked cars, etc., etc. It was generally considered that the Government was moving toward a showdown, which would mean slaughter on both sides. I hope this will not occur!

I saw compounds of men brought from their farms (kraals) miles away, to be fed, exercised, housed, and trained for underground mining. I was told they are well treated, "like good pieces of machinery"! They are not allowed to bring their wives and families with them. (The Belgians bring their families into townships which they, the Belgians, own; but the natives must build their houses themselves with money they have earned.)

I found Rhodesia much more relaxed, although there was labor union trouble and the fear that the natives were being corrupted by urban ideas and foreign influences, including U.S. anti-colonialism and communism. However, new construction and expansion were in progress. I should judge that the natives are well cared for, though my stay was short and I had to spend much time and energy "explaining" what I could about the United States. I discovered that the greatest compliment paid me, as I met various people, was that I am "not a typical American". I think I see what the trouble is. The American is disliked in other countries for several reasons. He is often too smug and too assertive about the present prosperity and vigor of the United States—which prosperity may be only an accident of time in history. Furthermore, some Americans are often most annoying in their demands that everything abroad be as it is at home—ice, service, food, etc. They seem often to be insensitive to trouble round them, or are apparently unable to try to understand it, because things are going so well for them now. In spite of all this, I am glad to say that I met some well-liked fellow countrymen and a number of people from other countries who have visited the United States, all of whom helped me out in my "explaining". So—I have learned a great deal about the United States, as well as about Europe and parts of Africa.

During my eight days of observation in the Congo, I was given the V.I.P. treatment by the Union Miniere—the great mining company—and Sabena Airlines. Everything there seemed more peaceful, cleaner, and outwardly serene. The Belgian Government allows no voting and no ownership of land by either the native or the European, in order to avoid problems. In contrast, a Belgian official told me, "We Europeans must be ready to use brutality to keep order." They believe there may be trouble with the urbanized black if wages go down, which problem they plan to handle with force.

My visit to Dr. Schweitzer's hospital at Lamborene in French Equatorial Africa lasted five days. I slept, ate, worked (not as hard as the others) as a member of the regular staff of Europeans—at that time numbering about 25, with 4 doctors and 6 nurses. There were also many dedicated women who carried out household and administrative duties. Dr. Schweitzer ate at the table with us. Mrs. Schweitzer (obviously very fragile—she died two months later) joined us briefly for the noon meal. We each lived in a relatively narrow, screened-in cubicle or small bedroom, about 5 feet by 12. These cubicles were in rows of 8 or 10 for the Europeans. Noticeable protocol and ritual concerning every phase of our lives were closely adhered to, guarded by two older women who had been chief staff members and who had sat on either side of Dr. Schweitzer at the table for years. They looked sad, somehow. Their skin was like yellow parchment, they seemed fragile in appearance, and were always hurried and harrassed by some detail or other. It is not surprising that they do not look well, having worked for years in that tropical climate. I, who boast that I do not mind the summer heat of New England, wondered often during my short visit if I were suffering from heat stroke.

Dr. Schweitzer, as you know, is a tall man who makes an impressive appearance. He looked well, and ate enormously—so it seemed to me. He appeared to be weary, often, but was obviously rested by eating. He always smiled at me as we sat down—a good warm smile. He seldom spoke, but seemed lost in faraway thoughts. Occasionally, he told stories of his travels, of his acquaintance with Einstein or someone else of fame. He spoke in lively German, and seemed to be enjoying these occasions.

Dark comes completely and suddenly in the jungle there at about 6 P.M. By kerosene lamp, after supper, Dr. Schweitzer would announce a hymn in an old German hymnal. He played on a poor tropical-ruined piano as though he were touching the keys of a great cathedral organ. Following this, he would read two short bits from a Bible in a French I gradually grasped. Then, without a word, he would leave, and the rest of us (especially the physicians) would talk together for an hour or two in the hot night.

In the daytime, there was hustle, bustle, and everywhere animals of all kinds. Gorillas, goats, antelopes, cats, dogs, hens created endless trouble and untidiness; but they were all very much a part of the life. One nurse kept three young antelopes in her room at night; another had a four-months-old gorilla *and* an African baby who had been sick. These two were in my row of rooms, and for several nights the noises were wild, indeed!

Now, let me describe something of the work of the place. As is well known, sick people are brought by their families, who care for them. They live in the African village located below the Europeans' living quarters while the patient receives surgery or medicine. Dr. Schweitzer has natives on his "payroll", who clean the Europeans' rooms, do laundry work or carpentry, sew, serve the food, help the nurses, etc., and all are paid by food which Dr. Schweitzer gets for them and the patients (bananas and rice) plus a small amount of money. The food for the Europeans, incidentally, is excellent: native fruits and vegetables carefully tended, imported cheese, butter, some meat—a generous supply of everything.

Dr. Schweitzer has built a new leper village, about a quarter of a mile away, with his Nobel Peace Prize money. This is the most hopeful spot for the visitor to see. There are about 6 native men who help with the medical work, but otherwise Europeans do all except menial work at the hospital. Only outpatients are admitted there, and those operated upon are put directly back into their crowded "casa" (dormitory) beds and cared for by their families.

Except for simple social greetings, I had only one talk with Dr. Schweitzer, and because of my poor French and German, and his unwillingness to use English, our interview was carried on through an interpreter. We talked mostly about atomic energy developments. It was not a very satisfactory talk, really, though I caught a bit of his personal charm which has rightly drawn to him so many people of all types and backgrounds.

A widespread, and perhaps correct, interpretation of medical practice at Lamborene is that Dr. Schweitzer is a 19th century continental who believes in 19th century colonialism and practises 19th century medicine. However, the M.D.'s say, he has sharp clinical acumen, and in general leaves them alone in their work. Gunther seems to have pretty fairly described the present-day Dr. Schweitzer. He is 83 years of age, and 44 years in the tropics should be taken into consideration. Also, Dr. Schweitzer had to work very hard in the past to get buildings built and food procured for everyone at Lamborene, especially during the two wars, and these factors probably have a bearing on his present behavior.

It has occurred to me that the excessive Schweitzer publicity is perhaps a mistake. Instead, let his legend of self-initiated service to native slaves act as a spur to moral conscience wherever there is privilege, ease, domination; and let his great intellectual and musical achievements stand, as they well can, documented in his writings. The parallel between Dr. Schweitzer and Lawrence of Arabia was brought up more than once in talks I had with various people.

Harriet L. Hardy, M.D.,
Associate Physician

No. 77 in a series of Staff photographs
Dr. Hannibal Hamlin, Assistant in Neurosurgery

Brief bits:—

Dr. Henry K. Beecher participated recently, by invitation, in an international symposium on submarine and space medicine, at the United States Submarine Base at New London.

Dr. Robert L. Berg left the M.G.H. on Sept. 30, to be Professor of Preventive Medicine and Community Health at the University of Rochester Medical School.

Dr. Carl A. L. Binger lectured in Buenos Aires, Argentina, on "The relations of medicine, psychiatry and psychoanalysis in the United States — Historical considerations", to the Psychoanalytic Society of Argentina, August 15-21. He also presented a paper on "Concept of cure in psychiatry, or some goals for psychotherapy" to the 3rd Ibero-American Medical — Psychological Congress in Rio de Janeiro on August 22.

Dr. Mary A. B. Brazier is visiting Czechoslovakia, Poland, the U. S. S. R., and Rumania, at the invitation of the Academies of Sciences of these respective countries. In Moscow she will be participating in a colloquium on the electrical activity of the brain.

Dr. Earle M. Chapman addressed the Milwaukee Academy of Medicine, last May 20, on "Radioactive iodine treatment for heart disease". Dr. Chapman has been appointed Chairman of the Isotopes Committee here at the Hospital.

At the Annual Meeting of the Massachusetts Public Health Association held last April, Dr. Dean A. Clark was voted president-elect. He assumes the duties and office of president as he closes the next Annual Meeting, which will be held April 30, 1959.

Dr. Erich Lindemann was the keynote speaker at the National Assembly in Community Mental Health Education held at Cornell University, Ithaca, N. Y., September 10-13.

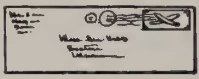
The Medical Art Department has moved into more spacious quarters on the 3rd floor of the old Pathology Building.

Dr. Jan Mellgren, Professor of Pathology at the University of Gothenburg, Sweden, delivered a lecture on Wednesday afternoon, October 15, in the Ether Dome. The subject of the talk was "Lymphoid tissue reactions in the adaptation syndrome". A tea was given for Dr. and Mrs. Mellgren in the Mallory Memorial Library of the Pathology Department preceding the lecture.

Dr. Winfield S. Morgan, Assistant Pathologist, has been granted a leave of absence to study at the Wenner-Grens Institute, Stockholm, Sweden, for two years. He will work with Professor Hultin, a biochemist interested in protein synthesis research. Dr. Morgan's address in Sweden is: Hersbyvägen 22, Lidingö, Sweden.

Dr. Arthur L. Watkins was awarded the Gold Key for meritorious service in rehabilitation at the American Congress of Physical Medicine and Rehabilitation Meeting, held in Philadelphia last August.

Dr. Sumner Zacks, formerly resident in the Department of Pathology, has been assigned Chief of Laboratories at DeWitt Army Hospital, Fort Belvoir, Virginia. Captain Zacks will set up the teaching in clinical pathology, corroborate the laboratory medicine with the staff, and give CPC's at this military hospital.



New addresses:—

Dr. Charles R. Allison (*W.M.* 1938), 15 Prince St., Rochester 7, N. Y.
Dr. Norman W. Andrew (r.p. *An.* 1956), 31 Commonwealth Ave., Boston 16, Mass.
Dr. Fred B. Ballard, Jr. (a.r.p. 1958), 9750 Old Warson Rd., Rock Hill 17, Mo.
Dr. Rafe Banks, Jr. (*E.S.* 1943), 106 S. Enota Drive, Gainesville, Ga.
Dr. Robert L. Berg (*M.* 1944), Dept. of Preventive Medicine and Community Health, University of Rochester Medical School, Rochester, N. Y.
Dr. Stewart H. Clifford (*E.M.* 1927), Boston Lying-in Hospital, Boston 15, Mass.
Dr. Beverly W. Cobbs, Jr. (*M.* 1953), Emory University Clinic, Dept. of Internal Medicine, Box 459, Atlanta, Ga.
Dr. Arthur B. Emmons, II (*W.S.* 1905), Bay View Estates, Brewster Drive, Largo, Fla.
Dr. Lionel O. Garrote (clin. and res. fel. *N.S.* 1958), Hotel Prescott, 10 W. 61st St., New York 16, N. Y.
Dr. Joachim S. Gravenstein (clin. and res. fel. *An.* 1958), J. Hillis Miller Health Center, University of Florida, Gainesville, Fla.
Dr. Robert G. Greene (a.r.p. *Or.* 1953), 63 S. Fullerton Ave., Montclair, N. J.
Dr. Eugene Guralnick (clin. a. *S.*), 5 Bay State Rd., Boston 15, Mass.
Dr. Theodore H. Ingalls (r.p. *C.M.* 1938), Dept. of Public Health and Preventive Medicine, University of Pennsylvania School of Medicine, Philadelphia 4, Pa.
Gillray B. S. Kandel, Ph.D. (res. fel. *Psychol.* 1958), Rensselaer Polytechnical Institute, Troy, N. Y.
Dr. Edward Karian (a.r.p. *D.* 1955), 324 Common St., Watertown, Mass.
Dr. Glenn A. Langer (*M.* 1955), Apt. 4-K, 617 W. 168th St., New York 32, N. Y.
Dr. William E. Lassiter (*M.* 1955), 59 Hamilton Rd., Chapel Hill, N. C.
Dr. Claud E. McGahey (r.s. 1946), 795 Elm St., Manchester, N. H.
Dr. W. Wallace McKay (*C.M.* 1921), R.R. 1, Aylmer, Quebec, Canada
Dr. Bernard I. Maisel (r.p. *Path.* 1943), 1 E. 69th St., New York 21, N. Y.
Dr. Gardner Middlebrook (*M.* 1945), National Jewish Hospital at Denver, Denver 6, Colo.
Dr. Jule P. Miller, Jr. (a.r.p. *Psychiat.* 1955), 222 South St., Pittsfield, Mass.
Dr. Winfield S. Morgan (r.p. *Path.* 1951), Wenner-Grens Institute for Experimental Biology, Stockholm, Sweden
Dr. Eugene R. Nobles, Jr. (*S.* 1955), Rosedale, Miss.
Dr. H. Eugene Patterson (a.r.p. *C.M.* 1952), Suite 40, Yakima Medical Center, 210 S. 11th Ave., Yakima, Wash.
Dr. John D. Reeves (r.p. *R.* 1951), J. Hillis Miller Health Center, University of Florida, Gainesville, Fla.
Dr. John A. Reidy (*Or.* 1939), 3 Seaward Rd., Wellesley Hills, Mass.
Dr. Francoise J. Robert Robillard (a.r.p. *Path.* 1956), 1676 Van Horne Ave., Montreal, Quebec, Canada
Dr. Raymond L. Robillard (a.r.p. *N.* 1957), 1676 Van Horne Ave., Montreal, Quebec, Canada
Dr. Leonard J. Rothfeld (a.r.p. *An.* 1955), 711 Grevillea, Hawthorne, Calif.
Dr. Hermann K. Schueler (r.s. *U.* 1957), Harlan Memorial Hospital, Harlan, Ky.
Dr. John C. Seed (*M.* 1946), Wellcome Research Laboratories, Tuckahoe 7, N. Y.
Dr. William H. Smith (*W.M.* 1897), 262 Commonwealth Ave., Boston, Mass.
Dr. Clarence E. Thornton (a.r.p. *Psychiat.* 1958), 14 Main St., Topsfield, Mass.
Dr. William H. Thurlbeck (a.r.p. *Path.* 1958), 8 Beaufort House, Beaufort St., Chelsea, London S.W. 3, England

THE NEWS

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SURGICAL RESEARCH

"A slow sort of country," said the Queen. "Now, *here*, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

Almost anyone who has been involved in the development of cardiac surgery in the past 10 years can appreciate what the Red Queen had in mind, and also some of Alice's consternation.

Yes, we have a "pump", thanks to the efforts of Dr. Shaw and Dr. William G. Austen, plus Dr. Villegas and many others who have helped get the program off the ground. By "pump", of course, I mean a pump-oxygenator — a device that permits total bypass of the heart by removing the entire venous return, oxygenating it, and returning it to the arterial side of the circulation in amounts approximating the normal cardiac output. We have a disc oxygenator similar to the apparatus produced by Kay and Cross in Cleveland from a machine designed by Björk in Sweden, etc., etc. It is similar in fundamentals to the machine currently in use at the Children's Medical Center.

In early times — 1956 and 1957 — we had a "bubbler", the simplest of all oxygenators, in which oxygen is bubbled up through a column of blood, producing voluminous amounts of red foam, which is then de-foamed and, rich in oxygen and cleared of its carbon dioxide, returned to the patient under pressure. The bubbler is the product of the surgical ingenuity of the University of Minnesota, where it is still used with great effectiveness. Other oxygenators there are, of varying simplicity, effectiveness, and expense, and a great deal of engineering talent is engaged in developing such apparatus and producing standard models.

Though interested in extracorporeal circulation for many years, our interest here was largely spectator until 2 years ago. At that time an active program was begun in the animal laboratory, with the generous cooperation of the Peripheral Vascular Laboratory and the Anesthesia Laboratories of Dr. Brewster. The initial efforts were, of course, in the direction of merely trying to get the machine to work, and to make such modifications of the original DeWall oxygenator (bubbler) as were found to be desirable in our circumstances. Such early experience was invaluable, but also, of course, extremely expensive in time, materials, and animals. This is not the place to describe the many problems which arise when one takes over the cardiopulmonary function for a patient. They range from the relatively simple problem of determining optimum rates of flow to the more complex and still partly-known difficulties that arise in the blood which is subjected to this artificial environment. A great deal of systematic study has been done in this regard, and much remains to be done.

Then, there has been the subject of elective cardiac arrest. Obviously, the significance of the pump-oxygenator has been that it is possible to exclude the heart from the circulation, and, having done so, to carry out appropriate surgical maneuvers within it. To have a quiet, dry field it is necessary to occlude the coronary circulation, and if the heart continues to beat under these circumstances it will itself show the effects of anoxia which may be disastrous. Just what changes may occur are presently the subject of investigation. Elective cardiac arrest can be obtained by perfusion of the heart with dilute solution of potassium citrate. When the latter has been washed out of the coronary circulation by reperfusion with oxygenated blood, the heart will resume its normal beat, or, at least, can usually be made to do so. That such a procedure is clinically important is demonstrated by the fact that in the last two open operations we have done for tetralogy of Fallot — "blue babies" aged 10 and 13, respectively — the heart has been stopped and excluded from the circulation for slightly over an hour in each case, and has rather promptly resumed its intrinsic rhythm in each, though only after electrical defibrillation. Such are the problems of open heart surgery.

Our clinical experience here to date consists of about 25 open heart cases. About half of these have been in patients with congenital heart disease: atrial septal defects, ventricular septal defects, pulmonic stenosis, tetralogy of Fallot. A second group of patients who have come to open operation have been severely incapacitated by acquired valvular disease. Almost all of these (12) have had severe aortic stenosis; 3 have had reoperation on recurrent mitral stenosis. The results have been both encouraging and discouraging. In the congenital group, results have been excellent when the defect could be clearly seen and repaired, and this includes most atrial and ventricular septal defects and our limited experience so far with tetralogy. In the acquired group, calcific aortic stenosis continues to be a stubborn problem. Since it is a notoriously lethal lesion, once symptomatic, heroic efforts are justifiable and may be rewarding, but we cannot be at all complacent about our present attack. Mitral and aortic regurgitation are obvious targets for an open approach, but so far we have only pondered the problem and not attacked it directly. Mitral stenosis continues to be managed satisfactorily in a large proportion of cases (the MGH "series" now numbers about 300) by a closed, or blind, approach, and we have considered open operation only after the conventional operation has failed, or we have strong reason to think that it may.

Actually, our first open heart operation here (in 1955) was on a patient who was thought to have mitral stenosis but who proved to have a tumor within the cavity of the left atrium. He was operated upon under hypothermia — a technique of total body cooling which allows one to stop the circulation for 5 to 10 minutes, during which open heart operations are possible. This is a technique which is useful but unfortunately imposes limitations of time which have led us to concentrate our efforts toward extracorporeal circulation. Incidentally, the patient mentioned at the outset of this paragraph recovered and is now well.

Prior to the present pump program, our cardiac surgical efforts had been chiefly centered about an active clinical program, with mitral stenosis the chief subject of attack, and also in the Cardiac Catheterization Laboratory. The latter goes back as an active, functioning unit to 1948, when it became apparent that such a laboratory was essential to the clinical investigation and evaluation of congenital and acquired heart disease and the proper treatment thereof, be it medical or surgical. The activities of this laboratory might well be the subject of another communication for The News. Suffice it to say, it has been invaluable in preoperative and postoperative evaluation, and has served as the focal point of our clinical investigation.

If called upon to describe the present status of our cardiac surgical program, I should sum it up as follows. We have tried to establish a sound specialized program within the framework of a general surgical service. We have kept it very much a joint effort with the medical service, realizing that it is important to monitor surgical efforts with sound clinical cardiology. We are in a position to move along with the technical development of extracorporeal circulation as well as to explore the possibilities that extracorporeal circulation offers; for example, Dr. Austen is presently working on partial support of the left side of the circulation (left-heart bypass) and also the perfusion of extremities as a possible method of tumor therapy. We have a whole new field of surgical pathology unfolding before us. It is an exciting field and a rewarding one.

J. Gordon Scannell, M.D.,
Associate Visiting Surgeon

The Board of Trustees, at their meeting on October 24, voted to appoint:

Dr. Howard P. Baden as Assistant Resident in Dermatology for one year, beginning July 1, 1959;

Dr. James P. Bell as Assistant Resident in Orthopedic Surgery for one year, beginning November 23;

Dr. Norris B. Finlayson as Second Assistant Resident in Pathology for one year, beginning July 1, 1959;

Dr. David J. Lang as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959.

At their meetings during October and on November 5, the General Executive Committee voted:

To accept the resignation of Dr. George Kaldor from the position of Research Fellow in Medicine, effective as of August 31.

To promote:

Dr. Stanford B. Friedman to the position of Chief Resident on the Children's Medical Service for one year, beginning July 1, 1959;

Dr. Jordan S. Ruboy to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1959.

To reappoint:

Mary D. Albert, Ph.D. as Research Fellow in Medicine for one year, beginning November 1;

Dr. Margit M. Bellman as Clinical Fellow in Psychiatry for one year, beginning September 3;

Dr. Alberto Miyara as Clinical Fellow in Medicine for one year, beginning July 1;

Irving Weliky, Ph.D. as Research Fellow in Medicine for one year, beginning October 1.

To appoint:

Dr. Michael A. Browne as Graduate Student Assistant in Orthopedic Surgery, for the period October 6, 1958 through January 6, 1959;

Dr. Ellen S. Kang as Clinical and Research Fellow on the Children's Medical Service, beginning November 1;

Dr. Geza Ferenc Pal Kaplany de Kaplanyhaza as Clinical Fellow in Anesthesia, beginning October 15, provided he is able to obtain a temporary license to practise in this State;

Dr. Raymond N. Kjellberg as Clinical Assistant in Neurosurgery, with the understanding that this appointment will run concurrently with his appointment as Resident in Neurosurgery;

Dr. Harlin G. Knierim as Graduate Student Assistant and Clinical Fellow in Dermatology for one year, beginning October 1;

Lorna J. Langer, Ph.D. as Research Fellow in Biochemistry in the Department of Pathology for one year, beginning October 1;

Dr. Marriner W. Merrill as Graduate Student Assistant in Surgery, for the period September 1 through December 20;

Dr. Richard S. Morgan as Research Fellow in Medicine, beginning November 1;

Dr. Earle H. Rosenberg as Clinical Assistant on the Dental Service for one year, beginning October 1;

Dr. Aaron Toledano as Graduate Student Assistant in Surgery for one year, beginning November 1;

Dr. Alan Ziskind as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1, 1959.

The General Executive Committee also voted:

To extend the appointment of Dr. Leonardo S. J. Martin as Clinical and Research Fellow in Urology to November 15;

To change the title of Dr. James L. Vanderveen from Clinical Fellow to that of Research Fellow in Anesthesia, effective October 1.

* * *

HOUSE PUPILS ASSOCIATION

October 16, 1958

October 16, 1958, was a memorable occasion at the Massachusetts General Hospital. This day marked the 112th anniversary of the demonstration of the use of ether anesthesia by Dr. W. T. G. Morton, and was celebrated this year with an unusually interesting program sponsored by the MGH House Pupils Association. This organization, which has been in existence since the year 1905, has been rather inactive in recent years. Its last official meeting was held in 1946, when the 100th Anniversary of Ether Day was celebrated by a dinner at the Copley Plaza.

The day's program this year was opened by its leading spirit, Dr. James Howard Means, who spoke briefly of the history of the House Pupils Association. A new slate of officers was introduced by the nominating committee, and the following former house pupils were elected to office: Dr. James M. Faulkner, President; Dr. Edward Hamlin, Jr., Vice-President; Dr. Reed Harwood, Secretary-Treasurer. While the new president strode to the platform to conduct the morning's scientific program, the new secretary-treasurer performed his only official act of the day by quickly taking possession of the precious volume, *Transactions of the Association,* and impounding it in the MGH Archives safe. (This volume had mysteriously disappeared during the long hibernation of the HPA and its whereabouts had been discovered only through diligent search by certain rather belatedly responsible persons. A careful perusal of this priceless record is planned for the near future, and may be the subject of an article in a later edition of THE NEWS.)

The morning scientific program in the Moseley Rotunda included talks by four young investigators. Dr. Gordon L. Brownell's paper was concerned with recent technical developments in the detection of radioactivity. Dr. Melvin J. Glimcher described some fascinating studies of the physicochemical structure of collagen and bone. Dr. Alexander Leaf described his experiments with the isolated bladder of the toad, in which he measured the transport of sodium across this living membrane. Dr. Robert S. Shaw described the clinical picture of intestinal ischemia, its anatomical problems, and the successful treatment of this condition by endarterectomy.

This informative program was brought to a close at noon, and the assembled members of the House Pupils Association and their wives and guests toiled up the familiar stairs of the Moseley Building — not painfully to the 4th floor as in the days when they used this building for short nights of oft-interrupted sleep — but merely to the 2nd floor to the pleasant sanctuary of the Treadwell Library where, in observance of the Library's 100th Anniversary, pretty maids and matrons were pouring and passing the very best of imported sherry. Surely Treadwell was never so eagerly patronized! And for once its well-stacked shelves were ignored, its dedicated silence shattered. Its reading room was invaded by the excitement of reunion and reminiscence, the gaiety of broken routine, and (as anyone who was there can testify) a spirit of the unity of shared experience which has been for decades an amazing, if not unique, quality of the old M.G.H.

The sherry hour — a scant thirty minutes, actually — passed all too soon. The great open spaces of the Bulfinch Lawn were calling, and there, under a nearly-cloudless Indian summer sky, the company took lunch, standing in queues for second helpings and sitting round in small groups. This was Ether Day at its best; the worriers should have realized that the weather was bound to smile on the auspicious occasion.

After lunch, the crowd returned to the Moseley Rotunda to listen to what was announced in the program as a panel discussion entitled "Function of the teaching hospital". In reality, this turned out to be a series of brief expositions by four distinguished members of the Staff. Dr. Walter Bauer discussed the alliance of basic research, clinical studies, teaching, and the care of the patient as the essence of the continued growth of modern medicine. Dr. Edward D. Churchill presented an outline of the training program offered to the surgical house pupils of today, stressing its well-rounded character and its flexibility and the recent shift from the apprentice system of former times to what he termed the "tutorial" system. Dr. Raymond D. Adams detailed the special problems of training neurologists and the relation of neurology to its sister specialties, psychiatry and neurosurgery, and their parents, medicine and surgery. And last, Dr. Dean A. Clark described the changes in the M.G.H. since the last meeting of the House Pupils Association. In the intervening twelve years, he reported, the Hospital had erected $7,500,000 worth of buildings — all devoted to "supporting services", rather than space for new beds. The annual budget had increased by an astounding 400% and the number of admissions to the Hospital and to the Emergency Ward had increased by 50% and 100% (in round figures), respectively. Dr. Clark felt a gentle urge to mention in passing (and who could blame him and who was taken by suprise?) the chronic financial difficulties that beset all modern teaching hospitals, including (we gathered) our own.

This session was followed by a brief intermission designed to give the visitors an opportunity to inspect the new buildings. During this period there was shown a movie of the vintage of 1932, dramatizing on the silver screen the renowned "Demonstration of the administration of ether", produced, directed, and filmed in the Ether Dome itself. At about the same time, the coveted MGH pins for long service were being bestowed in the lobby of the Warren Building upon a number of faithful members of the Staff and other MGH personnel.

Just before the Lowell Lecture at 5 P.M., the Hospital presented to Dr. Robert F. Loeb the first Treadwell Award. This Award was established by the Trustees on the occasion of the 100th Anniversary of the Treadwell Library, and on recommendation of the Treadwell Library Committee was given to Dr. Loeb who came from New York City to receive it. (The News carries in this issue the text of the citation.)

Dr. Henry K. Beecher introduced the final speaker, welcoming back a well-beloved former house pupil, a distinguished neighbor, Dr. Francis D. Moore, whose Lowell Lecture subject was "The two roads — science and surgery". Introducing his subject with a series of lantern-slide reproductions of anatomical drawings by Leonardo da Vinci (1452-1519) and those by Andreas Vesalius (1514-1564), he briefly reviewed the development of modern surgery, and the disciplines of its art and its science, relating his historical outline to the problems of modern surgical practice and of modern surgical research. No one could deny that Dr. Moore held his audience spellbound. He may have strayed from our precincts — indeed, he did stray, as far as the Peter Bent Brigham Hospital — but he made it clear to us that his loyalty to the M.G.H. was undiminished, though he had gone elsewhere to fulfill his early promise as surgeon, scientist, and speaker.

Darkness was soon to fall on this memorable Ether Day. In the dusk, the men donned their black ties, the ladies their prettiest dresses, and all ventured forth to the Harvard Club where a party had been organized under the able guidance of Miss Dorothy Rackemann. A "reception" was the first order of business there. Quotation marks appear about this euphemism because in reality this hour, devoted to the imbibing of tissue-restoring alcoholic beverages, resembled (as is usual at such gatherings) the scrum of an English football game, as the more timid souls sought to capture the strategic positions held by their more forehanded colleagues at the bar. But there was no weeping, no pain felt at the end as the company descended to Harvard Hall to enjoy a sumptuous dinner and to dance to the familiar and nostalgic rhythms of Ruby Newman's orchestra. The only bit of business was the announcement by Dr. Dana L. Farnsworth of the James Howard Means Fund. (The News gives a report of this Fund elsewhere in this issue.)

The unbiased observer — well, perhaps he *was* a little biased — observed the crowd from his special point of vantage (which is to say, he was one of the few stags) and noted with satisfaction that a good time was had by all.

Reed Harwood, M.D.,
Secretary-Treasurer

Dr. Dana L. Farnsworth made the following announcement at the House Pupils Association dinner, at the Harvard Club, on October 16, 1958.

At this reunion of the House Pupils Association of the Massachusetts General Hospital it seems particularly appropriate to announce the formation of a new educational resource for the Hospital. This one is compounded of sentiment and has been devised to honor one who has influenced every one of us here, one way or another. Willa Cather stated that happiness is to be dissolved in something good and great. Our friend, to whom we do honor, is eminently qualified by this definition, or any other for that matter, to be called a happy person. As a physician, teacher, author, artist, companion, and friend he has for three decades brought up house pupils to be better than they knew. As a foremost scholar of thyroidology he has set a standard of medical research which his younger colleagues envy with friendly approval. He was a skillful administrator before the advent and applicability of Parkinson's Law. As a fearless crusader, believing in better manners at the bedside rather than more bedside manners, and being more interested in the ethics of physicians in medical practice than in medical ethics, he has accomplished much in the improvement of medical care for all the people.

It is with pleasure that I speak for friends of Dr. Means and report that a sum amounting to $20,000 has been subscribed by them to establish in his honor a James Howard Means Fund. This will enable the Hospital occasionally to invite a distinguished physician and scholar to spend some time with our Staff, discoursing on whatever matters may be uppermost in his mind on the never-ending problem of alleviating human suffering.

Dr. Robert F. Loeb (*W.M.* 1920), the recipient on October 16 of the first Treadwell Award, is the Bard Professor of Medicine at Columbia University and Director of the Medical Service at the Presbyterian Hospital in New York City.

The Award, symbolized by an appropriately designed scroll, was created by the Trustees in honor of the 100th Anniversary of Treadwell Library. The text of the citation to Dr. Loeb is as follows:

While a House Pupil, your wholehearted admiration of the kindly bedside skills of the senior physicians of an era already past was a stepping stone to a career as educator and pathfinder in scientific medicine. Your life has shown that a passionate love of truth can bridge generations in family and in profession, without pretense or compromise and that no conflict exists between the humanitarian, the scientific and the educational undertakings of a great physician.

The spirit of William H. Smith, affectionately known as "Big Bill" proudly watches over and joins with us as you receive this First Treadwell Award.

The signatures of Dr. James M. Faulkner, President of the MGH House Pupils Association, and Mr. Francis C. Gray, Chairman of our Board of Trustees, are affixed.

Directly after the presentation of the scroll, a pseudoserious note was interjected when Dr. Churchill reminded Dr. Loeb that, somehow, he had failed to sign the West Medical records (now in bound volumes nos. 1362 and 1368) when he finished his internship here in 1920. He was forthwith ushered by Dr. Clark and Dr. Churchill to where these volumes were on display, and they witnessed his signing of these old records.

DIABETES DETECTION DRIVE

Last month, visitors to the M.G.H. witnessed a new and interesting activity in the Hospital. The Diabetes Clinic, with the help and cooperation of Miss Ruth M. Farrisey and the School of Nursing, initiated a program for the detection of diabetes, in observance of National Diabetes Week. On November 19 and 20, booths were set up in the lobbies of both the White Building and the Warren Building, and the materials for a quick, easy method of testing for sugar in the urine were supplied to all who were interested in testing themselves. All persons who returned with evidence of a positive test for sugar were then offered a free blood sugar test.

There were 516 persons who performed the urine test and of these, 7 were found to have sugar in the urine. All 7 with positive tests submitted to a blood sugar test and answered a questionnaire designed to help interpret the results of the tests. Normal blood sugar values were found in 6 of the 7 cases and these were classified as "glycosuria, cause undetermined; diabetes possible". Only 1 person had a definitely abnormal blood sugar, and was diagnosed as having diabetes. Reports of the tests and their interpretations were sent to all 7, and to the 6 who had given the names of their doctors.

Many persons also took home to their relatives small supplies of the urine-testing material, as well as pamphlets containing information on diabetes.

Judging from the experiences of other detection drives, the M.G.H. encountered a group that was remarkably free of diabetes. Ordinarily one would expect to discover 5 or 10 cases in a crowd of 500 persons. Nevertheless, this brief campaign served its purpose of demonstrating that unsuspected diabetes can be found by the performance of simple laboratory tests.

Reed Harwood, M.D.,
Associate Physician
and *Head of Diabetes Clinic*

REUNION IN BRUSSELS

Members of the Cardiac Staff of the M.G.H. were hosts on September 18 at a reunion and reception in honor of Dr. and Mrs. Paul D. White during the Third World Congress of Cardiology in Brussels. More than seventy former students and research workers at the Hospital and their wives were present, including representatives from Canada, Mexico, Ireland, England, France, Belgium, Portugal, Italy, Austria, Sweden, Turkey, Syria, Pakistan, India, Thailand, the Philippines, and South Africa.

The reception was held in the Commissioner-General's lounge in the United States pavilion at the World's Fair. Among those present from the M.G.H. were Mrs. Charles P. Howard (a member of our Ladies' Visiting Committee and President Eisenhower's special representative at the Fair), Dr. and Mrs. Walter

Bauer, Dr. and Mrs. Allan L. Friedlich, Dr. and Mrs. James H. Currens, Dr. and Mrs. William R. Brewster, Miss Helen Donovan, and Drs. William P. Chapman, John C. Rowe, Arnold M. Katz, and Edward F. Bland. During the reception Dr. White presented a scroll to Miss Helen Donovan in recognition of her long service to him and to cardiology; and Drs. White and Bland, together with Mrs. Howard, recorded for the "Voice of America" a brief description of the Congress and of our reunion, stressing the importance of science and medicine in fostering better understanding and good will among nations.

E. F. B.

[Edward F. Bland, M.D.]

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Cardiology

Currens, J. H.
"Pulseless disease"—Description by Robert Adams, 1827: An historical note.
Circulation 18:396.

Dentistry

Hall, H. D., and Shaw, J. H.
Parabiosis in strains of caries-susceptible and caries-resistant rats.
J. Dent. Research 37:912.

General Medicine

Gardner, F. H., and Freymann, J. G.
Erythrocythemia (polycythemia) and hydronephrosis. Report of a case with radio-iron studies, with recovery after nephrectomy.
New England J. Med. 259:323.

General Surgery

Austen, W. G., Shaw, R. S., Scannell, J. G., and Thurlbeck, W. M.
Postmortem study of the technique of aortic valvulotomy in calcific aortic stenosis by quantitative examination of valvular function by perfusion.
J. Thoracic Surg. 36:571.

Hyperparathyroidism

Cope, O., Keynes, W. M., Roth, S. I., and Castleman, B.
Primary chief-cell hyperplasia of the parathyroid glands: A new entity in the surgery of hyperparathyroidism.
Ann. Surg. 148:375.

Laboratory Science

Friis, T., and Chapman, E. M.
The function of the thyroid in euthyroid patients with exophthalmos.
Acta endocrinologica 27:207.

Neurosurgery

White, J. C.
The problem of the painful scar.
Ann. Surg. 148:422.

Otolaryngology

Kelemen, G.
Congenital deafness.
American Academy of Ophthalmology and Otolaryngology, 1956 Instruction Section, Course No. 462:1.

Kelemen, G. (J. Berberich, joint author)
Erkrankungen der Nase.
In Pathologie der Laboratoriumstiere (Cohrs, P., Jaffé, R., and Meessen, H., Editors), Berlin-Göttingen-Heidelberg, Springer-Verlag, 1:18.

Kelemen, G. (J. Berberich, joint author)
Erkrankungen des Ohres.
In Pathologie der Laboratoriumstiere (Cohrs, P., Jaffé, R., and Meessen, H., Editors), Berlin-Göttingen-Heidelberg, Springer-Verlag, 1:670.

Kelemen, G.
Tympanoplasty.
American Academy of Ophthalmology and Otolaryngology, 1958 Instruction Section, Course No. 463:1.

Lewis, D. K.
Medical progress: Recent contributions to the study of deafness.
New England J. Med. 259:169.

Psychiatry

Beecher, H. K.
Psychotomimetic drugs.
J. Chron. Dis. 8:253.

Binger, C. A. L.
The need for human acceptance.
Ment. Hosp. 9:10.

Talland, G. A.
Perception of apparent movement in Korsakoff's psychosis.
J. Personality 26:337.

Wolf, I.
Alcoholism and marriage.
Quart. J. Stud. on Alcohol 19:511.

MASSACHUSETTS EYE & EAR INFIRMARY

HENRY WHITTIER PORTER BACTERIOLOGY LABORATORY

It is interesting to note that the Massachusetts Eye and Ear Infirmary did not have a separate bacteriological department until the era of chemotherapy and antibiotic therapy was born. This is not because infections and their treatment were not of great importance to both the otolaryngologist and the ophthalmologist. On the contrary, before the advent of antibacterial therapy, some of the most life-endangering infections had their origins in the middle ear or the sinuses. Often an upper respiratory infection would be followed by acute otitis media or sinusitis or meningitis with and without brain abscess and death.

While infections of the eye were not apt to be fatal, partial or complete loss of vision was not an uncommon outcome of eye infection.

One speculates, therefore, as to why the need for a well-equipped and staffed bacteriological department was not felt. Searching among the old publications produces titles of papers relating to problems of infections and their control. Invariably one finds that these were written by staff members who were interested enough to do whatever work was necessary themselves.

As a routine, the junior residents were assigned to the laboratory service for the first three to six months of their training. This included doing all the routine clinical laboratory procedures, such as hematology and urine analyses, plus any bacteriological work necessary. Most of these young residents were not qualified to perform accurate bacteriological studies and, furthermore, they were not interested. To them it was a chore to be done with as soon as possible so that they could find time for the things that did interest them.

Not infrequently they called upon the bacteriological department of the M.G.H. for help; and later, in the middle 1930's, they turned to the Surgical Research Bacteriology Department, which was under Dr. Edward D. Churchill and Dr. Champ Lyons, where the present bacteriologist got her early experience and training after college. Usually these consultants were called upon in cases of serious infection. Early in the 1940's, after the introduction of the sulfonamides, the need for a department of bacteriology became more apparent. Dr. LeRoy Schall, the new Chief of Otolaryngology, decided to establish such a laboratory. Room was found for the laboratory on the first floor, and an incubator and an autoclave were installed. A bacteriological technician was put in charge. Under the guidance of Dr. Merrill King, who had started out as a bacteriologist under Dr. Hans Zinsser and had later been bacteriologist at the M.G.H., the first careful bacteriological studies were undertaken at the Infirmary. In April 1943, the present bacteriologist took over. She will never forget the remark of one of her surgeon friends who quipped when she told him of her new position, "You'd do better to brush up on your chemistry. Now that we have penicillin you bacteriologists are going to be out of your jobs!" Little could he or anyone else guess then what the future held for bacteriologists.

The past fifteen years have been very productive. The primary function of the laboratory is the identification as rapidly as possible of etiological agents of infection. The discovery of successive antibiotics, the emergency of resistant strains of bacteria, especially of the staphylococcus aureus, and the danger of super-infection all make it important that the bacteriologist carry out his studies as rapidly and efficiently as possible. The progress of the patient on antibiotics must be followed bacteriologically as well as medically. Antibiotic sensitivity studies are often a very useful and necessary guide as to therapy.

The laboratory performs between 5,000 and 6,000 routine cultures a year. It undertakes research projects as they come up.

Early in 1944 the new department began to justify the faith put in it when the laboratory established that purulent conjunctivitis, especially in children and young adults, was not due to n. gonorrhoeae but to n. meningitidis. Up to that time diagnosis was made on the basis of smears which showed the presence of intra- and extra-cellular gram negative diplococci. It had been assumed that these were gonococci. Careful bacteriological studies proved otherwise.

Shortly thereafter the laboratory again proved its usefulness when it started to produce crude penicillin for local use. That was during the period when all penicillin was carefully preserved for the Armed Services and desperately sick civilian patients. Conditions which could be treated with local antibiotics were not serious enough to warrant using the precious commercial product. The laboratory-produced antibiotic proved very useful in the treatment of eye, nose, and external ear infections. This, of course, was before the emergency of resistant strains and the sensitization of patients to penicillin.

After the general introduction of broad-spectrum antibiotics, it was noted that routine cultures from treated patients often showed spore-like organisms. A study of these soon showed that superinfection with Monilia albicans was not uncommon and that this complication might be more serious than the original infection. The *New England Journal of Medicine* published a letter summarizing the study, which proved to be one of the first reports to the medical profession about this complication.

Over the years this has been the type of help that the laboratory has tried to give the clinician.

In addition to routine smears, cultures, and sensitivity studies, the bacteriology service has tried to awaken and stimulate the interest of both the visiting and resident staffs in the whole problem of infection and its treatment. A series of lectures starting with the fundamentals of practical bacteriological procedures and ending with discussions of antibiotic therapy is given yearly to the otolaryngology residents. The ophthalmology residents are required to take a course in basic science before beginning their residency. Such a course and one in which the laboratory participates is the one given at the Infirmary in collaboration with the Harvard Medical School, under the direction of Dr. Henry F. Allen, Assistant Surgeon in Ophthalmology.

A major problem facing all hospitals within the past few years has been that of infections due to resistant strains of staphylococcus aureus in hospitalized patients, especially following surgery. A major role in the work the laboratory has done in tracking down and controlling sources of staphylococcic infection has been played by Dr. Allen, especially in the evaluation of filters in the air-conditioning system and the vacuum cleaner presently being used at the Infirmary. His studies relating to this cleaner are soon to be published.

As a result of bacteriological studies, certain routines have been established in an effort to cut down on the number of staphylococci surrounding the environment of the patient. An inspection committee has been appointed, consisting of a nursing supervisor, the Infirmary housekeeper, and the bacteriologist. Meticulous cleanliness in the hospital is thereby rigidly enforced. Since mattresses, blankets, and pillows were found to be great sources of staphylococci, changes in well-established hospital procedures were made.

All pillows are now covered with disposable plastic covers which are discarded when the patient leaves the Infirmary. Mattresses are covered with washable plastic covers, and all blankets are sterilized in ethylene oxide gas between use by patients. Bacteriological controls are routinely carried out on all these procedures.

To keep the operating room staff aware of the possibility of contamination, they are asked to carry out monthly surveys, consisting of culturing all instruments, solutions, and ointments that have been used in eye operations.

Air sampling of the patients' rooms, operating suites, and other patient areas is carried out routinely. If bacterial counts increase, the reasons are sought and corrective procedures undertaken immediately.

Situated in attractive air-conditioned quarters in the research wing which it has occupied since May 1956, the bacteriology laboratory was dedicated at that time in memory of Henry Whittier Porter, a former member of the Board of Managers. Now that the continued use and development of antibiotics have made the role of the bacteriologist more important than ever, the Porter Laboratory of Bacteriology continues to perform a vital service at the Infirmary.

Anita Mangiaracine,
Bacteriologist

Dr. LeRoy A. Schall, Chief of Otolaryngology, presided over the annual meeting of the American Academy of Ophthalmology and Otolaryngology, held in Chicago from October 12 to 17. Dr. Schall was elected president at last year's meeting of the Academy, which is the largest special society of its kind in the world, numbering over 6,500 certified ophthalmologists and otolaryngologists.

Dr. David D. Donaldson, Assistant in Ophthalmology, exhibited his stereoscopic photographs of corneal dystrophies and degenerations at the International Conference of Ophthalmology, held in Brussels early this fall.

Dr. Albert E. Sloane, Associate Surgeon in Ophthalmology, has returned from Israel, where he established a Low Visioned Clinic in the out-patient department at the Mayer De Rothschild Hadassah University Hospital in Jerusalem. Modeled on the clinic that Dr. Sloane set up at the Infirmary four years ago, this visual aid clinic is the first of its kind in Israel.

New addresses:—

Dr. Edwin C. Albright (*W.M.* 1942), University of Wisconsin Hospitals, Madison, Wis.
Dr. Betty Q. Banker (a.r.p. *N.P.* 1954), Children's Medical Center, Boston, Mass.
Dr. Richard M. Barry (a.r.p. 1957), 206 Pitshanger Lane, London W 5 (Ealing), England
Dr. Frederic M. Blodgett (*C.M.* 1946), Yale University School of Medicine, New Haven, Conn.
Dr. Roy L. Byrnes (a.r.p. *Path.* 1954), Clinical Laboratory, 679 S. Westlake Ave., Los Angeles, Calif.
Dr. George E. Donaghy (assoc. an. 1953), St. Francis Hospital, Columbus, Ga.
Dr. Hans J. Eberlein (fel. *An.* 1958), Chirurgische, Universitäts Klinik, 16 Marburg/Lahn, Germany
Dr. Albert J. Finck (a.r.p. *An.* 1949), Beth Israel Hospital, Boston 15, Mass.
Dr. Buford Hall (*M.* 1946), 40 S. Clay St., Hinsdale, Ill.
Dr. William J. James (r.s. *N.S.* 1949), 27 Live Oak Drive, Ventura, Calif.
Dr. Paul R. Johnson (*Path.* 1936), 85 Jefferson St., Hartford, Conn.
Dr. George Kaldor (res. fel. *M.* 1958), McArdle Laboratory, University of Wisconsin Medical School, Madison 6, Wis.
Dr. Richard N. Kleaveland (*S.* 1952), 407 W. Riverside, Spokane, Wash.
Dr. Louis Kunian (clin. a. *M.*), 23 Broad St., Lynn, Mass.
Dr. John B. Lloyd (*E.S.* 1944), Lemuel Shattuck Hospital, Boston, Mass.
Dr. Paul L. Norton (*Or.* 1933), 1180 Beacon St., Brookline, Mass.
Dr. Murray E. Pendleton (a.p. *C.M.*), Boston Lying-in Hospital, Boston 15, Mass.
Dr. Ihsan Sahinalp (res. fel. *N.S.* 1958), Maltepe Hale Sokak S/2, Ankara, Turkey
Dr. Germán C. Sánchez-Checa (clin. fel. *R.* 1957), Ave. Arica 360, San Miguel, Lima, Peru
Dr. Jesse E. Thompson (*E.S.* 1943), 1008 N. Washington Ave., Dallas 4, Tex.
Dr. Frederick S. Tomchik (r.p. *R.* 1955), Dept. of Radiology, Massachusetts General Hospital, Boston 14, Mass.
Dr. Curtis C. Tripp (*W.S.* 1923), 97 Madison St., New Bedford, Mass.
Dr. Theodore van Ravenswaay (a.r.p. *Path.* 1957), Apollolaan 72, Amsterdam Z, The Netherlands
Dr. Yang Wang (*M.* 1953), c/o Dr. H. B. Burchell, Mayo Clinic, Rochester, Minn.
Dr. Franz Wendlberger (clin. fel. *An.* 1958), Surgical Clinic, University of Munich, Nussbaumstrasse 20, Munich, Germany
Dr. Earle W. Wilkins, Jr. (*W.S.* 1945), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. John L. Wilson (*E.S.* 1940), Dept. of Surgery, Veterans Hospital, Fort Miley, San Francisco, Calif.
Dr. John B. Youmans (*E.M.* 1921), U.S. Army Medical Research and Development Command, Dept. of the Army, Main Navy Bldg., Washington 25, D. C.

Brief bits:—

Following the World Congress of Cardiology in Brussels, Drs. Walter Bauer and Edward F. Bland participated in a four-day symposium on rheumatic fever and rheumatic heart disease in London at the Postgraduate Medical School at Hammersmith and at the Rheumatic Fever Hospital in Taplow. This

No. 78 in a series of Staff photographs
Dr. J. Gordon Scannell, Associate Visiting Surgeon

symposium was organized by Professor John McMichael and by Dr. Eric Bywaters, a former research fellow with the Arthritis Unit at this Hospital. Among the participants was Dr. Xavier Robles-Gil of Mexico City, also a former research fellow at the M.G.H.

After attending the World Congress of Cardiology at Brussels, where Dr. Paul D. White officiated in September, and making a few visits to the exciting Exposition, Dr. and Mrs. James H. Currens motored through central Czechoslovakia and on to Poland, where they visited Krakow and Warsaw. Dr. Currens attended the Second Medical Clinic there and gave a lecture on "Pulseless disease". Professor D. Aleksondrow and his associates were most hospitable and were engaged in good clinical and investigative work. The Currenses visited the wife of Dr. Jan Nielubowicz in Warsaw, who is also a doctor. Dr. Jan has spent the last 10 months at the M.G.H. on the surgical service. Dr. and Mrs. Currens had an interesting return trip by car through Poznań, East Germany, and Berlin.

Golda M. Edinburg, Director of Psychiatric Social Work at McLean Hospital, has joined hundreds of social workers from all parts of the world at the Ninth International Conference of Social Work, being held in Tokyo, Japan, from November 30 to December 6.

Dr. Guy W. Leadbetter, Jr. (sr. r.s. *U.*) and Dr. Leonardo S. J. Martin (clin. and res. fel. *U.*) presented papers before the Fundamental Surgical Forum at the recent meeting of the American College of Surgeons.

Dr. Wyland F. Leadbetter is now President of the New England Section of the American Urological Association.

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VOLUNTEER GROUPS

MGH Staff Wives Association

Tickets! Tickets! The Reception Center of the Staff Wives Association, located next to the General Store, has recently been appointed the agency through which entertainment tickets will be handled for the *professional* Hospital family. These tickets are donated by Staff members and friends of the Hospital, and are available free of charge to members of our professional group. The Staff Wives will be grateful to receive at the *earliest* possible date any tickets for the symphony, the theatre, the circus, etc., so that they may place them in the most deserving hands.

A bulletin board has been placed on the partition next to the General Store, which will announce the availability of tickets — particularly last-minute ones. Watch this board for announcements of Friday afternoon symphony concerts.

Starting on November 13, Mrs. Walter T. St. Goar began to conduct tours of the Hospital for those wishing this service. These tours leave at 2 P.M. every Thursday afternoon, from the Staff Wives Reception Center. With Mrs. St. Goar's knowledge of M.G.H.'s many facilities, her services as a guide will be of great assistance to our professional visitors.

Distaff Club

The fall issue of the *Distaff News* was published in October. Mrs. Milton S. Grossman was the editor. The issue included a calendar of events for the Club and news of various members.

On October 16, some of the Distaff members helped, in various capacities, with the commemoration of the anniversary of Ether Day.

November was a busy month, with two gatherings. On the 8th, Mr. Bill Baxter officiated as caller for the square dance held in the Moseley Rotunda. We all enjoyed the evening, which was heightened by an excellent entertainment of songs and guitar by Dr. Clarke Anderson. On the 20th, Mrs. Bruce J. Sams, Jr. was hostess for a meeting held in the Pent House. Mrs. DeVere Armstrong discussed holiday decorations and ideas and suggested the use of certain local shops and New England flora for carrying out these ideas. We all benefited a great deal from her helpful talk.

This letter from Dr. William P. Boger (a.r.p. 1942), written to Dr. Means, gives an account of a very active life. We have learned from an outside source that Dr. Boger is now Director of the Medical and Surgical Division, Department of Research Therapeutics, at the Norristown State Hospital in Pennsylvania.

> I have just received the invitation to the House Pupils Reunion and I am caught in a conflict of emotions. It goes without saying that I am always pleased to be identified with the Massachusetts General Hospital. At the moment, I am extremely regretful that I will not be able to be on hand, for I will be in Washington participating in a program of the Antibiotics Symposium. I am certain that it would be far more rewarding for me, personally, to be on hand to hear, particularly, the panel discussion of the function of the teaching hospital than it will be for me to present in Washington the modest scientific data that we have developed. Be assured that I shall take the earliest opportunity to pay a visit to M.G.H., to compensate in some measure for my absence at the reunion.
>
> Last spring I had the privilege of making a lecture trip around the world, and it was a real pleasure to unexpectedly encounter an HMS graduate in my audience in Hong Kong and to visit with John Wilson in Beirut. I was there at the time the rioting began and just got out in time.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

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THE MIXTER RADIOISOTOPE LABORATORY

Prior to the opening of the Mixter Radioisotope Laboratory in the Warren Building, the scanning of brain tumors with radioisotopes and the biological investigations related to this project had been carried out at a number of points within the Hospital. A small scanning room was located on White 11, where routine scanning was carried on, and many of the biological studies were carried out in the Physics Research Laboratory or on White 4. The new laboratories immensely improved our facilities for brain tumor scanning and for biological and medical research in these fields.

The positron scanning technique for localization of brain tumors was evolved some five years ago by cooperative effort between the Physics Research Laboratory and the Neurosurgical Service. Since that time the number of patients scanned has increased steadily to a point where one positron scanner is now used full time. In the summer of 1955 a paper based on some 700 scans was presented at the Geneva Conference on the Peaceful Uses of Atomic Energy. This paper related our clinical experience up to that time, and the accuracy of diagnosis among our scans of patients with brain tumors and with other neurological diseases. Since that time our tally of scans has risen to nearly 3,000, and the laboratory is struggling to maintain up-to-date clinical data on all scanned patients.

Until the fall of 1957 this scanning procedure was carried on under the direction of Miss Pauline Montgomery. Since that time Miss Ruth A. Collins has been in charge of patient scanning. The isotopes used in the scanning procedures are obtained either from the cyclotron at M.I.T. or from the cyclotron and reactor at Oak Ridge. The M.I.T. cyclotron targets are processed in the hot laboratory, and a sterile solution is prepared for injection of the patients. The Oak Ridge material is received from Abbott Laboratories in sterile form. Subsequent to the intravenous injection of the material, the scanning procedure commences after a period of approximately one hour. The scans take about 45 minutes to perform. In certain cases an AP scan is performed on the patients subsequent to the first lateral scan. In other cases the scans are repeated in 24 hours. The scans are then interpreted and the results placed in the patient's record, together with copies of the actual scan.

As our scanning load increased, it became obvious that compilation and correlation of clinical data on patients who have been scanned would become a full-time undertaking. Consequently, Miss Sara L. Emery joined our laboratory in 1958 to take on this task. Since then we have inaugurated a punch card system for recording data records, and have set up a standard protocol for collecting clinical information subsequent to the scanning procedure. Miss Emery, assisted by Drs. John A. Scholl and John Mealey, Jr., has succeeded in compiling data on scans up to January 1958. This information will soon be ready for correlation and processing. We are planning to use some machine techniques for this correlation.

The biological studies carried out in the Isotope Laboratory on the Mixter Floor deal primarily with positron emitters of interest for scanning. We have accumulated a large amount of data on As^{74}, Cu^{64}, and Rb^{86} distribution and turnover in humans, and papers on arsenic and copper have been accepted for publication. A paper on rubidium is now in preparation. During the past summer studies on copper compounds other than Cu^{64} versenate, routinely used for scanning, were performed. The study considered copper tartrate. Biological, animal studies, and scans in humans were performed with this material, comparing the results with those done with copper versenate. The study was carried on by Dr. Henry J. Powsner. During the summer we started preliminary studies of a third compound of copper—copper acetate. Dr. Mealey has been studying an isotope of zirconium obtained from the M.I.T. cyclotron. This element shows quite novel behavior in humans, and may be of use in certain scanning problems.

We are particularly interested in biological studies on an isotope of gallium—Ga^{62}. This isotope has a 68-minute half-life, but is the daughter of a 250-day parent—Ge^{62}. Techniques have been developed to separate the gallium from the germanium within a period of 10 minutes. Studies on this substance have been carried out on animals and humans. These studies were performed by Drs. John Mealey, Helen Gyftaki, and Mr. Harold B. Carter. Many of these studies have been performed with double tracer technique, and a beta and gamma well counter are located in the Radioisotope Unit for such measurements.

Another aspect of our work in the Radioisotope Laboratory is the development of scanning apparatus. Dr. Saul Aronow has been conducting investigation into the use of high-speed electronic circuits for scanning procedures. More recently we have been carrying out studies on a new concept of a scanner, called the positron camera. This device will not use mechanically moving parts but will involve large-area scintillators, multiple phototube, and complicated electronic circuitry to produce a scan. The final picture will appear on the face of a television tube. We believe that this technique, when developed, may offer considerably greater sensitivity and versatility than the present scanning devices.

Dr. Aronow has also been cooperating with others on the Mixter Floor in the use of an RF lesion generator which he has developed. This device has found considerable application both in research problems and in therapeutic applications.

In association with others on the Mixter Floor, we have been studying the physical problems concerned with neutron capture therapy. A paper on these physical aspects is to be presented at the Second International Conference on Peaceful Uses of Atomic Energy at Geneva this year. Collaborating with the reactor group at M.I.T., a medical facility has been designed and built. To study the energy spectra of neutrons at this facility, a crystal neutron spectrometer is being built and will be operating by the time the reactor is at full power. A further development has been the design of a semiconductor alpha-probe detector by Mr. James Mayer of Purdue. We plan to make extensive tests of these devices and use them in neutron capture therapy.

Mr. William H. Ellett and Mr. John R. Lyons have been collaborating with Drs. Derek S. Gordon and Albert H. Soloway on developing a technique for radiophotographic study of the distribution of boron compounds and radioisotopes in brain tissue. This type of study is essential in the determination of the precise cellular location of these compounds and the prediction of their therapeutic possibilities.

Gordon L. Brownell, Ph.D.,
Associate Physicist in Medicine

* * *

At the Annual Meeting of the Radiological Society of North America, held in Chicago the last week of November, Dr. Laurence L. Robbins was installed as president of the organization for the coming year.

* * *

Contributions to THE NEWS in the amount of $584.60, over and above the subscription fees, were received during the fiscal year 1957-1958. A note of appreciation is always sent to each contributor, but THE NEWS takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

The Board of Trustees, at their meetings on November 7 and 21, voted:

To reappoint:

William H. Ellett, B.Sc. as Assistant Physicist (Medicine) for one year, beginning September 24, 1958.

To appoint:

Dr. Maurice J. Boivin as Assistant Resident in Anesthesia, beginning July 1;
Dr. Nancy L. Davis as Assistant Resident in Anesthesia for one year, beginning July 1;
Dr. William Franklin as Assistant Physician, effective January 1;
Dr. Milton R. Okun as Assistant Resident in Dermatology for one year, beginning July 1;
Hugh J. O'Rourke, D.S.C. as Assistant Podiatrist in the Orthopedic Department, effective November 1, 1958;
Dr. Richard L. Sallade as Assistant Resident in Urology, on affiliation, for a period of six months, beginning December 1, 1958;
Dr. Joyce K. Wong as Out-Patient Resident on the Children's Medical Service for one year, beginning July 1.

The Trustees also voted to confirm the invitation to Mr. Rodney Smith, Surgeon, St. George's Hospital, London, to give a Richardson Lecture at the Hospital on November 17, 1958.

At their meetings on November 12, 19, and 26, the General Executive Committee voted:

To promote:

Dr. Arthur K. Asbury to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. Caesar Briefer, Jr. to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. William T. Butler to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. Myron A. Hofer, II, to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. George A. Jacoby, Jr. to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. Myron Lotz to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. John T. Pollard, Jr. to the position of Resident in Radiology for one year, beginning January 1;
Dr. Robert H. Schapiro to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. Robert T. Schimke to the position of Assistant Resident in Medicine for one year. beginning July 1;
Dr. Rodman D. Starke to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. William E. Strole, Jr. to the position of Assistant Resident in Medicine for one year. beginning July 1;
Dr. Hibbard E. Williams to the position of Assistant Resident in Medicine for one year, beginning July 1.

To reappoint:

Dr. William Sharpe, Jr. as Clinical Fellow in Psychiatry for one year, beginning October 1, 1958.

To extend the appointment of:

Dr. Joan N. Angelo as Research Fellow in Neurology, from January 1 through June 30.

To appoint:

Dr. Utumporn Anekamaya as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Arthur C. Cairns as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of seven months, beginning November 1, 1958;
Dr. Edgardo G. Carrasco as Clinical and Research Fellow in Medicine for one year, beginning December 15, 1958;
Dr. Thamboo J. Danaraj as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Joseph H. Dimon, III, as Clinical Assistant in Orthopedic Surgery, for the period November 24, 1958 through April 30, 1959, with the privilege of assisting Dr. Aufranc in the care of his private patients. It was further voted to appoint him as Senior Resident in Orthopedic Surgery, for the period May 1 through December 31;
Edna M. Follensby, Ph.D. as Assistant Immunologist in the Department of Medicine for one year, beginning November 1, 1958;
Dr. Fraser J. Gagnon as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Andrew G. Goesl as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Leonard W. Jarcho as Research Fellow in Neurology, for the period November 1, 1958 through April 30, 1959;
Dr. Robert E. Kahn as Clinical and Research Fellow in Medicine for one year, beginning November 1, 1958;
Dr. Ronald J. Knudson as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Augusto D. Litonjua as Clinical and Research Fellow in Medicine for one year, beginning November 18, 1958;
Dr. Gerald Ç. Matura as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. J. Gaston Mercier as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Roger E. Monier as Research Fellow in Medicine, for the period November 1, 1958 through October 31, 1959;
Dr. Ernest H. Picard as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Alexander Polak as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Harvey H. Seiple as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Pustika K. Sudjana as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958;
Dr. Oscar F. Tristan as Graduate Student Assistant in Medicine, assigned to Cardiology, for a period of eight months, beginning October 1, 1958.

To rescind the appointment of:

Dr. Alberto Miyara as Clinical Fellow in Medicine, since it is understood that the Board of Registration in Medicine allows limited registration for only one appointment and it is believed his registration now applies to the Jewish Memorial Hospital.

MASSACHUSETTS EYE & EAR INFIRMARY

At a meeting of the Executive Committee of the Massachusetts Eye and Ear Infirmary, held on November 24, 1958, the following appointments were made:

Mr. Hilmi Arslan—Research Associate, assigned to the Micro-Circulatory and Eaton-Peabody Laboratories;
Dr. Sergio L. Cunha—Fellow in Ophthalmology, assigned to the Retina Service;
Dr. Claes-Henrik Dohlman—Fellow in Ophthalmology, assigned to the Retina Service.

ALCOHOL AND THE CHRONIC ALCOHOLIC

Alcohol's role in social functioning dates back to antiquity. Birth, marriage, comradeship, victory, health, etc. have long been celebrated with alcohol. Certain cultures, like the Irish, consider its use for the release of tension as acceptable, while other cultures — orthodox Judaism and the Chinese — utilize it for ceremonial purposes, and forbid it as a release mechanism. For others, however, alcohol has become more than a means of making social and ceremonial adjustments. It has become a way of life. These are the alcohol addicts.

While there are many theories as to the etiology of alcoholism, most workers in the field consider it to be the symptom of underlying emotional problems. In this way the alcoholic is seen as developing a psychological dependence which, in time, with continued intake, is complicated by physiological habituation.

In 1952, with State funds, a clinic for the treatment of alcoholism was established at the Massachusetts General Hospital under the direction of the Department of Psychiatry. Its aim was to utilize long-term psychotherapy in the treatment of the alcoholic, and thereby to develop greater understanding of the mechanisms resulting in addiction. Some of our initial findings were reported to the American Psychiatric Association meetings in San Francisco, in May 1958. A compilation of our psychotherapeutic experiences with alcoholics for a five-year period is being prepared for publication.

While we are involved in the rehabilitation of the alcoholic by psychiatric techniques, the Department of Neurology has expressed its interest in alcoholism via its work on Korsakoff's syndrome, Wernicke's disease, cerebellar ataxia, etc., and the Medical Department has long studied and treated cirrhosis and malnutrition associated with chronic alcoholism. The Psychiatry Ward personnel has shown interest in withdrawal reactions and acute psychotic reactions related to addictive alcoholism. Of course, the Emergency Ward of the Hospital is the most active facility in our contact with the alcoholic, and we shall elaborate upon this later. These varied interests emphasize that a multidisciplinary approach is essential in the handling of the alcoholic problem.

Physicians are trained to fit patients into diagnostic "pigeonholes". There is a great tendency to classify alcoholics into a category which limits interest in them and discourages treatment programs. It is most important to evaluate each patient separately, to study the factors involved in the pathological use of alcohol, and to devise individualized therapeutic approaches.

Although there is no such thing as an alcoholic personality, certain common denominators exist in our population which are of interest in formulating an approach to the problem.

In the reactive alcoholic group, some drink to alleviate an uncomfortable feeling, like tension or depression. Others employ it as a method for overcoming phobic reactions, e.g., a lawyer drinking before a trial, or a man using alcohol so he can board a plane. Still others may use it to avoid responsibility for their actions, while others employ it to control their environment, e.g., a rejecting wife or mother who becomes attentive when the alcoholic is intoxicated.

For others, however, the drive toward alcoholism is even more serious, because drinking may not be associated with any external stress, and seemingly arises without rhyme or reason. For them one drink is too many, a million is not enough. Drinking involves a self-destructive element, which led Karl Menninger to label addictive alcoholism as "chronic suicide". By "self-destructive" it is meant that the addict will destroy his family, work, health, in order to drink. Once they start to drink, only sickness or stupor will end their quest.

These addicts constitute the most difficult category of alcoholism to treat. This is because psychologically their level of adapting to life is primitive, and alcohol becomes the main method of avoiding conflicts and achieving gratification. Due to the level of their personality development, the ability to form mature give-and-take relationships is precluded. The demands in the interpersonal relationships of alcoholics are similar to their attitudes toward alcohol, e.g., alcohol must gratify all needs and wishes, be available in inexhaustible supply, and be under constant control. Few people can tolerate for long the insatiable demands of such a relationship. The most frequent response to the expressed and implied demands of the alcoholic is rejection and the adoption of moralistic and punitive attitudes. These responses reactivate the rejected and depressed feelings prevalent in alcoholics, and result in their reversion to ethanol as their "only true friend", putting them out of reach of rehabilitative measures.

Because of the insatiable demands of the alcoholic as outlined above, it is our impression that the most appropriate locale for dealing with the alcoholic is a general hospital, employing a team setting. There are many reasons for this conclusion.

Anyone with a need for help must have motivation for seeking aid. Usually some event will precipitate this. Most commonly, with the alcoholic, it is the development of secondary complications and being too sick to drink that leads him to seek help. Therefore, directly or indirectly, the alcoholic is asking for treatment not only for the complications which have arisen, but ultimately for the underlying cause of these complications. This is in reality the first rehabilitative contact that may, if handled correctly, lead to a successful therapeutic relationship. However, since these patients have an intense need for punishment, they continually seek out and establish relationships of a punitive nature. It is important, therefore, to avoid playing along with this need and to remember that initial rejection is a continual hazard. Permitting the patient to be treated as a second-class citizen who waits around, handled gruffly or with little interest, is a major illustration of this. Merely pushing some medication at the patient and discharging him outright does not promote the establishment of a therapeutic relationship.

Of course, a busy hospital has multiple problems and the alcoholic constitutes only a fraction of the hospital population. Our group studied the alcoholic population of the Emergency Ward, and found that 200 alcoholics are admitted every 2½ months. Although the numbers are high, the emergency ward of a general hospital, with its specialized services, its diagnostic and therapeutic facilities, is an ideal locale in which to minister to the multiple needs of the alcoholic, and to establish a healthy first therapeutic contact. We hope, in the near future, to provide increased personnel in our Emergency Ward — workers with special interests in alcoholism — in order to handle some of the excessive demands imposed by the alcoholic. At the same time we shall put into practice our hypothetical formulations involving the first therapeutic contact.

Along with the Emergency Ward and General Hospital facilities, other team members are essential. The social worker is an all-important member. This worker is available to help with the financial, family, and social pressures which commonly arise to interfere with treatment. At our Clinic, the social worker usually makes the first contact at the intake interview and, therefore, her approach sets the tone of the Clinic for the patient. Frequently we are able to establish a helpful relationship with a patient because a devoted worker spends much time making brief daily visits to depressed and withdrawn patients on the wards. The social worker, in a number of instances provides the most meaningful contact to those patients whose problems require a satisfying relationship with a woman. Also, the worker serves another part of the program by seeing the mate while the patient is seen by a doctor.

A consulting psychologist is available for testing, to provide clues when certain therapeutic roadblocks are encountered. A consulting neurologist delineates any neurological complications that may be present, and utilizes them as a means of establishing a relationship in patients where "relationship therapy" is the treatment of choice. The Medical Clinic is routinely used for evaluation of the physical well-being of the patient prior to the onset of psychotherapy, and it is essential in delineating the physical complications which may interfere with psychiatric treatment.

While treatment is the first and foremost role of the Alcoholism Clinic, two other areas are essential.

The first of these is education. Since the general attitudes toward the alcoholic are moralistic and punitive, it is important that many of the misconceptions be corrected. The alcoholic is not a delinquent — he cannot "stop drinking if he would just want to" — he is an emotionally, and often physically, very ill individual. The adoption of attitudes toward the alcoholic which in the past were reserved for the mentally ill (the stigmatized vestiges of which remain, often to preclude the possibility of early treatment) does nothing toward promoting proper aid to the patients. For this reason our Clinic staff has been engaged in television and radio broadcasts, in cooperation with the office of the State Commissioner of Alcoholism. Lectures have been given to medical, psychiatric, social worker, rehabilitative, nursing, student, and lay groups who have shown an interest in alcoholism.

The monthly Alcoholism Clinic seminar held in our Department of Psychiatry has been directed toward the exchanging of ideas relating to different approaches to the problem, as well as to basic information concerning biochemical, physiological, neurological, and psychological responses. These seminars have now become a part of the training available to public health nurses and pastoral counselors, and are being further expanded. A most important educational advance is the rotation of residents in psychiatry through the Alcoholism Clinic. This is not primarily for experience in treatment, but for exposure through intake procedure to the alcoholic, in order to develop an understanding approach to the condition. We feel that this program is beneficial to the Clinic as well as to the resident, and it is hoped that in the future other services will rotate their personnel through the Clinic.

The other area of great importance to the Alcoholism Clinic involves research. We are a member clinic of the large research program being conducted by the Yale Center for Studies in Alcohol for evaluation of treatment results in alcoholism. In the future it will be necessary to test more formally the thesis of the importance of the initial therapeutic contact and its ultimate effect on long-term treatment, and also to study some of the basic physiological and biochemical effects of alcohol upon the alcoholic. Pilot studies involving radioactive magnesium levels, as well as psychological responses to experimental stress situations in the chronic alcoholic, were completed this year. A study of the marital status of alcoholics, in comparison with a matched group of patients from the Medical and Psychiatry Clinics, was published this past year. The results of the Emergency Ward admission study and the findings observed from the first five years of Clinic operation have been completed.

As our knowledge increases concerning the alcoholic population, it becomes apparent that in time we shall have to go out into the community to deal with and assess this problem more properly. This is because social and cultural factors play an important role in sustaining the alcoholic in his drinking, thereby interfering with attempts at treatment. Only by greater understanding of the family, social, work, and cultural factors can we hope to give the alcoholic the more total approach which now appears necessary.

The study of the community origins of our Emergency Ward alcoholic population is a step in such a direction.

One may well ask if all this effort is worth it. It is conservatively estimated that in the United States there are 5 million addictive alcoholics, 20 million problem drinkers, and that industry loses over one billion dollars a year as a consequence of alcoholism. In addition, it is impossible to measure the total effects of alcoholism upon family life and physical well-being All this is evidence enough that continued medical and community measures will be necessary to cope with this immense problem.

Morris E. Chafetz, M.D.,
Director of the Alcoholism Clinic

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VOLUNTEER GROUPS

DISTAFF CLUB

Santa Claus made a special trip early this year, to be at the Distaff Club Christmas Party on December 10, in the Pent House. Thanks to Mrs. Dwight R. Robinson, hostess for the evening, everyone had a delightful time and felt very much in the Christmas mood. It was a gay start to the holiday season.

On December 18, Mrs. Scott Adler was hostess for the annual "gift wrapping" evening. These gifts were given to the employees' children at the Employees' Christmas Party on December 22. Distaff-ers assisted at the party.

The last event of the month was the Christmas Party for the Burnham patients, held on December 24. Distaff Club members helped at the party. The children, of course, loved seeing Santa Claus.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Brewster, W. R., Jr., Isaacs, J. P., Osgood, P. R., Nylander, A. M., and Chock, R. Y. W.
The effect of thyroid hormones and temperature on the kinetics of contraction and relaxation of ventricular heart muscle.
Bull. Johns Hopkins Hosp. 103:157.

Hallowell, P., Murphy, J. T., and Mangiaracine, A. B.
Sterilization of ampuls with ethylene oxide.
Anesthesiology 19:665.

General Medicine

Henneman, P. H., Benedict, P. H., Forbes, A. P., and Dudley, H. R.
Idiopathic hypercalcuria.
New England J. Med. 259:802.

General Surgery

Grillo, H. C., and Nardi, G. L.
Perforation of the colon during enema into the colonic stoma.
Surg., Gynec. & Obst. 107:659.

McDermott, W. V., Jr.
The treatment of cirrhotic ascites by combined hepatic and portal decompression.
New England J. Med. 259:897.

Quinby, W. C., Jr., and McGovern, J. J.
Surgical correction of defective absorption of vitamin B_{12} in a child.
New England J. Med. 259:755.

Hematology

Freymann, J. G., Burrell, S. B., and Marler, E. A.
Role of hemolysis in anemia secondary to chronic lymphocytic leukemia and certain malignant lymphomas.
New England J. Med. 259:847.

Immunology

Waksman, B. H., and Matoltsy, M.
The effect of tuberculin on peritoneal exudate cells of sensitized guinea pigs in surviving cell culture.
J. Immunol. 81:220.

Waksman, B. H., and Matoltsy, M.
Quantitative study of local passive transfer of tuberculin sensitivity with peritoneal exudate cells in the guinea pig.
J. Immunol. 81:235.

Laboratory Science

Irwin, J. W.
The pulmonary microcirculation of living rabbits during passive anaphylaxis.
Anat. Rec. 130:474.

Scott, J. F., and Taft, E. B.
The conservation of ribonucleic acid by Ehrlich ascites tumor cells.
Biochim. et Biophys. Acta 28:45.

Taft, E. B., and Scott, J. F
Studies in histochemistry. II. Quantitative histochemical estimation of activities of alkaline and acid phosphomonoesterases.
J. Histochem. & Cytochem. 6:340.

Taft, E. B., and Scott, J. F.
Studies in histochemistry. III. Effect of fixation and paraffin embedding on the activity of alkaline and acid phosphomonoesterases.
Lab. Invest. 7:505.

Weille, F. L., Irwin, J. W., Jako, G., Holschuh, L. L., Weille, A. S., Stanley, C. A., and Rappaport, M. B.
Pressures of the labyrinthine fluids.
Ann. Otol., Rhin. & Laryng. 67:858.

Neurosurgery

White, J. C.
Choice of surgical procedures for relief of pain in incurable diseases of chest and abdomen.
In Surgical Clin. North America, vol. 38, no. 5, pp. 1373-1392.

Nursing

Sleeper, R.
What's right with diploma schools of nursing—a reaffirmation of belief.
Hospitals 32:32.

Oral Medicine

Trieger, N., and Stoeckle, J. D.
Stomatitis and pancytopenia associated with thymoma.
Oral Surg., Oral Med., & Oral Path. 11:1229.

Otolaryngology

Kelemen, G.
Toxoplasmosis and congenital deafness.
A.M.A. Arch. Otolaryng. 68:547.

Physical Medicine

Watkins, A. L.
Medical progress: An evaluation of electrodiagnostic testing.
New England J. Med. 259:868.

Physiology

Malt, R. A., Cassells, J. S., and Smith, D. D.
Effect of Valsalva maneuver on circulation time.
J. App. Physiol. 13:303.

Radiology

McConnell, F., Hanelin, J., and Robbins, L. L.
Plain film diagnosis of fulminating ulcerative colitis.
Radiology 71:674.

Schatzki, S. C., and Blade, W. R.
Emergency X-ray examination in the diagnosis of severe upper gastrointestinal bleeding.
New England J. Med. 259:910.

Reconstructive Surgery

Cannon, B.
Presidential address.
Plast. & Reconstruct. Surg. 22:287.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Aegerter, E., and Kirkpatrick, J. A., Jr.
Orthopedic diseases; physiology, pathology, radiology.
Philadelphia, W. B. Saunders Company, 1958.
(18E)

Allan, W. S.
Rehabilitation; a community challenge.
New York, John Wiley & Sons, Inc., 1958.
(36V)

American Hospital Association.
Cost finding for hospitals.
Chicago, American Hospital Association, 1957.
(39C)

Anderson, W. A. D.
Pathology, ed. 3.
St. Louis, The C. V. Mosby Company, 1957.
(8A)

Arthritis and Rheumatism Foundation.
Transactions of the Second National Conference on Research and Education in Rheumatic Diseases.
New York, Arthritis and Rheumatism Foundation, 1958.
(18K)

Baldwin, E.
Dynamic aspects of biochemistry, ed. 3.
New York, The Cambridge University Press, 1957.
(5A)

Beierwaltes, W. H., and others.
Clinical use of radioisotopes.
Philadelphia, W. B. Saunders Company, 1957.
(36Jn)

Bishop, W. H. (Editor)
Bibliography of international congresses of medical sciences.
Springfield, Ill., Charles C. Thomas, 1958.
(1Rh)

Bloomfield, A. L.
A bibliography of internal medicine: communicable diseases.
Chicago, University of Chicago Press, 1958.
(11Ah)

Boyd, G. A.
Autoradiography in biology and medicine.
New York, Academic Press, Inc., 1955.
(36Jn)

British Postgraduate Medical Foundation.
Lectures on the scientific basis of medicine, vol. 6, 1956-57.
London, The Athlone Press, 1958.
(6A)

Butler, J. A. V., and Katz, B. (Editors)
Progress in biophysics and biophysical chem-

istry, vol. 8.
New York, Pergamon Press, 1958.
(2Am)

Carpovich, E. A.
Russian-English biological and medical dictionary.
New York, Technical Dictionaries Company, 1958.
(1Dmr)

Churchill, E. D. (Editor)
To work in the vineyard of surgery.
Cambridge, Mass., Harvard University Press, 1958.
(1Ea)

Clifton, C. E., and others. (Editors)
Annual review of microbiology, vol. 12.
Palo Alto, Calif., Annual Reviews, Inc., 1958.
(9A)

Committee on Medical Care Teaching of the Association of Teachers of Preventive Medicine.
Readings in medical care.
Chapel Hill, N. C., University of North Carolina Press, 1958.
(39C)

Conel, J. L.
The postnatal development of the human cerebral cortex, vol. 5. The cortex of the 15-month infant.
Cambridge, Mass., Harvard University Press, 1955.
(19B)

Cook, R. P. (Editor)
Cholesterol; chemistry, biochemistry and pathology.
New York, Academic Press, Inc., 1958.
(5D)

Cope, Sir Zachary. (Editor)
Sidelights on the history of medicine.
London, Butterworth & Co., Ltd., 1957.
(1F)

Dahlin, D. C.
Bone tumors; general aspects and an analysis of 2,276 cases.
Springfield, Ill., Charles C. Thomas, 1957.
(18H)

Deutsch, F., and Murphy, W. F.
The clinical interview, 2 vols.
New York, International Universities Press, Inc., 1955.
(19O)

Eyring, E. (Editor)
Annual review of physical chemistry, vol. 9.
Palo Alto, Calif., Annual Reviews, Inc., 1958.
(5A)

Fields, T., and Seed, L. (Editors)
Clinical use of radioisotopes; a manual of technique.
Chicago, The Year Book Publishers, Inc., 1957.
(36Jn)

Goss, C. M. (Editor)
Gray's anatomy of the human body, ed. 26.
Philadelphia, Lea & Febiger, 1954.
(3A)

Granit, R.
Receptors and sensory perception.
New Haven, Yale University Press, 1955.
(19C)

Harris, R. S., and others. (Editors)
Vitamins and hormones, vol. 16.
New York, Academic Press, Inc., 1958.
(5N)

Harrower, M. (Editor)
Medical and psychological teamwork in the care of the chronically ill.
Springfield, Ill., Charles C. Thomas, 1955.
(13P)

Hewer, C. L., and Lee, J. A.
Recent advances in anesthesia and analgesia, ed. 8.
Boston, Little, Brown and Company, 1957.
(22Ea)

Homburger, F., and Bernfeld, P. (Editors)
Symposium on research advances applied to medical practice, no. 3. The lipoproteins; methods and clinical significance.
Basel, S. Karger, 1958.
(5B)

International Conference on Biochemical Problems of Lipids, 4th.
Essential fatty acids.
New York, Academic Press, Inc., 1958.
(5D)

International Society of Blood Transfusion.
Seventh Congress, Rome, 1958.
Rome, Ortho-Pharmaceutical Corporation, 1958.
(14B)

Jablonski, S.
Russian-English medical dictionary.
New York, Academic Press, Inc., 1958.
(1Dmr)

Jasper, H. H., and others. (Editors)
Henry Ford International Symposium. Reticular formation of the brain.
Boston, Little, Brown and Company, 1958.
(19J)

Jones, F. A. (Editor)
Modern trends in gastroenterology, 2d series.
New York, Paul B. Hoeber, Inc., 1958.
(16G)

Keys, T. E.
Applied medical library practice.
Springfield, Ill., Charles C. Thomas, 1958.
(1C)

Kritchevsky, D.
Cholesterol.
New York, John Wiley & Sons, Inc., 1958.
(5D)

Lacassagne, A., & Gricouroff, G.
Action of radiation on tissues; an introduction to radiotherapy.
New York, Grune & Stratton, 1958.
(22W)

Lee, R. I.
A doctor speaks his mind.
Boston, Little, Brown and Company, 1958.
(31A)

Lisser, H., and Escamilla, R. F.
Atlas of clinical endocrinology.
St. Louis, The C. V. Mosby Company, 1957.
(14L)

Luszki, M. B.
Interdisciplinary team research.
New York, New York University Press, 1958.
(19M)

Mulholland, J., and others. (Editors)
Current surgical management.
Philadelphia, W. B. Saunders Company, 1957.
(23A)

Nord, F. F. (Editor)
Advances in enzymology, vol. 20.
New York, Interscience Publishers, Inc., 1958.
(5C)

Pack, G. T., and Ariel, I. M. (Editors)
Treatment of cancer and allied diseases, ed. 2, vol. 1. Principles of treatment.
New York, Paul B. Hoeber, Inc., 1958.
(13V)

Page, I. H. (Compiler and Editor)
Chemistry of lipides as related to atherosclerosis.
Springfield, Ill., Charles C. Thomas, 1958.
(5D)

Phelps, W. M., and others.
The cerebral-palsied child. A guide for parents.
New York, Simon and Schuster, Inc., 1958.
(19E)

Podolsky, E. (Editor)
The neuroses and their treatment.
New York, The Philosophical Library, 1958.
(19F)

Popper, H., and Schaffner, F.
Liver: structure and function.
New York, McGraw-Hill Book Company, Inc., 1957.
(16B)

Reitzes, D. C.
Negroes and medicine.
Cambridge, Mass., Harvard University Press, 1958.
(1N)

Sherlock, S.
Diseases of the liver and biliary system, ed. 2.
Oxford, Eng., Blackwell Scientific Publications, 1958.
(16K)

Shy, G. M., and others.
External collimation detection of intracranial neoplasia with unstable nuclides.
London, E. & S. Livingstone, Ltd., 1958.
(23P)

Snapper, I., and others.
Multiple myeloma.
New York, Grune & Stratton, 1953.
(23K)

Tuberculosis in white and negro children, 2 vols., Hardy, J. S., and Brailey, M. E.
Cambridge, Mass., Harvard University Press, 1958.
(26D)

U.S. Army Medical Department.
Surgery in World War II, 4 vols.
Washington, D.C., United States Government Printing Office, 1955-58.
(33J)

Weber, H. H.
The motility of muscle and cells.
Cambridge, Mass., Harvard University Press, 1958.
(4E)

White, P. D., and others.
Rehabilitation of the cardiovascular patient.
New York, McGraw-Hill Book Company, Inc., 1958.
(15D)

Who's who in America, ed. 30.
Chicago, Marquis—Who's Who, Inc., 1958/59.
(1A)

Wolstenholme, G. E. W., and O'Connor, C. M. (Editors)
Ciba Foundation Symposium on the neurological basis of behavior.
Boston, Little, Brown and Company, 1958.
(19A)

Wolstenholme, G. E. W., and others. (Editors)
Ciba Foundation Coloquia on aging, vol. 4. Water and electrolyte metabolism in relation to age and sex.
Boston, Little, Brown and Company, 1958.
(13Po)

Wood, P.
Diseases of the heart and circulation, ed. 2.
London, Eyre & Spottiswoode, 1956.
(15E)

Brief bits:—

Dr. Benjamin Castleman recently returned from Geneva, Switzerland, where he was the United States member at a Conference of the World Health Organization which met to discuss the introduction of preventive medicine into the teaching of pathology. The other panel members were Professors George Payling Wright of Great Britain, Colip of Canada, Hamperl of West Germany, Favilli of Italy, Yoshida of Japan, Cooray of Ceylon, and Avtsyn of the Soviet Union. Dr. Castleman (in collaboration with Dr. Samuel H. Rosen of the Armed Forces Institute of Pathology, and Dr. Averill A. Liebow, Professor of Pathology at Yale University Medical School) has won the second award—the Silver Medal—for their exhibit "Pulmonary alveolar proteinosis—A new entity" at the recent meeting of the American Roentgen Ray Society in Washington, D.C.

Dr. Champ Lyons (*W.S.* 1933) has been elected chairman of the Board of Regents of the National Library of Medicine. Dr. Lyons has been a regent since 1956.

Dr. John W. Raker, by invitation, addressed the Kansas City Surgical Society on November 19. His topic was "Experiences gained in the study of civilian disasters". At this same meeting Dr. Raker was elected an honorary member of the Kansas City Surgical Society.

New addresses:—

Dr. Richard F. Bedell (*C.M.* 1958), New York Hospital, 525 E. 68th St., New York 21, N. Y.

Dr. Madelaine R. Brown (n.), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.

Dr. Norman K. Brown (*M.* 1957), Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington 12, D.C.

Dr. William N. Christenson (*M.* 1949), Cornell Medical Center, New York Hospital, 525 E. 68th St., New York 21, N. Y.

Dr. Harvey S. Collins (*M.* 1944), 131 E. 15th St., New York, N. Y.

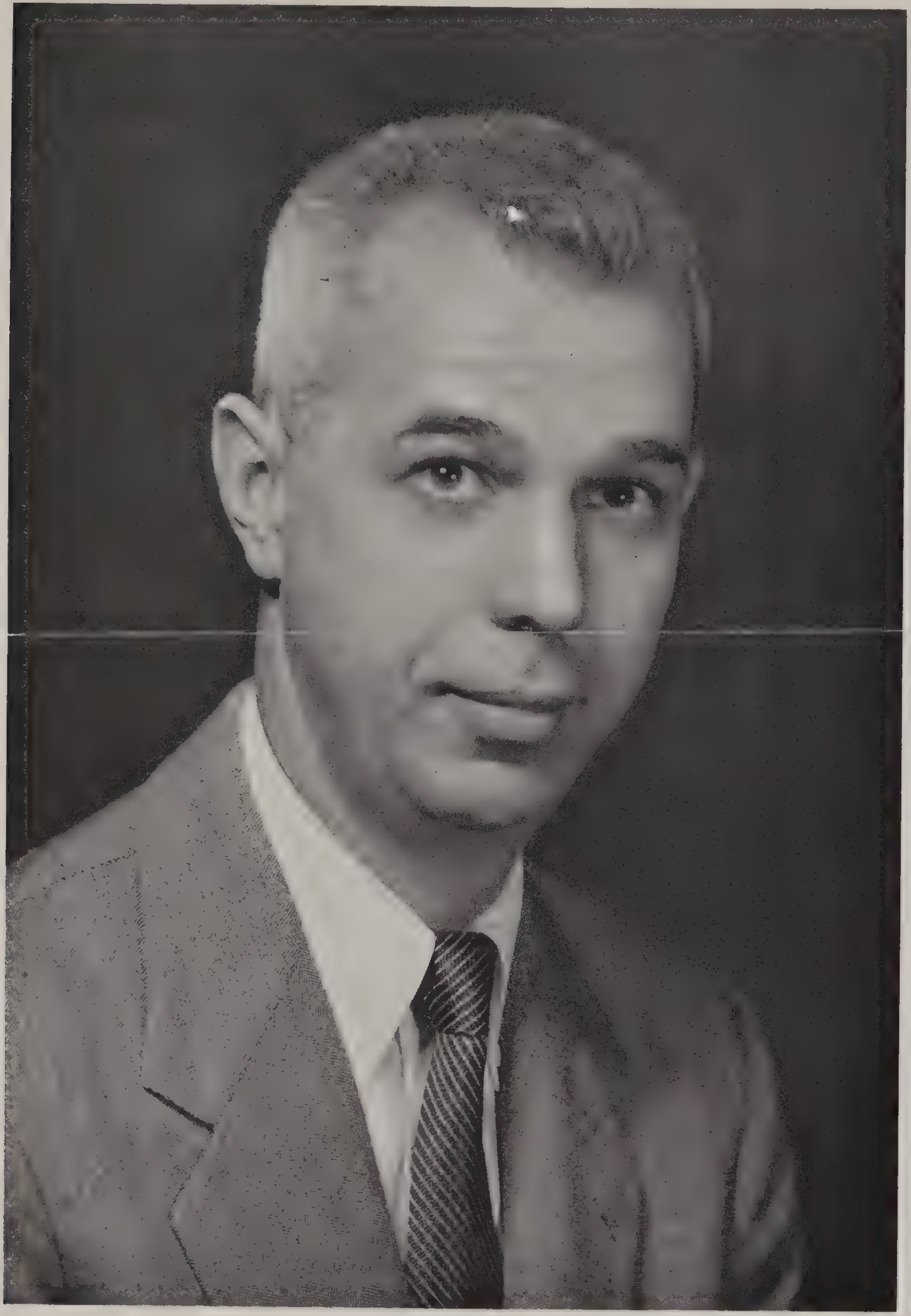
Dr. Richard Collins (*E.S.* 1933), 202 W. Glendale Ave., Alexandria, Va.

Dr. James J. Ferguson, Jr. (*M.* 1951), 507 Bryn Mawr Ave., Swarthmore, Pa

Dr. Chester N. Frazier (c. *D.* 1958), 154 Hamilton Rd., Chapel Hill, N. C.

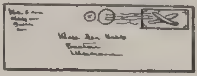
Dr. Harold M. Frost (*W.S.* 1915), Friendship, Maine

Dr. Richard W. Greene (*M.* 1945), 713 E. Genesee St., Syracuse 2, N. Y.



No. 79 in a series of Staff photographs
Dr. Gordon L. Brownell, Associate Physicist (Medicine)

Dr. John B. Griggs (*C.M.* 1929), 650 Farmington Ave., Hartford, Conn.
Dr. John E. Harty (r.p. *Psychiat.* (*McL.*) 1939), 101 N. Main St., Waterbury 2, Conn.
Dr. Milton E. Helman (a.d.), 1874 Beacon St., Brookline 46. Mass.
Dr. Helmut F. Hofmann (clin. & res. fel. *N.S.*), 603 High St., Westwood, Mass.
Dr. Elliott P. Joslin (*W.M.* 1895), 15 Joslin Rd., Boston, Mass.
Dr. Richard B. Kearsley (*C.M.* 1954), Main St., Norwell, Mass.
Dr. Glenn A. Langer (*M.* 1955), Columbia-Presbyterian Medical Center, 622 W. 168th St., New York 32, N. Y
Dr. J. Thaddeus Monroe, Jr. (*M.* 1956), North Carolina Memorial Hospital, Chapel Hill, N. C.
Dr. Huerta C. Neals (gr. stud. a. *M.* 1958), 130 Atlantic St., Jersey City 4, N. J.
Lt. Ernest H. Picard, MC, USAR (a.r.p. *N.* 1957), Annex IV, Brooke Army Hospital, Fort Sam Houston, Tex.
Dr. Francis D. Pierce (r.p. *W.M.* 1931), 619 E. Broward Blvd., Fort Lauderdale, Fla.
Dr. Helen S. Pittman (assoc. p.), Warren Bldg., Massachusetts General Hospital, Boston 14. Mass.
Dr. Desire J. A. Rebello (a.r.p. *D.* 1954), Skin and Cancer Hospital of Philadelphia, 804 Pine St., Philadelphia 7, Pa.
Dr. Thomas Rutter (*E.S.* 1946), 832 E. Main St., Medford, Oreg.
Capt. Allan I. Sandler, MC, USAF (*M.* 1956), 4050 USAF Hospital, Westover AFB, Mass.
Dr. Edward W. Shannon (r.s. *N.S.* 1944), 930 Hanna Bldg., Cleveland 15, Ohio
Dr. Milton V. Veldee (*E.M.* 1920), 1855 Bay Laurel Drive, Menlo Park, Calif.
Dr. Jerome Waldman (a.r.s. *Or.* 1949), 1893 Sheridan Rd., Highland Park, Ill.; 215 W. Water St., Waukegan, Ill.



This most interesting letter has come from Dr. Zvi Laron (r.p. *C.M.* 1955), written from the Beilinson Hospital in Petah Tiqva, Israel:

I am extremely happy to receive The News and so it seems to me as if I am very close to the M.G.H. to which I got accustomed so much. It not only informs me of your newer hospital activities, but also brings me news about many people dear to me, about whom I would otherwise not hear.

Returning home after a three-year absence I found many things changed. The fast increasing population demanded big construction projects and there were many sections completely new to me. So, also, was the hospital I joined, which has 750 beds, of which 75-80 are pediatric ones, besides a newborn station. This is one of the hospitals of the Federation of Labor—the medical insurance which covers more than half the population. We have all the services, including heart surgery, and neurosurgery, and very modern laboratory facilities. The hospital also houses the Rogoff Institute for Medical Research and an Isotope Unit. In our research we are collaborating with the University Medical School in Jerusalem, the Weizmann Institute of Science in Rehovoth, and the Biological Research Station in Nes Ziona.

Our hospital is a non-teaching hospital but is approved for internships and residencies. It also has a Nursing School. It serves a very big population. To give you an example: with 75 beds capacity, the Pediatric Service has about 2000 admissions a year. There are also follow-up clinics, such as tumor clinic, thyroid clinic, adult endocrinology, pediatric endocrinology and metabolism, neurology, dermatology, etc. All the patients are referred from the regional out-patient clinics of the previously mentioned insurance system. Compared with the turnover of patients, our hospital is understaffed because of budgetary reasons. On the other hand, we have many physicians per head of population: 4600 for 2 millions. Nevertheless, most of the doctors are concentrated in the big cities. Last year there was an immigration of 400 physicians from Egypt, Hungary, and Poland, most of whom are already settled here.

The big problems our medicine faces are increased demands for beds and special institutions for convalescence, the mentally retarded, etc. Happily, many institutions for TBC are closing from lack of patients. Also, polio has been reduced markedly since vaccination started last year. Education and sanitary measures have greatly reduced infectious diseases, but still much remains to be done, especially in the field of gastrointestinal infections in infancy. The infant mortality rate is now 32 per 1000 live births.

Personally, I am trying to establish a pediatric metabolic service and to make use of the knowledge I acquired in the United States, especially at the Children's Service of the M.G.H.

Because of the big immigration (tripling of the population in 10 years) our country has many specific problems, a few of which I have briefly mentioned. As one humorist put it, "Israel is a country so small you cannot write its name on a map, and a country where the children teach their parents their national language and sometimes hygiene, too."

Dr. Means received this letter from Dr. William N. Christenson (*M.* 1949) last October:

I certainly wish I could attend the House Pupils Reunion at the M.G.H., but unfortunately I am unable to get away at that time. My reply is terribly delayed, due to my failure to keep the M.G.H. informed of my address change, hence the invitation traveled to London and back before it reached me. [Another illustration of why we are unable to keep the Directory section of our *Annual Report* up to date. —— *Editor*]

My present address has reverted to the New York Hospital, as I returned here two years ago to work in M. Harold Wolff's Human Ecology Study Program. I don't know whether I am a confirmed New Yorker as yet, but I am most happy working in a group which allows me to participate in studies of people, their personalities, and adaptive patterns in relation to their susceptibility to illness. As part of our program, I am trying to develop an immuno-hematology laboratory in which I can follow up some lines of interest stemming from work which I did on cold agglutinins several years ago.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 183 Boston, Mass. February 1959

A PURCHASING DEPARTMENT ACTIVITY

HOSPITAL PURCHASING CORPORATION

An interesting facet of the activity of the Massachusetts General Hospital Purchasing Department is its participation in the Hospital Purchasing Corporation of Boston, Inc., a unique Red Feather supported group-purchasing endeavor, with offices at 25 Huntington Avenue.

Hospital Purchasing Corporation came into being as a result of a belief widely held in the community that proved industrial buying techniques could be profitably employed by hospitals in the battle against constantly rising costs. Under the distinguished leadership of Mr. Robert Cutler of Peter Bent Brigham Hospital, the corporation was formally organized in May 1952 by trustee-appointed representatives of ten Greater Boston hospitals, including Mr. George S. Weld, Secretary and Assistant Treasurer of the Massachusetts General Hospital.

In spite of the enthusiasm at the trustee level, Hospital Purchasing Corporation experienced several difficult years before starting to take root in the community. Hospital personnel generally mistrusted the effort, vendors feared it, and, in turn, Hospital Purchasing Corporation management at times demonstrated a remarkable lack of understanding of its place in the hospital procurement picture. Hard work and enlightened leadership by administrators such as Mr. Henry J. Murphy, Assistant Director of Massachusetts General, carried HPC through this first period, although these difficulties continue to plague the organization.

Enthusiasm for the Hospital Purchasing Corporation activity now comes from all segments of the community. It is one of the regional projects of the Hospital Council of Greater Boston; financial aid and administrative support continue to come from the Red Feather-United Community Fund in spite of sporadic merchant opposition; Mr. J. Reed Morss, President of the Hospital Council of Metropolitan Boston, directed a letter to the hospitals in the area urging maximum utilization of the facility; third party agencies support it as an ally in the battle against rising rates; the general public's interest, an extension of its concern with the cost of hospitalization, was manifested in the *Boston Herald* editorial, "Tender efficiency", published May 17, 1958; and support from the medical community was manifested in the February 1958 issue of the *Massachusetts Physician.*

What is unique about Hospital Purchasing Corporation is the fact that it is essentially a committee-type operation. The board of directors has a membership drawn from hospital administration and the general public. Mr. Frederick D. Foster, Assistant Director of Massachusetts General Hospital, serves on this committee and as vice-president. At the heart of the organization is the Standardization and Purchasing Committee, made up of purchasing agents from member hospitals. This group, which includes Mr. Joseph F. Hill, Jr. of Massachusetts General Hospital, is charged with final responsibility for all contracts and price offers which are negotiated for the membership. This committee is supported in its work of standardization by product committees of dietitians, maintenance engineers, and pharmacists, which set specifications and explore the suitability of items for group purchase. Expert advice is called upon and professional testing facilities are retained wherever it is deemed necessary. These committees are serviced and coordinated by a small office staff composed of a manager, assistant manager, and two clerks.

The value of HPC to the Greater Boston hospital community extends far beyond the dollars and cents savings in the products which it purchases. Of far greater importance is the fact that through this facility — for the first time —hospital representatives meet to exchange ideas and discuss problems with a view to finding the product or products which will contribute most effectively to patient care. The development of this technique was accompanied, of necessity, by a limiting of personal purchasing prerogatives to those deemed justifiable because of good judgment. Over the years, however, even this severe limitation has come to be accepted. By transferring purchasing from a personal preference basis to one of carefully reasoned choice, and by creating a set of circumstances wherein an individual's ideas were reviewed and either approved or disapproved by his professional peers, Hospital Purchasing Corporation made a substantial contribution to better hospital administration. Much of the credit for the development of this phase of HPC must go to Mr. Foster. Obviously, as the use of this technique spread, it became a major weapon against the hospitals' mistrust mentioned above. Other, older, group purchasing organizations have watched the growth of this new approach to group purchasing with considerable interest and there are indications that it will set the pattern for future development.

For several years, Massachusetts General Hospital has used a patient gown which was developed in one of the early HPC projects. The democratic character of Hospital Purchasing Corporation was evolved during the gown project which was undertaken at the request of the membership because of general dissatisfaction with the commercial gowns which were available.

In developing the gown, product committees of housekeepers, laundry managers, and nursing personnel were called upon to aid in drawing up specifications, in order that features which the majority felt were most desirable might be incorporated. The next step was to call in five leading hospital garment manufacturers and ask them to criticize the hospital specifications from the standpoint of practical manufacturing methods and to tell of their experience with this item. Considerable discussion and numerous suggestions ensued; divergent views on style, material, and other features had to be weighed and reconciled before a specification could be finalized. In the process a number of sample gowns were made up, illustrating features which were being considered. When finally completed, the draft of the specification was given to Professor Frederick of the Lowell Textile Institute Research Council for a last evaluation and, when approved by him, was accepted as a basis for calling for bids. The time and care which went into this specification has been more than paid for in the satisfaction of the users of the gown. Not only are hospitals pleased with the gown and are reordering it, but it is also being paid the supreme compliment by other gown manufacturers who are copying its features. For the past two years, the gown has been manufactured for Hospital Purchasing Corporation, on a low bid basis, by Altro Workshops — a non-profit corporation employing the handicapped in New York City.

One of Hospital Purchasing Corporation's most difficult problems — and one at which it has worked most diligently —has been that of acquiring good public relations. As a matter of policy, the group is dedicated to purchasing from local suppliers whenever this procedure does not militate against the best interests of the patient. Yet, at times, fear, mistrust, or personal philosophy has caused local suppliers to refuse to sell to the hospitals as a group. In many instances this antipathy has been overcome and a healthy local situation exists; in other instances, the barrier must still subside. In retrospect, it is quite clear that if it were not for the fundamental soundness of group procurement and strong public interest in the success of HPC, attacks by trade groups and their threats to withhold contributions to the Red Feather-United Fund drive could well have brought about a decline in the organization's activity. The hospitals are confident, however, that time and understanding will bring a spirit of friendly cooperation to its relations with all local trade groups.

Once standardization has been achieved, the approach to a contract calls for a study of the problems and costs involved in the manufacture and distribution of a given item. The intent is to use this information for writing a contract which is economically sound — that is, one which accrues savings to the member hospitals and still provides the contractor with a profit which he considers satisfactory. A major goal is the elimination of unnecessary costs in the process of bringing the item from the manufacturer to the consumer. The member hospitals, themselves, have been the greatest obstacle to the reduction of these costs. Even a superficial survey of the structure of firms which service hospitals and the relationships of salesmen to the hospitals which they service, reveals that empires have been built and are being built upon the general belief in the permanence of hospitals' chronic inability to plan. Far from being apologetic about their unnecessary and unreasonable demands, hospitals have generally come to consider this de luxe service as one of their birthrights.

During the negotiation of a contract, Hospital Purchasing Corporation has invariably been able to identify to its membership the costs (and potential savings) inherent in their present mode of doing business, and has attempted to persuade the institution that it should try to conduct its business in a more responsible manner. Like many others who are concerned with the welfare of hospitals, HPC looks to improved planning as a key to a better control over costs.

One of the features of the past year at HPC has been the activity of the Food Committee in development of contracts for 32 items with a dollar value of $139,827.45. Actually, this program has been an extension of the traditional MGH food contracting procedure, and the success which it enjoyed is due almost exclusively to the trail-breaking efforts of Miss Louise Hatch, Director of the Dietary Department, and Mr. John J. Norton, Assistant Purchasing Agent, of Massachusetts General Hospital. At one time or another, they have had to contend with and overcome all of the problems discussed above. An interesting feature of the food program is the fact that, in addition to using wholesalers, HPC has acquired the services of a food broker. This man's interest in the food program has brought about a remarkably pleasant change in the attitude of a number of wholesalers and therefore has made him doubly welcome. The food buying program has progressed so well that it is planned to add a food buyer to the HPC staff during the coming year.

A monumental event during 1958 saw Harvard University and Hospital Purchasing Corporation join hands in the negotiation of a fuel oil contract and successfully conclude a long-term arrangement with a prominent Boston oil company at a never-before-achieved discount from the Boston tank car price. The specifications for the oil and the manner of testing were worked out by the Maintenance Committee of HPC. Mr. Joseph W. Degen, Assistant Director, and Mr. John H. Dobbins, Assistant Purchasing Agent, of M.G.H. have been working closely with this group.

Of interest, too, is the fact that the Maintenance Committee of Hospital Purchasing Corporation made it possible for HPC to place contracts for both lumber and electrical supplies. The manner in which problems of quality, manufacture, supply, and price were worked out reflects great credit to the organization.

Although the Pharmacy Committee of HPC is just beginning its work with Mr. John W. Webb, Assistant Pharmacist-in-Chief, representing M.G.H., Dr. John T. Murphy, Pharmacist-in-Chief, has for some time been working with HPC as a valued consultant.

While the hospitals in Boston work to improve and extend their group procurement facility, similar activity is taking place in many other centers across the nation. In addition, plans are under way for the formation of a national group procurement organization which could begin functioning within the year. This national group would pursue contracts with manufacturers for appropriate items, attempting to find savings in the manufacturing which could be passed on to the hospitals.

Hospital Purchasing Corporation is fortunate to have Mr. Parker D. Perry as its manager. Mr. Perry has spent many years in hospital service industries. The assistant manager of HPC is Mr. Geoffry Jackson, who has been known to Massachusetts General Hospital personnel from the time of his administrative residency here. These men have played an important role in the continuing growth and acceptance of HPC. The volume of purchases has grown from an initial $195,800 to a 1958 figure of $1,268,622.

Joseph F. Hill, Jr., Ph.D.,
Director of Purchases

The Board of Trustees, at their meetings on December 5, 19, and 31, voted:

To accept with regret the resignation of Dr. Thorkild Waino-Andersen from the position of Associate Anesthetist.

To promote:

Dr. Roy E. Mabrey from the position of Clinical Associate in Surgery to that of Assistant Surgeon.

To appoint:

Dr. Joseph Albert as Assistant Resident in Dermatology for one year, beginning July 1;
Dr. Theodore C. Barton as Third Assistant Resident in Surgery, beginning July 1;
Dr. James R. Callison as Third Assistant Resident in Surgery, beginning July 1;
Dr. Monroe Cole as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Noble J. David as Clinical Fellow in Neurology, to act as Assistant Resident in Neurology, for a term of six months, beginning January 1;
Dr. Pierre M. Dreyfus as Assistant Attending Neurologist at McLean Hospital, beginning July 1, 1958;
Dr. Robert G. Frost as Assistant Resident in Anesthesia, beginning September 1;
Dr. Jacqueline Gauthier as Assistant in Psychiatry at McLean Hospital, beginning July 1;
Louisa P. Howe, Ph.D. as Assistant Sociologist, beginning January 1;
Dr. Richard T. Johnson as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Arnold M. Katz as Assistant Resident in Medicine for one year, beginning July 1;
Dr. John H. Knowles as Assistant in Medicine, beginning January 1;
Dr. Glenn A. Langer as Resident in Medicine for one year, beginning July 1;
Dr. Donald B. Lathrop as Exchange Assistant Resident on the Children's Medical Service, for the term December 12, 1958 through January 21, 1959;
Dr. William J. McIlroy as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1;
Dr. Alexander M. McPhedran as Clinical Fellow in Neurology, to carry on the duties of Assistant Resident, for one year, beginning July 1;
Dr. Harry S. Olin as Resident in Psychiatry at McLean Hospital, beginning July 1;
Dr. Clement E. Papazian as Assistant Resident on the Children's Medical Service for one year, beginning July 15;
Dr. Alphonse M. Prus as Assistant Resident in Anesthesia, beginning July 1;
Dr. Mitchell T. Rabkin as Resident in Medicine for one year, beginning July 1;
Dr. Claus W. Reichle as Assistant in Anesthesia, beginning January 1;
Dr. Ellis L. Rolett as Resident in Medicine for one year, beginning July 1;
Dr. Richard L. Sidman as Assistant in Neurology, beginning January 1;
Dr. Merrill K. Wolf as Assistant Resident in Neurology for one year, beginning July 1.

The Trustees also voted:

That Dr. Geoffrey Bourne of Emory University, Atlanta, Georgia, be invited to give a lecture at the Hospital on December 15, 1958;
To grant Mary A. B. Brazier, Ph.D. leave of absence for the months of February and March;
That the promotion of Dr. Yosh Maruyama to the position of Second Assistant Resident in Radiology become effective January 1 rather than April 1.

At their meetings on November 26 and during December, the General Executive Committee voted:

To accept the resignation of Dr. C. Bremner Cameron from the position of Clinical and Research Fellow in Medicine, effective December 12, 1958, because of his returning to England.

To promote:

Dr. W. Gerald Austen to the position of First Assistant Resident in Surgery, beginning January 1;
Dr. Edwin L. Carter to the position of First Assistant Resident in Surgery, beginning January 1;
Dr. Roman W. DeSanctis to the position of Resident in Medicine for one year, beginning October 1;
Dr. John E. Mazuzan, Jr. to the position of Chief Resident in Anesthesia, beginning January 1;
Dr. Jens G. Rosenkrantz to the position of First Assistant Resident in Surgery, beginning January 1.

To reappoint:

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1, 1958;

Dr. Josip Matovinovic as Clinical and Research Fellow in Medicine for one year, beginning December 12, 1958;
Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery for one year, beginning January 1;
Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine for one year, beginning October 1, 1958.

To appoint:

Dr. Gianfranco Dal Santo as Clinical Fellow in Anesthesia, effective upon his arrival in this country;
Dr. James C. DeWitt as Clinical Fellow in Anesthesia, part time, effective immediately;
Dr. G. Richard Dickersin as Clinical Assistant in Pathology, beginning January 1;
Dr. Robert S. Harper as Clinical Fellow in Pathology, for a period of six months, beginning January 1;
Dr. Stefan Kozminski as Clinical and Research Fellow in Surgery for one year, beginning November 1, 1958;
Dr. Annick Lazorthes as Clinical and Research Fellow in Surgery for one year, beginning December 9, 1958;
Dr. Richard C. Packert as Clinical Fellow in Radiology, for the period January 1 through March 31;
Dr. Gilberto Rebouças as Clinical Fellow in Medicine for one year, beginning December 1, 1958;
Dr. Margaret A. Single as Clinical and Research Fellow on the Children's Medical Service for one year, beginning January 1;
Dr. Robert C. Spagnoli as Clinical Fellow in Radiology for one year, beginning July 1;
Dr. Albrecht Struppler as Research Fellow in Neurology, for a period of six months, beginning January 1;
Dr. Hirsh Sulkowitch as Research Fellow in Chemistry, assigned to Urology, for one year, beginning January 1.

A General Executive Committee vote of July 16, 1958, which failed to reach the office of THE NEWS until recently, is that of Dr. Edmund Klein, who was appointed Assistant Resident in Dermatology for one year, beginning September 1, 1958.

* * *

A Distinguished Achievement Award for "significant contributions to human health and welfare" has been made to Dr. Henry K. Beecher. Announcement of the award was made by the board of medical editors of *Modern Medicine*, a publication which annually makes the award. To quote from a news release from *Modern Medicine*:

> Dr. Beecher and nine other leaders of American medicine who were similarly honored were chosen from hundreds of medical researchers, teachers, and clinicians nominated by deans of medical schools and readers of the journal.
>
> Dr. Beecher's contributions to the effectiveness and safety of anesthetic and pain-relieving agents were cited in his award for "Zeal in improving methods of anesthesia and development of means for critical evaluation of new analgesic and anesthetic agents."
>
> As Henry Isaiah Dorr professor of research in anesthesia, Dr. Beecher holds the oldest endowed chair of anesthesia in the world. His is the first full-time laboratory of research in anesthesia. He also has been a consultant to the surgeons general of the army, navy, air force, and public health service.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biological Chemistry

Fekete, L. L., Lever, W. F., and Klein, E.
Inhibition of lipemia clearing activity by human white blood cell and platelet components.
J. Lab. & Clin. Med. 52:680, 1958.

General Medicine

Katz, A. M., and Pan, C. T.
Echinococcus disease in the United States.
Am. J. Med. 25:759, 1958.

Laboratory Science

Earle, D. P., Hutt, M. P., Schmid, K., and Gitlin, D.
A unique human serum albumin transmitted genetically.
Tr. A. Am. Phys. 71:69, 1958.

Neurology

Schwab, R. S.
A simple device for measuring the visual motor reaction time.
Neurol. 8:719, 1958.

Schwab, R. S., and England, A. C., Jr.
Medical and surgical therapy in Parkinson's disease.
In Pathogenesis and treatment of Parkinsonism, compiled and edited by William S. Fields, Springfield, Ill., Charles C. Thomas, chap. 8, 1958.

Schwab, R. S., and England, A. C.
Parkinson's disease.
J. Chron. Dis. 8:488, 1958.

Ophthalmology

Leahey, B. D.
Penetrating keratoplasty: Observations based on a series of 148 cases, with special emphasis on techniques of graft fixation.
Am. J. Ophth. 46:541, 1958.

Otolaryngology

Kelemen, G.
Peristapedial pathology and otitic reinfection.
A.M.A. Arch. Otolaryng. 68:683, 1958.

Kelemen, G.
Physiology of phonation in primates.
Logos 1:32, 1958.

Vallesi, R. N.
L'orecchio nell'idrocefalo congenito.
Boll. d. mal. d. orecchio, d. gola., d. naso 76:465, 1958.

Physiology

Griesemer, R. D., Blank, I. H., and Gould, E.
The penetration of an anticholinesterase agent (sarin) into skin. III. A method for studying the rate of penetration into the skin of the living rabbit.
J. Invest. Dermat. 31:255, 1958.

Psychiatry

Blom, G. E.
The reactions of hospitalized children to illness.
Pediat. 22:590, 1958.

The next issue of THE NEWS will be the last one in which 1958 titles will appear.

* * *

THE RECENT LOWELL LECTURES AT THE MASSACHUSETTS GENERAL HOSPITAL

ON DISEASE AND THE ADVANCEMENT OF BASIC SCIENCE

The series of lectures recently presented here grew out of my term as Chairman of the Committee on Research at the Massachusetts General Hospital. The obligations entailed in that post led to a fresh look at the Hospital and other such hospitals in general. Two very different and little explored areas seemed to need examination. The first of these has been discussed in a long and rather tedious review, "Experimentation in man", an area too little considered, or so it seemed to me, in terms of the proper degrees of freedom involved, and the necessary ethical and moral limitations required of the responsible investigator. Consideration of the second area led to this series of lectures.

* * *

There is not much point in arguing whether there are such things as basic and applied science. One can, as many have done, take the view that there is merely good science and bad science. But there is such a thing as science where the principal interest is in concept, with the discovery and establishment of new scientific concept. This is, probably, basic science at its best. And then there is the application of such concepts, applied science, whether it occurs in a university laboratory of biochemistry or on a hospital ward. The series of Lowell Lectures just concluded was based upon the thesis that some kinds of fundamental advances can be made only in the sick room, in the presence of disease, in the hospital. Recognition of this fact marks a milestone in the development of the university hospital. I do not believe it is overly nationalistic to say that this is, to a considerable degree, an American development. Of course the roots of this are as ancient as the history of man, and the history of experimentation in man is as ancient as the practice of medicine. It may have been the Greeks who first called medicine the mother of the sciences.

In an earlier series of Lowell Lectures, some of us presented a picture of the hospital as it then existed in its relationships with the sea of life around it. *The hospital in contemporary life* was the published form of those lectures. Now, a dozen years later, the task was to examine a newly emerging role of the university hospital, the university hospital as an indispensable instrument for the advancement of some kinds of truly basic science.

One can borrow a figure from the physicists and think of the human body, in one sense a closed system, as a black box. The characteristics of this system are studied and then, just as the physicist after studying his black box puts a perturbation, as he calls it, a stress, on it, so disease affecting the human body provides such a perturbation and its effects are there for study. Nature presents us with far bolder experiments than we would ever dare perform ourselves. We can profit from them. This series of lectures was dedicated to an exploration of some examples of the scientific progress which comes from such a source. Having seen what fundamental ends can be achieved, the investigator is led to carry on where Nature leaves off. Human investigation thus becomes richer and more complex than ever before.

THE UNIQUE POSITION OF THE HOSPITAL AND ITS MATERIAL IN THE ADVANCEMENT OF LEARNING

Knowledge can be advanced in several ways. There is observation and recording; there is the experimental method; there is reasoning, inductive and deductive. Full appreciation of all the broad uses of these tools inside the hospital has yet to be attained; we have not yet come to a full utilization of the material offered by the hospital as the stuff from which basic learning can be advanced. These Lowell Lectures provided an opportunity to show how material to be found only within the hospital can be utilized to make fundamental progress.

Of the three sources of knowledge—observation, experimentation, and reasoning—observation has been the principal source of learning within the hospital. Reasoning, of course, has not been neglected; but reasoning flowers best when experimentation has risen to a really important place. In an elementary sense, every time a physician prescribes a new drug or uses a new dosage of an old one he is experimenting. The immediate interest is not in this often empirical, hit-or-miss pursuit of information, for so many centuries a part of life within the hospital, but rather in man as an experimental animal, where he is the sole source of necessary data, where experiments on him must be far more thoughtfully and carefully planned than animal experiments almost ever are.

We know a great deal about what can be learned from animals. In general, we know how to surround such studies with the proper controls. Is it extreme to say that we know little of how to utilize man as a source of information? I suppose this is too strong a statement when limited to studies of objective phenomena. Nevertheless, we do not yet know well how to utilize man as a subject in the area of subjective phenomena. In this area man is not merely the animal of choice, he is the experimental animal of necessity.

We have already learned that the mathematician is essential here. For years I have been dependent upon Frederick Mosteller, Professor of Mathematic Statistics at Harvard. He has a formal relationship with our department. The mathematician must enter the hospital if the field under discussion is to grow, not just to grow soundly, but to grow at all. You may say, of course sound experimental design is necessary, but why emphasize the importance of the mathematician within the hospital? The answer is quite simple: much of the subjective response material we are concerned with exists only inside the hospital, or at least only within the sick room. The physician experimenter must learn something of the mathematics involved and the mathematician something of the problems that beset the biologist, if they are to form a productive team. We have learned already that to study most of the problems of pain, for example, we must use pain of pathological origin. We are learning that to study even a quasi-subjective matter like cough we must use cough that originates in disease to find out which agents will suppress it. Our work on the measurement of euphoria and the effects of drugs on euphoria and the relationship of personality type to the power of chemical agents to produce euphoria has meaning only in the presence of stress, and some of the very greatest stresses arise in disease found within the hospital. I suspect that in time it will be possible to make some very broad generalizations as to the essential use of "real" (pathologic) phenomena as opposed to contrived (experimental) material.

The point is, the hospital provides a vast amount of such material, material quite different from that obtainable anywhere else, material which can be utilized to make not only clinical advances but also basic (this overworked term is used in a fundamental sense), to make basic advances in the sciences of physiology and pharmacology and neurophysiology as well as in the fields of psychology and psychiatry.

One cannot overlook the fact that the use of man raises profound ethical and moral questions. These problems are intensified by the fact that in many inquiries we are obliged to go to the sick bed for our answers. When we stop to consider the emotion sometimes directed against those who use animals in their studies, we had better strengthen ourselves against the storm which could result when we are accused of making capital, even scientific capital, out of human illness. These matters must be studied first, to prevent abuses of the patient material, and then to prevent abuses of the investigator. You may be as surprised as I was to learn that in the legal view, the physician investigates to his peril, and yet experimentation is essential to the advancement of medical care. If either abuse exists, of the patient or of the investigator, the hospital will suffer. Both must be protected and in this the growth of learning in this broad new field will be advanced.

Everyone knows of the great age and honorable traditions of the Lowell Institute and the lectures carried out under it. I would not like to close these comments about the series of lectures just completed without expressing my regard for the great flexibility of the Institute and its Trustee, Mr. Ralph Lowell, who so generously supported this endeavor to have this series of lectures presented at the Massachusetts General Hospital, even though it did not conform to the established pattern of Lowell Lectureships. The average attendance for each of the 20 lectures was 165.

Henry K. Beecher, M.D.,
Chief of Anesthesia Service

MASSACHUSETTS EYE & EAR INFIRMARY

EAR, NOSE AND THROAT TUMOR CLINIC

The Tumor Clinic of the Massachusetts General Hospital and Massachusetts Eye and Ear Infirmary, headed by Dr. Claude E. Welch, is subdivided into many sections, one of which is known as the Ear, Nose and Throat Thursday Clinic. The largest of these sections is this Ear, Nose and Throat Tumor Clinic, headed by Dr. LeRoy A. Schall, Chief of Otolaryngology. This Clinic meets regularly each Thursday morning on White 2, adjacent to the General Head and Neck Clinic and the X-ray Therapy Department. This busy Clinic is efficiently run by Miss Isadora Glann, R.N. and her associates, assigned specifically to the Tumor Clinic.

The Tumor Clinic of the Massachusetts General and the Eye and Ear officially opened as a separate department in the year 1925. The activities of the Clinic were further accelerated in 1941, when the Huntington Memorial Tumor Clinic patients and their records were brought over here, following the termination of its previous location, and became an integral part of our Clinic.

Originally, the ENT Tumor Clinic was handled by conscientious, able men with foresight who laid the groundwork for those of us who now take part in this important function of the Infirmary. Names like Dr. D. Crosby Greene and Dr. Edwards W. Herman stand out like beacons of light. Dr. Carl H. Ernlund was Senior Surgeon at the Clinic from 1941 until 1957. Dr. Schall's interest in the Clinic dates further back, to the Huntington Clinic, and he has been a most stimulating Chief of the Tumor Clinic along with his many activities as Chief of Otolaryngology. It is the author's good fortune to have worked under these men since 1943. At that time, one small room was utilized to see ten or eleven patients during the course of a morning. In the past fifteen years we have moved three times to larger quarters as the demand for service increased. Over the years, through this Clinic the Massachusetts Eye and Ear Infirmary staff has been able to give increasingly better service to patients afflicted with neoplasms, and we feel that this is one more way in which the Infirmary and the M.G.H. have jointly given a better service to the New England Community.

The need and value of this special ENT Tumor Clinic is best exemplified by a few statistics. In 1948, 1283 patient visits were recorded as having been made. This rose to 1504 in 1951, and down to 1486 in 1952. In that same five-year period of 1948 through 1952, the total visits per year to the entire Clinic went from 12,671 in 1948 to 11,084 in 1952. These figures have dropped off somewhat this past year, there having been 10,137 tumor patient visits in the entire Clinic and 1135 visits to the Tumor Clinic. It is our feeling that this decrease is due to the development of other tumor clinics throughout Massachusetts and other New England States where many of our graduates who have had special tumor training are actively taking part in this general program of better tumor care in patient-areas that formerly were channeled to our Tumor Clinic.

The residents of the Massachusetts Eye and Ear Infirmary, twelve in number, rotate through the ENT Tumor Clinic as part of their educational program and, of course, are able to fortify and apply their knowledge on the wards and in the operating rooms at the Infirmary. We have exposed both Harvard and Tufts University medical students to the ENT Tumor Clinic over the years, hoping to build a cancer-consciousness in these young men, and events have proved this to be a valuable by-product of the Clinic. Many MGH student nurses also rotate through the Clinic, where they are exposed to cancer management.

The function of any department of the Infirmary and the General Hospital includes (1) the best possible service to the patient from the standpoint of early proper diagnosis, early adequate and proper treatment, and conscientious follow-up management. It is our feeling that this is being accomplished in our Clinic. (2) Teaching. Resident and medical student training is carried on within the limits of their programs, but could be improved upon if more of their limited time could be so assigned. Our Clinic staff has always preferred that all the patients be seen by the visiting staff, with residents and students joining us in observation and discussion, rather than to assign patients as cases to each of these young men, as in some other clinics. In this way they see more and benefit by many more discussions of the problem at hand.

Our present ENT Tumor Clinic consists of four assigned examining rooms, leading from a large central room where nurses and secretarial help facilitate a more efficient running of the Clinic. Our Tumor Clinic has been fortunate over the years to have assigned to it Mrs. Ruth Adair, the Tumor Clinic social worker from the Infirmary. She has been doing yeoman work contacting families of patients, relieving the doctors of innumerable small tasks, and helping maintain most satisfactory public relations between the patients, their families, and the Hospital.

Most of the patients originally find their way to the ENT Tumor Clinic by way of the Eye and Ear Infirmary, either from the ENT general clinic, or from the House itself. Some are referred directly to the Tumor Clinic by other otolaryngologists or family physicians.

Laryngeal cancer appears to be our number one lesion and, fortunately, has proved to be most effectively treated in the light of our modern day techniques of radiation and/or surgery. Our head nurse and social worker give us an interesting observation about our patients with this dreaded disease. They have observed that these patients with ENT cancer are rather distinctive, as noted by them, in comparison with other patients in the general Tumor Clinic. They rarely reveal any great outward emotional display as they await their turn to be seen, and show a most unusual feeling of empathy for their fellow patients. There is a kindred spirit which seems to be present year after year. Almost all of these patients know that they have or have had cancer and very rarely refuse to abide by the decisions of the attending physician. It is most unusual for one of these patients not to appear for his stated appointment. The rapport between staff and patients has always been excellent, which apparently aids in the general well-being of the patients. We have tried where possible for that staff member to see the same patient on his return visit, although this is difficult to do. Dr. Harley C. Shands and his group of the MGH staff have already pointed out in their excellent article in *Cancer* how important it is to cancer patients for one physician to assume charge and direction of each individual patient. It certainly reduces the feeling of insecurity and even allays the fear of death, with attendant great suffering, which is present in some degree in all patients in whom cancer has been diagnosed. Hopelessness has been reduced to the irreducible minimum where possible.

One of the most notable changes in the ENT Tumor Clinic since my exposure to it has been the gratifying response to radical neck dissection for metastatic cancer from the upper respiratory system. Whereas prior to 1950 many, many patients would appear with large sloughing, odorous, broken-down neck glands which we treated palliatively with radiation, requiring numerous dressings by doctors, visiting nurses, or family at home, this is rarely seen by us now. Radical neck dissections were only occasionally done at the Eye and Ear Infirmary in the past; 3 in 1948, 9 in 1949, and 4 in 1950, but since then there has been a tremendous application of this form of treatment, resulting in the salvage of so many heretofore failures.

In 1956 a summation of all our neck dissections done at the Eye and Ear Infirmary revealed a very fascinating and most satisfactory fact. In his report of that year, Dr. George F. Reed noted that those patients who presented themselves with metastatic lymph nodes of 2 cm. or smaller, and were subjected to radical neck dissection, showed no evidence of recurrence of the disease at least 2 years later in about 80% of the cases. However, if the metastatic node was not discovered clinically until it had reached a size of greater than 2 cm. at the time of the radical neck dissection, then the 2-year survival rate without evidence of recurrent disease dropped to about 10%.

Therefore, it seemed evident to us that closer and more frequent observation of our post-laryngectomy cases had become a must if we were to salvage still more of our patients. This led to earlier and a greater number of radical neck dissections, so that whereas by 1953, 47 neck dissections had been done, by 1955, 75 had been done. At this writing over 200 radical neck dissections have been done at the Massachusetts Eye and Ear Infirmary since 1952. It is true that there have been failures to eradicate the cancer in many cases, but the overwhelmingly good results and large salvage have been most rewarding.

A re-evaluation of the signs and symptoms of nasopharyngeal cancer, and the significance of certain early objective and subjective findings were reported out of this Clinic by your author as an aid in making an earlier diagnosis. This was pointed up by the finding that whereas only an occasional patient with cancer of the nasopharynx survived prior to 1940, our patients with this disease have had a 28.5% chance for 5-year cure if the diagnosis is made before metastatic glands are noted in the neck. When this occurs, the 5-year cure rate drops to about 3.4%. Almost all cancers of the nasopharynx are radiosensitive, and we owe a debt of gratitude to our most competent X-ray Therapy Department for their mutual help in the management of these problems. However, in view of the poor rate of cure in those patients with metastatic cancer from primary nasopharyngeal cancer, we are observing the results over the next decade from our decision to do radical neck dissections on such patients, if there is a reasonable chance that the primary in the nasopharynx has been controlled by radiation.

In our recent review of the problem of ear cancer, it was observed that cancer of the auricle located within 1 cm. of the external auditory meatus is a very dangerous lesion and will recur in 85% of the cases unless radical surgery including mastoidectomy is done. This fact revealed itself as a result of a study of repeat visits made by these patients over a 15-year period. This has changed our methods of managing these hitherto considered low-grade lesions.

There are many more important areas of information that have been revealed to our ENT Tumor Clinic staff over the years. Frequent re-evaluation of our methods of management, in the light of more statistical information derived from the many problems in the Clinic, has

No. 80 in a series of Staff photographs
Joseph F. Hill, Jr., Ph.D. — Director of Purchases

tended to make us more humble in the face of this disease. However, the increasingly better statistics have made us more optimistic about our end results.

Drs. John E. McKeigue, William P. Rogers, Jr., George F. Reed, and recently Louis E. Griffey have been a most conscientious staff with which to work; and we hope to continue to produce more cures as a result of careful and frequent observation of our ENT Tumor Clinic patients, followed by the proper application of surgery and X-ray therapy.

Daniel Miller, M.D.,
Associate Surgeon

New addresses:—

- Dr. Daniel W. Badal (r.p. *Psychiat.* 1942), 11328 Euclid Ave., Cleveland 6, Ohio
- Dr. Gerardo M. Balboni (hon.p.), 78 Mount Vernon St., Boston 8, Mass.
- Dr. Paul Colokathis (a.r.s. *Or.* 1954), 795 Elm St., Manchester, N. H.
- Dr. Solomon D. David (*Or.* 1922), 911 Medical Arts Bldg., Houston 2, Tex.
- Dr. Sylvia Davies Diehl (a.r.p. *C.M.* 1958), Albert Einstein College of Medicine, New York 61, N. Y.
- Dr. Gardner F. Fay (a.r.s. *Or.* 1957), 1101 Beacon St., Brookline 46, Mass.
- Dr. Robert P. Fornshell (sr. r.s. *Or.* 1958), 345 Main St., Danbury, Conn.
- Dr. John G. Gibson (a.r.p. *Psychiat.* 1951), Dept. of Mental Health, Queen's University of Belfast, Belfast, Northern Ireland
- Dr. Helen S. Gyftaki (res. fel. *Physics* 1958), Alexander Hospital, Vas Sofia and Laodikias St., Athens, Greece
- Dr. Clayton H. Hale (sr. r.p. *R.* 1943), 1200 E. Genesee St., Syracuse 10, N. Y.
- Dr. James Q. Haralambie (*C.M.* 1936), 17 N. Chatsworth Ave., Larchmont, N. Y.
- Dr. John S. Hodgson (*W.S.* 1916), 1180 Beacon St., Brookline 46, Mass.
- Dr. Benjamin B. Jackson (*S.* 1953), 1020 Heyburn Bldg., Louisville 2, Ky.
- Dr. Manucher Javid (r.s. *N.S.* 1952), 4750 Lafayette Drive, Madison 5, Wis.
- Dr. Robert F. Loeb (*W.M.* 1920), 950 Park Ave., New York 28, N. Y.
- Dr. Charles W. Peabody (*E.S.* 1917 & *Or.* 1920), 25 Riverside Drive, Barrington, R. I.
- Dr. James A. Pittman, Jr. (*M.* 1953), Veterans Administration Hospital, Birmingham, Ala.
- Dr. Sam M. Powell, Jr. (a.r.p. *C.M.* 1947), 3154 Reid Drive, Corpus Christi, Tex.
- Dr. Edwin W. Salzman (*S.* 1954), c/o Dr. MacFarlane, Oxford, England
- Dr. Bengt Skanse (res. fel. *M.* 1948), Allmänna Sjukhuset, Malmö, Sweden
- Dr. Horace K. Sowles (*W.S.* 1917), 413 Blackstrap Rd., Falmouth, Maine
- Dr. Thorkild Waino-Andersen (assoc. an. 1958), J. Hillis Miller Health Center, University of Florida, Gainesville, Fla.

Brief bits:—

Mary A. B. Brazier, Ph.D. has been elected a Foreign Affiliate of the Royal Society of Medicine of London, England.

Dr. Bradford Cannon spoke recently to the staff of the Akron General Hospital on "Homotransplantation", and presented a clinic on plastic surgery problems.

Dr. Oliver Cope addressed the Cameron-Willacy County Medical Society, Harlingen, Texas, on January 19. The title of his talk was "Newer concepts in the management of hyperthyroidism". On January 28, Dr. Cope spoke to the Buffalo Academy of Medicine, Buffalo, N. Y., on "Non-toxic nodular goitre: The evolution of the responsibilities of internist and surgeon".

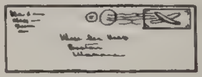
Dr. Hermes C. Grillo presented a paper entitled "Étude chimique et morphologique de la rétraction cicatricielle" before the Société Française de Chirurgie Plastique et Reconstructive at the VI^e Congrès Annuel in Paris on September 26, 1958.

Dr. Oscar Hirsch has been invited to lead a program on "The transsphenoidal approach to the pituitary area". This discussion will assume the form of a symposium, held on February 18, at the New York Academy of Medicine, Section on Otolaryngology.

Dr. Joseph E. Lichty, past Assistant Director at M.G.H., is now Director of Akron General Hospital. We have been told that the Akron newspapers are full of his exploits as a bicycle rider.

The after-dinner address at the May 1958 meeting of the Association of American Physicians was given by Dr. Howard B. Sprague. His title was "The murder of the Penultimate Puritan"—an account based upon original material concerned with the murder of Dr. Parkman by Professor Webster in 1849, in the old Harvard Medical School which stood where the present White Building entrance is located. Dr. Sprague has collected records and memorabilia of this famous case for many years.

Dr. Milton S. Thompson (*Or.* 1934), former Chief of Orthopedic Surgery at Walter Reed Army Hospital, Washington, D.C., has retired from the Service and is living at 441 Burr Road, San Antonio, Texas. Dr. Thompson is an active member of the Prosthetics Research Committee of the N.A.S.—N.R.C.



This letter has come from Dr. Hugh Chaplin, Jr. (*M.* 1948), written from Washington University School of Medicine, St. Louis, Missouri:

I have just received the current Annual Report of the Trustees of the Massachusetts General Hospital. I wish to express my appreciation for being included on your mailing list, since I always review the publication with great interest. My years spent at the Massachusetts General were among the most pleasurable and profitable of my life, and I welcome every opportunity to maintain close ties there.

I note that my own address in your file is approximately five years out of date! This is my own fault for not keeping you informed. I returned from England and was assigned to the National Institutes of Health for three years (1953-1956). Thereafter, I joined the faculty at Washington University School of Medicine in St. Louis, and have been associate dean of the medical school for the past eighteen months.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

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CURRENT WORK IN THE HEMATOLOGY UNIT, THE HEMATOLOGY RESEARCH LABORATORY, AND THE CLINICAL LABORATORIES

I have interpreted literally the invitation given me to describe for these columns the activities of the new Hematology Unit and Laboratories and to write down something of the thinking behind its program and of the current state of the art itself. Surely, anyone writing on the state of any field of learning today could begin by pointing to the enormous rate at which progress is being made, to the increasing difficulty of keeping abreast with the printed reports of that progress, and to the still worse difficulties of maintaining effective communication between individuals in and out of the field.

I shall begin this way, too, but with the added qualification that medicine is especially subject to these difficulties. Perhaps no one will be offended if I suggest further that internal medicine is the most sensitive area of medicine in this regard and—I shall go all the way—hematology is medicine's most tumultuous sector. Possibly this view could be debated and I should be happy to debate it, but that would slow down our work. For the purposes of this brief essay, let us accept the premise that hematology is, at the least, one of medicine's most vital and active arenas.

What does this mean for those responsible for research and teaching in hematology and for providing consultative assistance in the care of patients with blood diseases? I would say, first, in trying to answer the question of how to cope, that there is probably no better answer than the famous dictum of Professor P. W. Bridgman: you do your damnedest. As in all fields, the unknown will always outweigh the known and the sum of knowledge will always exceed any one man's capacity for knowledge. The pit into which we are peering seems not to have a bottom and that is the way things are.

In light of this, how are we to proceed with our daily work? What principles should guide our choice of the ways in which we spend our time? I have the deep conviction that these are very great questions with no *right* answers—that is, no answers that are right for everyone. I have given these matters much thought in planning *our* program and, before describing it in any detail, perhaps I might be permitted to state briefly some concepts which do seem reasonable to me.

One of these is that we must follow where the problems lead. Hematology, possibly more than many branches of medicine, has a large picture window facing out upon the central square of contemporary biological science. To deal constructively with the everyday problems of hematology, one must necessarily face some of the fundamental problems of immunology, biochemistry, genetics, physical chemistry, cellular biology, and other sciences uncounted. In many cases, the basic scientific issues raised are still unresolved in or out of the clinical context. Thus, hematology counts among its routine problems many of the great outstanding unsolved problems of science. Of course, it is also a matter of tribal pride to hematologists that many of science's greatest advances sprang directly from the study of blood and blood disease. Among these are Pauling's discovery of S hemoglobin, a major advance in genetics and biophysics; Ingram's elucidation of the possible mechanistic basis of sickling gene function, a discovery of profound significance for biology; Castle's discovery of the intrinsic factor; the discovery of vitamin B_{12}; the blood groups whose significance for immunology, immunochemistry, and anthropology is immense; and many more.

The choice that faces us is: should we await a distant day when chemists and geneticists will come to our clinics and wards to assist us with our problems? Or should we ourselves become geneticists and chemists as well as hematologists? Here, too, I am sure there is no right answer. My own belief, however, is that increasing numbers of us must enter these fields with all flags flying; that the obligation to straddle fields and to do so competently is ours and it cannot be evaded; that, in fact, the barriers between these fields are artificial man-made contraptions which now need to be dismantled.

Moreover, we must do what we do as well as it can be done. Hematology is, increasingly, a laboratory discipline. Because the blood is easily accessible (though, sadly, the marrow is not), we can examine our material directly and by many techniques. This is done in the laboratory. As new techniques and tests pour forth in increasing number, it is our task to sift out what has merit, to learn to do it well ourselves, and to develop *evidence* in each case that the method being used has or has not validity in our hands. I am certain this is the goal of every group in the Hospital. But few of these have had to decipher, for example, the utter confusion that is today's literature on blood coagulation. I think the point is made. Our laboratory men today must be professionals.

A third and final general point is one that at various times has distressed me greatly. I think that as physicians we should do a better job in delineating the areas of our ignorance. I speak, of course, only for hematology where so much of what we do, so many of the problems we daily encounter lead only to utter frustration. Hematology Rounds is an unending procession of questions without answers: we do not know the cause or cure of leukemia; we do not know why some patients develop marrow aplasia after chloramphenicol therapy and others do not; we do not know why megaloblasts are megaloblasts; we do not know what happens when we give patients steroids as we so often do; we do not know why marrow sometimes becomes fibrotic and we do not know how to reverse this process. The list is a very long one.

This is not to deny that there are a great many things that we do know. I wish here only to emphasize the surpassing importance, at least in my own thinking, of accurate citations of the literature, accurate attribution of credit to those who were, in fact, the true innovators, and critical consideration of what was done in these investigations, what was found, and what may thereby be inferred. To say this, of course, is to say the obvious. I think, however, that when so very much is unknown, we must be unusually careful to keep saying we don't know until the day arrives when we do know. Doing this, I think, will hasten that day.

* * *

Turning from platitudes, let us briefly review the current activities of "organized hematology" in the Hospital. They occur in three categories:

The Hematology Unit. This is the division of the Medical Services whose basic responsibility is to give consultative assistance in the care of patients with blood diseases and to teach hematology to the House Staff and Harvard students. The Unit consists of the members of the Hematology Research Laboratory and other members of the Medical Services with an interest or skill in hematology in one or another of its branches. The key individual in this group is the Clinical Fellow who answers consultation requests and reviews them with the senior members of the Unit. Dr. Bruce J. Sams, Jr. is our first Clinical Fellow. In July 1959, he will be succeeded by Dr. J. W. B. Forshaw of England.

One of the important tasks of the Clinical Fellow is to supervise a large variety of laboratory procedures that are essential in patient care. Among those now being done are the assays for serum B_{12}, leukocyte alkaline phosphatase, A_2 hemoglobin, red cell glucose 6-phosphate dehydrogenase, the Schilling test, Cr^{51} and Fe^{59} studies, and the folic acid absorption test. Much of this work is done with the good technical assistance of Miss Sarah Mair, an important member of our Unit.

Another member of the Hematology Unit is Dr. Lamont W. Gaston, now a Research Fellow in the Hematology Research Laboratory. It is he who has assumed the responsibility of running and supervising the coagulation tests needed in studying obscure hemorrhagic disorders in the light of contemporary knowledge. As I mentioned above, this is an intricate laboratory specialty. Gaston has done a fine job in launching this important work; but many problems lie ahead in this area, among them, the problem of making these tests available to all who may wish them. Much of this work must be done under rigorously controlled conditions of the type available only in the research laboratory. This means that there is a limit in the amount of space and the number of trained hands which can be put to this work. The demands we have already encountered attest to the importance of this field. We will need, in time, to come to grips with the problem of blood coagulation tests and their proper place in the constellation of service laboratories. Until that day, we will merely do our best to meet the demands within the limits that exist.

A most important member of the Hematology Unit and one to whom I wish to pay special tribute is Dr. Bernard M. Jacobson. It is unnecessary for me to recount how much he has contributed and is continuing to contribute to hematology in this Hospital. For many years, Dr. Jacobson carried much of this load on his own shoulders, working tirelessly in the good cause. He is an active member of the new Unit, whose experience and enthusiasm is one of our invaluable assets.

A problem that remains unsolved is the pressing need for a strong Hematology Clinic. At present, out-patients with hematologic disorders are divided between the Anemia Clinic and the lymphoma-leukemia section of the Tumor Clinic. I hope that, in the near future, this schism can be closed so that a strong new Hematology Clinic can come into being.

The Hematology Research Laboratory. The problems under investigation in the Hematology Research Laboratory are all related, in one way or another, to the biochemistry, physiology, and biology of human bone marrow, a tissue about which we know so very little. It is remarkable, actually, how meager is our knowledge of this important organ. What we know has been derived almost entirely from morphological, nutritional, and radiobiological data. We know almost nothing, to cite but a few examples, of the mechanisms governing the release of blood cells from marrow into blood, of the finer architecture of the marrow, of the mechanisms of cellular maturation and differentiation, or of the possible biochemical and nutritional interactions among different cell types.

We have, therefore, undertaken several investigations which aim to cast some light in this dark corner. Dr. John F. Bertles, our first Research Fellow in Hematology, in collaboration with Mrs. Fleurette Hershman, is currently investigating biochemical aspects of the process of reticulocyte maturation. As reticulocytes mature into adult erythrocytes, they lose many constituents, including nucleic acid and a large number of enzymes, among them being those which catalyze Krebs cycle activity and protein synthesis. Since reticulocyte maturation can be observed *in vitro,* the effort here will be to determine the fate of these lost materials, the mechanisms of their loss, the possible significance of the fact that genetically determined phenomena (such as S hemoglobin synthesis) continue actively in the absence of the prime genetic mover, the gene, which presumably was lost with the nucleus in the preceding stage of maturation (a loss, by the way, whose mechanism is completely unknown).

A second problem under investigation relates to the role of vitamin B_{12} in metabolism, a problem which is now one of the urgent unsolved problems in biochemistry. We have chosen to investigate this problem in *Lactobacillus leichmanii,* an organism which requires vitamin B_{12} for growth except when deoxyribosides are added to the medium. If clues to the metabolic role of B_{12} can be obtained in this microbiological system, we will then address ourselves to the question of its role in mammalian metabolism in hopes of finding similar mechanisms. I am fortunate in this work to have the excellent assistance of Miss Barbara Hurlock, formerly of Cambridge University and the University of Chicago.

Studies are also in progress on certain aspects of mammalian cell genetics as manifested in bone marrow cells, tissues which possess a number of possibly useful genetic markers. This work entails yet another attempt to cultivate human bone marrow cells *in vitro,* in this instance using contemporary techniques. Despite the great difficulties involved in this approach, we are optimistic of finding conditions which will permit the establishment of continuous and recognizable cell lines with clonal growth patterns and good plating efficiencies. These are the prerequisites for any meaningful study of cell genetics. Dr. Shelby Kashket, now a Fellow in the Department of Bacteriology and Immunology, will continue this work as a Research Fellow in Hematology beginning July 1, 1959.

We are also continuing our investigations of the biochemistry of peripheral blood leukocytes in various clinical conditions. It is hoped, incidentally, to apply some of this knowledge to the problem of cell type diagnosis in tissue culture preparations where morphology no longer provides useful diagnostic criteria. Finally, we anticipate that Dr. Gaston will soon begin work on the biosynthesis of certain coagulation factors in liver slices *in vitro.*

The general feeling behind the research effort in the Hematology Research Laboratory is that we will first endeavor to obtain basic knowledge concerning the physiology or biochemistry of hematopoietic tissues. Then we will attempt to apply this knowledge in the investigation of clinical problems. At the moment, each of our projects is near to its beginning. Only time will tell if these approaches are fruitful.

The Clinical Laboratories. A third area of responsibility is in the Clinical Laboratories, the Hospital's service laboratory in the field of hematology and clinical pathology.

Two great problems have had to be dealt with in the Clinical Laboratories: one of these may be considered a scientific problem; the other, administrative. As regards the former, it has been necessary to undertake a systematic review of the methods being used in the Laboratory and to revise them, one by one, in favor of more modern, more accurate, or more efficient methods. These efforts are now under way and they will continue in the months and years ahead. For example, we are currently converting to the cyanmethemoglobin method for hemoglobin and have obtained new spectrophotometers which will add greatly to the accuracy of our hemoglobin determinations. We have been dismayed at times by the idiosyncrasies of the clotting time method that has been used in years past and we are now attempting to do something about it, particularly since prolonged clotting times now lead automatically to consultation requests. To improve our assay, it may be necessary to take a heated water bath to the bedside, in which case our range of normal values will be different. If this comes about, the staff will be duly notified. Likewise, we expect in the near future to adopt the blood pressure cuff method of measuring the bleeding time (a method whose proper eponymic designation I will leave to others to decide). This is a better method of doing bleeding time determinations and we should be using it.

Regarding choice of methods, a number of general considerations arise. When procedures are being carried out by relatively inexperienced technicians, the best ones are those which involve clean-cut simple operations that yield easily readable and reportable numerical values. An example of this is the hematocrit determination. The next most desirable category of tests (or perhaps these might be called the second least desirable category) includes tests whose end points do not involve dial reading but the observation or non-observation of certain phenomena. An example of this would be blood typing tests where agglutination or non-agglutination is looked for, or perhaps the "L.E." test. These require the technician to look for a phenomenon and recognize it when she sees it, and this raises the possibility that the observer may or may not be able to decide, in a given case, whether she has indeed found what she is looking for. This is particularly disturbing in situations where phenomena obstinately refuse either to occur or not to occur.

Finally, we have a category of tests which are the most worrisome. These are the tests in which the technician must not only find and recognize something, she must also classify and interpret what she has found and, in failing to report it, convey the implication that it was not there. The examinations of the urinary sediment and the peripheral blood smear are the classic examples of this category of tests. I have not yet found a way by which a laboratory director can confidently give a blanket endorsement to the work of his technicians in this area, even when he has, as I have, the highest respect for the competence of his technical assistants. As one who was once associated with Dr. Thomas Addis, I rather feel as he did that physicians should not so readily relinquish these tasks to laboratory technicians. Addis wrote, "When the patient dies the kidneys may go to the pathologists, but while he lives the urine is ours. It can provide us day by day, month by month, year by year, with a serial story of a major event going on in the kidney. The examination of the urine is the most essential part of the physical examination of any patient with Bright's disease."

I agree with this principle as do those in the Hospital, I feel sure, who regularly see a large number of patients with renal disorders. Although the personnel of the Clinical Laboratories will continue to do tests of this type as well as they possibly can, I hope, nevertheless, that individuals reading these results will keep in mind the conditions and limitations under which this work is done.

This brings me to the second category of problems in the Clinical Laboratories, the administrative problems. I will refer to these only briefly. Within the past year the Clinical Laboratories has been reorganized so that what formerly were five autonomous laboratories (Baker, EW, OPD, White 6, and Burnham 6) is now a single organization with one head technician, Miss Althea King. The seemingly insurmountable problem we face in running this laboratory has to do with the shortage of competent technical personnel. This shortage is probably due to the fact that fewer and fewer women are entering this field and that hospital salaries do not compete successfully with those paid by private physicians and other institutions. We are continuously hiring inexperienced young ladies straight from their training courses, training them on the job for periods of six months or longer, and then losing them to higher paying technical jobs for which their experience at the Massachusetts General Hospital has qualified them. There is a grave shortage of experienced people and we are doing what little we can to correct this shortage by participating in the instruction of Simmons College students who are studying medical technology in the MGH-Simmons course recently begun under Drs. DuToit's and Castleman's direction. But this will not solve the problem and it is difficult, indeed, to get through our daily work load as matters now stand. This is a problem, I think, that the Administration, in its wisdom, will eventually have to meet realistically.

* * *

This concludes my summary of the activities in the field of hematology with which I am associated. As I have already mentioned, these are new enterprises and, as I see them, they have horizons unlimited. Only individuals who are unusually good or foolish would try to gain a foothold in this city of hematological Titans. Since I am sure the present members of the Hematology Unit are very much one of these and not the other, it will be interesting, indeed, to watch how their work comes along.

William S. Beck, M.D.,
Chief of the Hematology Unit
and *Director of the Clinical Laboratories*

The 67th Annual Vincent Show, to support the Vincent Memorial Hospital, will open at New England Mutual Hall on Wednesday, April 1 and run through Saturday, April 4. Last year the Vincent Club gave the Hospital $45,000. This contribution, the largest the Club has ever made, was due in no small measure to the success of the Show, the generous support of its patrons, and the advertisers whose names appeared in the 416-page program of the Show.

This year's Show, entitled "Heaven's above", was written by Mrs. Francis E. Baker, Jr., Dr. Herbert Barry, Jr.'s daughter. The scene is laid in outer space and the action takes place in the year 2020 on a space platform. Living on this way station between planets are, among others, the Hill family. Mr. Hill, in addition to being Chairman of the Defense Council, is much involved in the gala Interplanetary Peace Exposition which is about to open. Other characters include Mrs. Hill, an attractive and dynamic housewife; and the Hills' charming eighteen-year-old daughter, Marion, and precocious small son, Davis, who are anticipating a visit from their grandmother, Mrs. Pettigrew. Having come from Earth (a backward planet), this elderly lady is constantly amazed and bewitched by the push-button existence on the space platform. The threat of an invading robot army and Davis's do-it-yourself invention, Bartholomew, cause considerable chaos and make for many amusing incidents. The frantic gyrations of the dead-pan diplomats, the arrival of the Interplanetary Beauty Queens (Miss Mars is missing), the dancing delegation from Earth, and the "Heavenly Bodies" add sparkle to the plot.

Tickets will be on public sale at the Vincent Show box office at New England Mutual Hall, 225 Clarendon Street, March 16 through April 4. The box office will be open from nine-thirty to five o'clock, Mondays through Fridays. The box office telephone number is COpley 7-6112. Flyers and applications for tickets may be obtained at the Massachusetts General Hospital, at the White Building Information Desk.

The Board of Trustees, at their meeting on January 16, voted:

That Dr. Agnes Burt Russfield be granted leave of absence from her position of Assistant Pathologist, effective as of November 1, 1958;

To rescind the appointment of Dr. Claus W. Reichle as Assistant in Anesthesia until such time as he obtains a Massachusetts license.

To appoint:

Dr. Donald J. Annino as Assistant to the Children's Medical Service, beginning January 15;

Dr. Irwin M. Freedberg as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. William H. Hendren, III, as Assistant in Surgery, effective January 1;

Dr. Bernard F. Mach as Intern in Medicine, for the period January 13 through June 30;

Dr. Joseph F. Stocks as Second Assistant Resident on the Children's Medical Service for one year, beginning July 1;

Dr. James W. Tanner as Second Assistant Resident in Radiology, beginning January 1, 1960.

The Trustees also voted that the number of Interns on the Surgical Service be increased from 8 to 10, effective July 1, 1960.

At their meetings on November 26, January 7, 14, and 28, the General Executive Committee voted:

To promote:

Dr. Milton S. Grossman to the position of Assistant Resident on the Children's Medical Service for one year, beginning January 1;

Dr. Marvin M. Lipman to the position of Resident in Medicine for one year, beginning January 1;

Dr. Donald B. Martin to the position of Chief Resident in Medicine for one year, beginning January 1;

Dr. Walther T. Weylman to the position of First Assistant Resident in Radiology, beginning January 1.

To reappoint:

Dr. Leslie J. DeGroot as Clinical and Research Fellow in Medicine for one year, beginning January 1;

Donald L. Weston, Ph.D. as Research Fellow in Psychology for one year, beginning September 1, 1958;

Dr. Herman Wing as Clinical Fellow in Physical Medicine for one year, beginning September 1, 1958.

To appoint:

Laurence C. Bonar, A.B. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;

Dr. Gerald S. Brickman as Clinical Assistant in Orthopedic Surgery for one year, beginning February 1;

Dr. Ralph C. Darling, Jr. as Clinical Assistant in Surgery, effective January 1, with the privilege of assisting Dr. Robert Linton in the care of his private patients;

Dr. Gardner F. Fay as Clinical Assistant in Orthopedic Surgery for one year, beginning January 19, with the privilege of assisting

Dr. Paul Norton in the care of his private patients in the Baker Memorial and Phillips House;

Dr. Robert C. Hume as Clinical Fellow in Psychiatry for one year, beginning January 1;

Dr. Paul J. Kestens as Clinical and Research Fellow in Surgery for one year, beginning January 1;

Dr. Warren L. Reinoehl as Graduate Student Assistant in Surgery, for a period of four months, beginning January 5;

Dr. Hugh Tatlock as Clinical Assistant in Medicine, beginning January 26;

Dr. Robert G. Willocx as Clinical Fellow in Medicine, for a period of six months, beginning January 1.

The General Executive Committee also voted:

That Dr. David M. Klein be assigned to the Boston Veterans Administration Hospital on affiliation, for a period of three months, beginning February 1, as Junior Resident in Neurosurgery;

That the appointment of Dr. Tsutomu Oyama as Clinical and Research Fellow in Anesthesia be extended an additional two months, beginning January 1;

That in addition to Dr. Joseph D. Sabella's appointment as Clinical Fellow in Pathology, he be given the additional title of Acting Assistant Resident, retroactive to July 1, 1958;

That the appointment of Kathleen Stratton, Ph.D. be changed, retroactively as of August 1, 1958, from that of Assistant Physicist (Medicine) to Research Fellow in Physics (Medicine);

That Dr. Nicholas T. Zervas be assigned to the Neuroradiology and Ward Service, for a period of eleven months, beginning February 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Cardiovascular Surgery

Baumgartner, D. A., Jr., and Nevin, J. E.
Changes in peripheral circulation in lower extremities following the Beck I operation for coronary heart disease.
Am. J. Cardiol. 3:61, 1959.

General Medicine

Pawlowski, E. J., and Pawlowski, M. M. F.
Unconscious and abortive aspects of pseudocyesis.
Wisconsin M. J. 57:437, 1958.

General Surgery

Waddell, W. R., and Cannon, B.
A technic for subtotal excision of the trachea and establishment of a sternal tracheostomy.
Ann. Surg. 149:1, 1959.

Laboratory Science

Nardi, G. L., and Palazzi, H. M.
Studies of liver blood flow in man.
Strahlentherapie, Sonderbande 38:105, 1958.

Waddell, W. R., Geyer, R. P., Hurley, N., and Stare, F. J.
Abnormal carbohydrate metabolism in patients with hypercholesterolemia and hyperlipemia.
Metabolism 7:707, 1958.

Waddell, W. R., Leonsins, A. J., and Zuidema, G. D.
Gastric secretory and other laboratory studies on two patients with Zollinger-Ellison syndrome.
New England J. Med. 260:56, 1959.

Neurosurgery

Bakay, L.
Radioactive phosphate concentration in the cerebral cortex.
Neurol. 9:18, 1959.

White, J. C.
Injuries to the cervical cord: Fundamental factors in treatment and rehabilitation. (Editorial)
J. Bone & Joint Surg. 41-A:11, 1959.

Otolaryngology

Hinojosa, R.
Pathohistological aural changes in the progeny of a mother with pseudohypoparathyroidism.
Ann. Otol., Rhin. & Laryng. 67:964, 1958.

Pediatrics

Hendren, W. H., III, and Haggerty, R. J.
Staphylococcic pneumonia in infancy and childhood: Analysis of seventy-five cases.
J.A.M.A. 168:6, 1958.

Physical Medicine

Wing, H., and Watkins, A. L.
Some medicolegal aspects of physical medicine and rehabilitation.
Arch. Phys. Med. & Rehabil. 39:761, 1958.

Radiology

Blakemore, W. S., Murphy, J. J., Pendergrass, H. P., and Greening, R. R.
Carbon dioxide as contrast medium in roentgenography.
J.A.M.A. 167:310, 1958.

Pendergrass, H. P., Tondreau, R. L., Pendergrass, E. P., Ritchie, D. J., Hildreth, E. A., and Askovitz, S. I.
Reactions associated with intravenous urography: Historical and statistical review.
Radiology 71:1, 1958.

Miscellaneous

Farnsworth, D. L.
Counseling in medical school via faculty advisers.
J. Med. Ed. 33, no. 10, pt. 2, 107, 1958.

Farnsworth, D. L.
Financing a college health program.
Student Medicine 7:143, 1958.

This is the last issue of THE NEWS in which 1958 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American Cancer Society, Inc.
Symposium on cancer of the head and neck. Annual session, Oct. 28-29, 1957.
New York, American Cancer Society, Inc., 1958.
(13V)

Bankoff, G.
Plastic repair of genito-urinary defects.
New York, Philosophical Library, 1956.
(17A)

Boyer, P. D., and others.
The enzymes, ed. 2, vol. 1.
New York, Academic Press, Inc., 1959.
(5C)

Ciba Foundation.
Ciba Foundation Symposium on amino acids and peptides with antimetabolic activity.
Boston, Little, Brown and Company, 1958.
(5B)

European Society of Haematology.
Proceedings of the Sixth Congress, Copenhagen, 1957, 3 vols.
Basel, S. Karger, 1958.
(14B)

Experimental Cell Research, suppl. 5.
The submicroscopic organization and function of nerve cells.
New York, Academic Press, Inc., 1958.
(2Am)

Freud, S.
The standard edition of the complete psychological works, vol. 12.
London, The Hogarth Press, 1958.
(19Op)

Haynes, B. G.
Autonomic dyspraxia.
London, H. K. Lewis & Co., Ltd., 1958.
(19S)

International Union Against Cancer.
International Cancer Congress, 7th, London, 6th to 12th July, 1958. Abstracts of papers.
London, Chester Beatty Research Institute, Royal Cancer Hospital, 1958.
(13V)

Laegeforeningens Aarbog, 1958-59.
Medicinsk vejviser, 1958-59.
Copenhagen, N. Olaf Mollers Boghandel, 1958.
(38E)

Marti-Ibañez, F.
Men, molds, and history.
New York, MD Publications, Inc., 1958.
(22Yc)

Morgan, A. D.
The pathogenesis of coronary occlusion.
Oxford, Blackwell Scientific Publications, 1956.
(15E)

Pack, G. T., and Ariel, I. M. (Editors)
Treatment of cancer and allied diseases, ed. 2, vol. 2. Tumors of the nervous system.
New York, Paul B. Hoeber, Inc., 1959.
(13V)

Raven, R. W. (Editor)
Cancer, vol. 1-5.
London, Butterworth & Co., Ltd., 1957-1959.
(13V)

Ruesch, J., and others.
Duodenal ulcer.
Berkeley, University of California Press, 1948.
(16G)

Segré, E. (Editor)
Annual review of nuclear science, vol. 8.
Palo Alto, Annual Reviews, Inc., 1958.
(36Jn)

Talairach, J., and others.
Atlas d'anatomie stéréctaxique.
Paris, Masson et Cie, 1957.
(7R)

Thannhauser, S. J.
Lipidoses, ed. 3.
New York, Grune & Stratton, 1958.
(13A)

Van Nostrand's Scientific Encyclopedia, ed. 3.
Princeton, N. J., D. Van Nostrand Company, Inc., 1958.
(1A)

Vestling, C. S. (Editor)
Biochemical preparations, vol. 6.
New York, John Wiley & Sons, Inc., 1958.
(5A)

Who's who, 1958, ed. 110.
London, Adam & Charles Black, 1958.
(1E)

Wolfrom, M. L. (Editor)
Advances in carbohydrate chemistry, vol. 13.
New York, Academic Press, Inc., 1958.
(5D)

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VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

Our cupboard is bare! Furniture is needed!

One of the most successful and worthwhile projects of the Staff Wives Association needs your support again. The supply of furnishings which we lend to our visitors from abroad, and which is so greatly appreciated, is woefully low. We would gratefully accept anything that is usable — chairs, desks, bookshelves, tables, chests, beds, baby articles, household items (such as pots, pans, dishes, glasses, silverware, bedding, draperies, rugs), and any appliance which is in working order (such as irons, toasters, or radios).

We can pick up any articles, or they may be left at the Staff Wives Reception Center, next to the General Store. If you have anything to contribute, please telephone Mrs. Gerald S. Foster, IV4-7405, Mrs. John F. Burke, IV4-6006, or Mrs. Paul M. Howard, IV4-0643.

On January 29, the Staff Wives Association played hostess at a tea in Bartlett Hall for our foreign visitors who are currently studying at the Hospital. This is the only such event planned for this winter for our guests from other lands so the attendance was large, as was anticipated. Other special guests were the officers of the Ladies' Visiting Committee and the Distaff Club, as well as the secretaries of the various Hospital department heads, all of whom have given so much assistance to the Staff Wives Association in rendering service to our visitors from other countries.

DISTAFF CLUB

On January 13, Mrs. Ollie Robbins of the Weston Book Stall Store spoke on "Techniques of story telling". Besides giving us very helpful information and hints, she brought a display of the latest children's literature. Mrs. Roman W. DeSanctis was hostess for the evening.

"Game Night", held in the Pent House on February 19, was a very gay evening, topped off with door prizes and refreshments. Mrs. Gerald F. Winkler acted as hostess.

On February 20, the Club held its second bake sale of the year. Mrs. Ronald A. Malt and Mrs. Wayne M. Hebertson were the co-chairmen for the sale.

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BELGIAN HOSPITALITY

Perhaps the readers of the MGH NEWS might like to hear about my three-weeks' visit in the Benelux last summer and about the First International Symposium on Radioactive Iodine Treatment, to which I was invited by the Belgians. The Symposium was planned and carried out under the chairmanship of Professor Lucien Brull, Chief of the Department of Medicine of the University of Liége. Dr. Brull met several of us who arrived from Brussels by a helicopter which dropped us to the narrow asphalt strip by the river Meuse. Liége lies in a valley whose hillsides are dotted with coal mines and whose heavy industry includes one arms plant which employs about 12,000 men. It is a dynamic city. Soon we felt the warmth and sparkle of Belgian hospitality. We had a leisurely two-hour luncheon with the appropriate wine and then were given a tour of the city before driving to the Brull residence on the outskirts, where Madame Brull had readied a light five-course supper. Theirs is a new home built after the war, and even certain wooden pieces have been chosen carefully by Dr. Brull, who loves to work with his hands, either in the laboratory or at home.

The next day a few of us went on ward rounds and found that the methods of approach to the patient, the investigation of his or her disease, and the care extended were very much like our own. We were impressed with the number of homesick Italians who had come to work in the Belgian coal mines and had soon fretted themselves into peptic ulcers.

The Belgian economy is high and the evidence of prosperity can be seen in their programs of building new roads and huge modern apartments. Their factories are going full blast, the shops are filled with choice articles, and the people are happy and determined, whether they are on foot or on bike, motor scooter, or quadratyred. This country, the battleground of Europe for a thousand years, has an eternal spirit of reconstruction, adventure, and contentment.

Meetings of the Symposium were held around a huge green baize-covered table in the Library of the Hôpital de Baviere. Promptly at 9 A.M. on August 28, the members gathered to begin an informal exchange of ideas, factual and speculative, on the use of radioactive iodine. Fortunately for the three of us from Boston, English was chosen as the medium of exchange. Dr. Carl Cassidy from the New England Medical Center and Dr. Ward Slingerland from the Veterans Administration Hospital were the other two. Many old friends of the Thyroid Clinic were on hand—Professors Michel de Visscher of Louvain, Lamberg from Finland, W. R. Trotter from University College Hospital, London, and L. G. Larsson from Stockholm. Tape recordings were made of the meetings, but the true value lay in the personal exchanges that will not be apparent in the publications.

After the meeting on August 29, Dr. and Madame Brull again entertained us at a garden party at their home—a picturesque scene, with the chef in an enormous white hat visible in the kitchen window and two liveried men busy bringing wines and cakes to our tables which were flanked with roses.

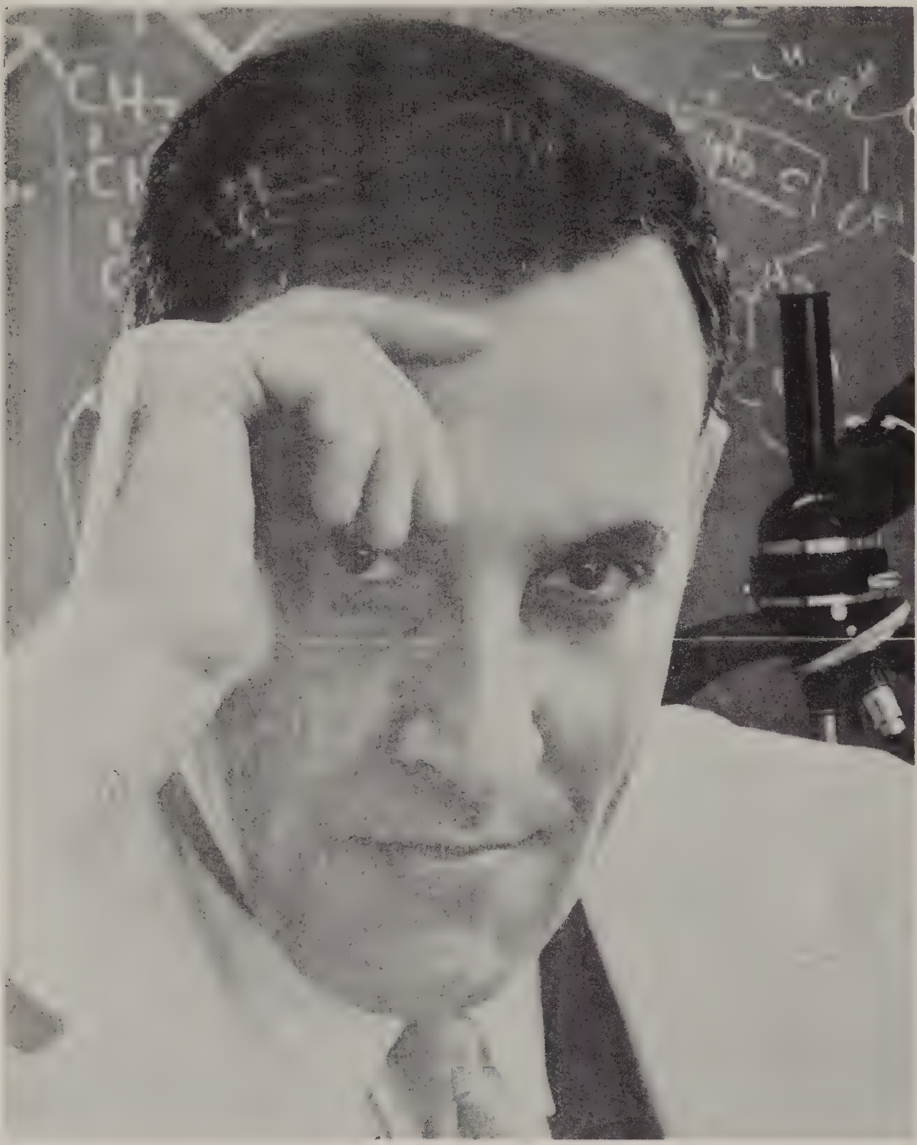
At noon, August 30, the sessions ended and a caravan took us all to a small chalet-restaurant down at the edge of the Ardennes, not far from Bastogne, where we sipped wine under the trees and had more discussions as we waited for the ladies to finish luncheon. That evening came the climax—a dinner at the Vieux Liége, an ancient restaurant that fortunately had escaped the German buzz-bombs. After apéritifs at 7, we climbed the narrow stairway to the third floor and then, around a banquet table, there followed four hours of dining, wining, and verbal exchanges in many tongues. The toastmaster, H. Wijnbladh, Surgical Director of St. Goran's in Stockholm, led the evening with his introduction of the Dean of the Medical School of the University of Liége and then called on several for responses. Dr. Zara of Paris was most amusing. As our representative, I encouraged the continuation of this International Symposium, not only as a means of exchange of scientific data, but one that would draw together the world community in mutual understanding so that we may live peacefully as united nations.

On Sunday, the 31st, everyone folded his papers and stole off, chiefly in the direction of the magnificent World's Fair in Brussels.

Earle M. Chapman, M.D.,
Physician

New addresses:—

Lt. Arthur F. Amick, MC, USNR (*M.* 1957), 9242 Phillip Ave., Norfolk, Va.
Dr. Anthony A. Arzimanoglou (a.r.s. *Or.* 1952), 197 Patisia Ave., Athens 8, Greece
Dr. William J. Baker (*W.S.* 1943), 724 Main St., Laconia, N. H.
Dr. Alice M. Bandeian (*An.* 1943), 210 Pine St., Holyoke, Mass.
Dr. Carl B. Beeman (*Path.* 1934), 833 Lake Drive, S.E., Grand Rapids 6, Mich.
Dr. Frederick S. Bigelow (*E.M.* 1943), Thorndike Memorial Laboratory, Boston City Hospital, 818 Harrison Ave., Boston, Mass.
Dr. George H. Carter (*M.* 1943), 80 E. Concord St., Boston 18, Mass.
Dr. George H. A. Clowes, Jr. (a.r.s. 1948), Cleveland Metropolitan General Hospital, Cleveland 9, Ohio
Dr. John P. Connelly (*C.M.* 1957), 76 W. Norman Ave., Dayton 5, Ohio
Dr. Elizabeth Conrad (a.r.p. *C.M.* 1945), 2240 Cloverdale Ave., Winston-Salem, N. C.
Dr. Ralph C. Darling, Jr. (*C.M.* 1954), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Thomas L. DeLorme (sr. r.s. *Or.* 1955), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Geoffrey Edsall (*E.M.* 1936), Division of Communicable Disease, Walter Reed Army Institute of Research, Washington 12, D.C.
Dr. N. Joel Ehrenkranz (*M.* 1950), University of Miami School of Medicine, 1700 N.W. 10th Ave., Miami, Fla.
Dr. William R. Eyler (*C.M.* 1943). Dept. of Radiology, Henry Ford Hospital, Detroit 2, Mich.
Dr. Douglas A. Farmer (*W.S.* 1943), 203 Commonwealth Ave., Boston 16, Mass.
Dr. Albert B. Ferguson, Jr. (a.r.s. *Or.* 1950), Children's Hospital, De Soto St., Pittsburgh, Pa.
Dr. Henry Field (*C.M.* 1921 & *E.M.* 1922), Veterans Administration Center, Martinsburg, W. Va.
Dr. Cleaveland Floyd (*W.M.* 1904), 55 Appleton St., Cambridge, Mass.
Dr. R. Earle Glendy (a.r.p. 1934), 2037 Crystal Spring Ave., S.W., Roanoke, Va.
Dr. Joel C. Goldthwait (a.r.p. *Path.* 1948), 1180 Beacon St., Brookline 46, Mass.
Dr. Gerald S. Greene (a.r.s. *Or.* 1948), 85 Jefferson St., Hartford, Conn.
Dr. David S. Grice (*Or.* 1943), Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia 4, Pa.
Dr. Ives Hendrick (r.p. *Psychiat.* (*McL.*) 1932), 84 Mount Vernon St., Boston, Mass.
Dr. Robert W. Hopkins (*S.* 1948), Cleveland Metropolitan General Hospital, Cleveland 9, Ohio
Louisa P. Howe, Ph.D. (a. sociol.), Family Guidance Center, 20 Whittier St., Boston 20, Mass.
Dr. Frank S. Jones (*Or.* 1932), 85 Jefferson



No. 81 in a series of Staff photographs

Dr. William S. Beck, Assistant Physician—Chief of the Hematology Unit and Director of the Clinical Laboratories

St., Hartford 14, Conn.
Dr. Rita M. Kelley (*M.* 1947), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Albert W. Kitts (r.p. *C.M.* 1941), Media Clinic, 346 W. Baltimore Ave., Media, Pa.
Dr. Michael Lake (*W.M.* 1924), 11 E. 68th St., New York 21, N. Y.
Dr. David Littmann (clin. assoc. *M.*), Veterans Administration Hospital, W. Roxbury, Mass.
Dr. Harry L. F. Locke (*C.M.* 1912), 293 Farmington Ave., Hartford 5, Conn.
Dr. Oliver A. Lothrop (*W.S.* 1909), 91 Neshobe Rd., Waban 68, Mass.
Dr. W. Holbrook Lowell, Jr. (a.r.p. 1940), 85 Jefferson St., Hartford, Conn.
Dr. Monroe A. McIver (h.s. *E.S.* 1922), 12 Main St., Cooperstown, N. Y.
Dr. Jesus S. Manlapaz (clin. & res. fel. *N.S.*), 116 New St., Shelton, Conn.
Dr. Daniel Miller (assoc. s. *Otolar.*), 60 Charlesgate West, Boston 15, Mass.
Dr. K. Jack Momose (clin. fel. *R.* 1956), 40 Burnview Crescent, Scarboro, Ontario, Canada
Dr. John R. Mote (*W.M.* 1937), 11 E. 68th St., New York 21, N. Y.
Dr. John D. Reeves (r.p. *R.* 1951), University of Florida College of Medicine, Gainesville, Fla.
Dr. Frederic W. Rhinelander (*E.S.* 1937 & *Or.* 1938), Cleveland Metropolitan General Hospital, Cleveland 9, Ohio
Dr. Fiorindo A. Simeone (*W.S.* 1936), Cleveland Metropolitan General Hospital, Cleveland 9, Ohio
Dr. Donald B. Steenburg (*E.S.* 1915), McKee Bldg., Aurora, Nebr.
Dr. Edmund K. Steenburg (*E.S.* 1919), 4200 Cathedral Ave., N.W., Washington, D.C.
Dr. Richard W. Steenburg (clin. fel. *S.* 1948), 205 Churchwarden Rd., Baltimore, Md.
Dr. Hugh Tatlock (*W.M.* 1940), 264 Elm St., Northampton, Mass.
Dr. Langdon T. Thaxter (*E.M.* 1916), Cumberland Foreside, Portland 100, Maine
Dr. Yasuzo Tsukada (res. fel. *N.S.* 1958), Dept. of Physiology, Toho University, Ohmori, Ohtaku, Tokyo, Japan
Dr. Katharine Spreng Waldmann (*M.* 1955), 397B Dawson Ave., Rockville, Md.
Dr. Arthur T. Willetts (a.r.s. *U.* 1942), 79 Union Place, Summit, N. J.

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Having changed all addresses which had been Cleveland City Hospital to Cuyahoga County Hospital in last year's Directory section of our *Annual Report,* we were somewhat puzzled when a recent communication from Dr. Fiorindo A. Simeone indicated still another change. This clarifying reply to our query has come from Dr. Simeone's office.

I am embarrassed that I did not explain to you the change in our hospital's name in sending you Dr. Simeone's address.

In January of 1958 Cleveland City Hospital was transferred to Cuyahoga County ownership and technically became Cuyahoga County Hospital. There is, however, at least one other Cuyahoga County Hospital in Cleveland and it has been necessary to give our County hospitals popular names in order to avoid confusion. The name given this hospital by the Board of Trustees in November of 1958 was Cleveland Metropolitan General Hospital.

I can well understand your wonderment in finding that Dr. Simeone was at Cleveland City Hospital in 1957, Cuyahoga County Hospital in 1958, and Cleveland Metropolitan General Hospital in 1959—and all with the same address of 3395 Scranton Road! We can assure you that it's the same Department of Surgery and the same group of hospital buildings. Only the name has been changed.

* * *

Brief bits:—

Dr. Bradford Cannon attended the meeting of the American Society for Surgery of the Hand, held in Chicago, January 23-24. On January 25 he spoke on "Soft tissue plastic procedures" before the American Academy of Orthopedic Surgeons, also in Chicago.

Dr. Oliver Cope is acting as Visiting Professor of Surgery at Yale University School of Medicine, March 2-7, and gave the Leon Sample Lecture there on March 4. Dr. Cope will be the guest speaker at the Annual Meeting of the Southwestern Pennsylvania Chapter of the American College of Surgeons, held in Pittsburgh on March 20.

Dr. James Howard Means has written the Foreword for Harry Eckstein's new book, *The English Health Service: Its origins, structure, and achievements,* published by Harvard University Press, Cambridge, Massachusetts.

Dr. Marion W. Ropes received the Elizabeth Blackwell Award at the New York Infirmary on January 25. These Awards, established in 1949 in honor of Dr. Blackwell, the first woman physician, are made each year to women who have made significant contributions to the science, practice, or teaching of Medicine.

* * *

Dr. Nathaniel W. Faxon was given the honorary degree of Doctor of Science at the commencement exercises of the University of Rochester last June 8. At last we have succeeded in securing a copy of the citation which was read at that time.

No ancient authority can tell us why a Greek physician of great repute contrasted the endurance of art with the brevity of life, but Nathaniel Wales Faxon, by filling his days with human interest, has blended medicine and life into an art of lasting value. His family was a prodigious progenitor of males produced under the exclusive eye of nature's prognosis. He completed his education at Harvard Medical, served his apprenticeship in his father's country practice, and answered the call of duty during World War I before he became an Assistant Director at the Massachusetts General Hospital in 1919. Three years later he left the salty shores of New England for the banks of the Genesee to serve as Director of the new Strong Memorial Hospital. Here he became an ardent promoter of the hospital insurance plan, at the same time endearing himself to both the staff and the community because he ruled not "by authority and sanction but by influence and example"; he knew how to substitute contingent reason for arbitrary certainty. In 1935 the rumble of the sea lured him back to Massachusetts General where he served [as Director] until his retirement in 1949.

Functioning under the conviction that an institution is not the expanding circumference of a Director's dominion but a growing organism of which the Director is an important part, he identified himself completely with his hospital, he integrated his hospital with the best interests of the community, the municipality, and the State. He grew along with his institutions as they served, and in this wise they realized the full measure of human values "as rare as they are difficult to attain."

THE MASSACHUSETTS GENERAL HOSPITAL 1811 NEWS

No. 185 Boston, Mass. April 1959

SURGICAL RESEARCH

WOUND HEALING

The surgeon depends in nearly all his efforts upon the generally predictable responses of the connective tissue. From a vast experiential knowledge derived from centuries of cutting and sewing he has learned what to expect from his tentative approximation of these tissue layers with one or another of the suture materials. He has also learned to recognize aberrations from desired behavior—failures of union or excessive scar proliferation—but real knowledge of the intimate processes of repair remains small. Correspondingly, the ability to control these processes remains essentially undeveloped. The all-inclusive term "wound healing" encompasses the multitudinous biological activities involved in these processes. Our laboratory is engaged in research in certain problems in this field. I shall preface these brief notes on our activities by stating a hope which guides most investigators in this field and provides the only answer, if answer be required, to the question: "What practical information can be obtained by experimentation which will actually help the healing of wound?" One does hope that comprehension of the intimate processes of wound healing will ultimately lead to opportunities to alter and control these processes. In the meanwhile we must approach this goal by primary efforts in the analysis and dissection of specific problems of a more theoretical nature.

Initially I worked in the laboratory of Dr. Jerome Gross in the Lovett Foundation, studying the properties of connective tissue, in particular those of collagen, and techniques for connective tissue analysis. Later the Huntington Laboratories generously made available a space for surgical research on the third floor of the Research Building, a space previously used as a stock room. I was given the pleasant opportunity to design in this space a small laboratory named the Ira T. Nathanson Memorial Laboratory in tribute to the late Huntington surgeon and investigator. Dr. Paul Russell shares this area, and we have found that a tight but flexible nautical design compensates as well as can be hoped for any space limitations.

Surgeons have long been familiar with the phenomenon of closure of a full thickness skin wound by contraction—the migration of the preformed tissue bordering the wound in toward the center of the wound, effecting partial or complete closure depending upon a host of factors. The assumption had been made for half a century that this process resulted from activity of the granulation tissue filling the wound—acting by shortening of collagen fibers in the mass or in some mysterious way—as an "organ of contraction". But most of the large amount of laboratory work devoted to this problem has been directed to quantitating the process experimentally by attempting to discover mathematical formulae governing the process, or else by utilizing an experimentally contracting wound system as a general measure of "wound healing".

On the basis of the loss of edema and compaction of granulation tissue which is directly observable in a maturing open wound, Dr. Gross and I considered the hypothesis that abstraction of water might secondarily lead to contraction of the new formed tissue and we designed a series of experiments to answer this question. We hoped also to correlate the changes in composition of the granulation tissue with the contraction process.

Dr. George T. Watts, a surgeon from the Queen Elizabeth Hospital in Birmingham, England, worked energetically and capably with us for a year on these researches. As the work progressed we were able to demonstrate that tissue dehydration was not a cause of contraction, and also, surprisingly, we demonstrated a notable lack of correlation of the contraction process with the total amount and concentrations of various elements of the granulation tissue filling the wound: collagen, ground substance, and non-collagenous proteins. This indication that the time-accepted hypothesis of the role of the granulation tissue filling the wound bed as an agent of contraction might not be true was followed by a series of morphological experiments which proved that contraction occurs quite independently of the central granulation tissue filling the wound bed. Only interference with the wound margin itself interfered with the wound contraction process.

This work has served to localize the site of origin of the biological forces resulting in the contraction process. We have recently completed a careful histological study of the marginal area—the "picture frame" of tissue wherein the activity goes on—which further localizes the activity to the loose connective tissue of the margin. Dr. Charles Levene of the Lovett Laboratories has been most helpful in this aspect of the study.

Our present data have led to the formulation of a hypothesis that oriented cell migration is the motile force for the contraction process.. This mechanism is of course yet to be conclusively proved and fully elucidated. A fuller dissection of the role of the various connective tissue elements involved in this "picture frame" zone of activity is currently in progress, utilizing a number of techniques and experimental tools, including scurvy and lathyrism. The work continues as a collaborative venture with Dr. Gross. Dr. Arnold van den Hooff, working in Dr. Gross's laboratory, has also become intrigued by the problem of transmission of forces which the above hypothesis presents and is submitting the problem to electron microscopic analysis.

It will thus be seen that our progress has been by the application of multiple techniques to the problem under study rather than determination of the direction of study by the techniques used.

Other projects are under way and I shall note some of them briefly here. A fuller study of the chemistry of new tissue formation in vitamin C deficiency is in progress. This is presently only a preliminary study following up earlier observations, which we hope may add to our understanding of the role of vitamin C in collagen fiber formation. The endless analytical determinations which these experiments require, as well as the careful observations and manipulations of the contraction experiments, have been diligently done by Miss Martha Morton.

Some years ago in his studies on the properties and behavior of collagen molecules Dr. Gross defined conditions under which collagen might be extracted from tissues, purified, placed in solution, and then reconstituted as a rigid gel. Potential surgical applications of this material as a structural replacement substance seemed evident. We demonstrated that this gel could be dried under special conditions, easily sterilized, and stored indefinitely. It can be poured into molds, resulting in any desired shape. We have put considerable effort in the past into studying the applicability of this material. We have demonstrated that the material, although a heterologous protein, is tolerated as a tissue implant with minimal reaction. Immunologic response is minimal even in the present incompletely purified state, despite rigorous stimulation with adjuvants. The implanted material is gradually replaced by host connective tissue, which may offer some advantage over synthetic fabric prostheses. Although these aspects of the problem, which originally seemed to represent difficult problems, have proved to be no serious barrier to further testing of reconstituted heterologous collagen prostheses, problems of intrinsic structure have posed themselves.

Thus far we cannot supply a happy ending to this story.

These paragraphs will make it evident that while we label our chief field of interest "wound healing", it may be more appropriate to describe the laboratory's field as "studies of connective tissue response to injury".

Hermes C. Grillo, M.D.,
Assistant in Surgery

* * *

On January 28, the American Academy of Orthopaedic Surgeons presented to Dr. Melvin J. Glimcher the Kappa Delta Award for Outstanding Orthopaedic Research. Dr. Glimcher is Assistant in Orthopedic Surgery and Director of the Orthopedic Research Laboratories here at the Hospital.

The Award is donated each year by the Kappa Delta Sorority and awarded by the American Academy of Orthopaedic Surgeons, at its Annual Meeting, to the American citizen in the United States or its possessions who has performed the most valuable research in orthopedic surgery.

At the time of the presentation it was stated that "The Kappa Delta Award is presented for the outstanding scientific contribution to the field of orthopaedic surgery or related basic sciences and the single most important scientific research in this field."

Dr. Glimcher received the Award for research which he has carried on over a period of three years in the laboratories of Professor Francis O. Schmitt at the Massachusetts Institute of Technology.

A report of the October 10, 1958 meeting of the Board of Trustees failed to reach the office of THE NEWS until March. At that meeting the Trustees voted to appoint:

Dr. John F. Barlow as Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Alan M. Bornstein as Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. William L. Dunn as First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Frederick A. Horner as Visiting Physician in Children's Medicine pro tempore, for the month of October 1958;
Dr. Herbert I. Krickstein as Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Eliot M. Slater as Assistant Resident in Anesthesia, beginning June 1.

At that same meeting the Trustees voted that Sir Geoffrey Jefferson be invited to give a Richardson Lecture at the Hospital in November 1958.

At their meetings on February 4 and 20, the Trustees voted:

That the resignation of Dr. Louis Nathan from the position of Clinical Associate in Orthopedic Surgery be accepted, with continuing privileges at Baker Memorial;
That the appointment of Dr. Donald J. Glotzer as Acting Assistant Resident in Pathology be extended from January 1 through March 31, and that he be appointed First Assistant Resident in Surgery, beginning April 1.

To appoint:

Dr. Frederick W. Ackroyd as Assistant Resident in Pathology, for the period February 16 through June 30, and as Clinical Fellow in Pathology for one year, beginning July 1;
Eugene T. Agard, B.Sc. as Assistant Physicist in the Department of Radiology, beginning January 19;
Dr. Frank W. Bora, Jr. as Assistant Resident on the Orthopedic Service for one year, beginning February 4;
Dr. Robert D. Brodell as Exchange Assistant Resident on the Children's Medical Service, for the period January 21 through March 2;
Dr. James B. Caulfield as Assistant in Pathology, beginning July 1;
Maurice Cohen, Ph.D. as Consultant in Physical Metallurgy on the Orthopedic Service;
Dr. David A. Drachman as Resident in Neurology, beginning July 1;
Dr. Robert Fienberg as Clinical Associate in Pathology, beginning January 1;
Dr. Martin H. Flax as Clinical Fellow and Acting Resident in Pathology for one year, beginning July 1;
Alan J. Hodge, Ph.D. as Consultant in Biophysics on the Orthopedic Service, effective January 1;
Dr. W. Scott James as Exchange Assistant Resident on the Children's Medical Service, for the period March 3 through April 11;
Dr. Paul R. McHugh as Resident in Neurology, beginning July 1;
Dr. David G. Satin as Assistant Resident in Psychiatry, beginning July 1;
George Scatchard, Ph.D. as Consultant in Physical Chemistry on the Orthopedic Service;
Dr. Richard J. Stenger as Assistant in Pathology, beginning July 1.

The Trustees also voted to reappoint Drs. Leo B. Burgin, Edward Hamlin, Jr., and Vincent P. Perlo on the Social Service Advisory Committee, for a three-year term; and to appoint Dr. Victor G. Balboni and Mrs. James Howard Means as members of the Social Service Advisory Committee, for a three-year term.

At their meetings on February 11 and 18, the General Executive Committee voted:

To extend the appointment of:

Dr. Frederick A. Horner as Clinical and Research Fellow in Neurology, assigned to Electroencephalography, for the five additional months of January 1 through May 31.

To reappoint:

Dr. J. Gordon Millichap for one year, beginning July 1, with a change of title from Clinical Fellow in Neurology to Clinical and Research Fellow in Neuropathology, working under Dr. Dodge in Pediatric Neurology;
Dr. Edward F. Rabe as Clinical Fellow and Acting Assistant Resident in Neurology for one year, beginning July 1.

To appoint:

Dr. Barry G. W. Arnason as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Ingrid Gamstorp as Clinical and Research Fellow in Neurology and Pediatrics, for a period of nine months, beginning January 1;
Dr. Jørgen G. Jacobsen as Clinical and Research Fellow in Medicine, effective April 1;
Dr. Bruce W. Konigsmark as Clinical Fellow in Neuropathology for one year, beginning July 1;
Dr. Chaim I. Mayman as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;
Dr. Hugo W. Moser as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;
Dr. Elizabeth Struppler as Research Fellow in Neurology, for a period of six months, beginning January 1;
Dr. Octavio B. Tourinho as Clinical and Research Fellow in Surgery for one year, beginning February 1;
Dr. Gerald F. Winkler as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;
Dr. Irving Zieper as Clinical and Research Fellow in Neuropathology for one year, beginning July 1.

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MASSACHUSETTS EYE & EAR INFIRMARY

TEMPORAL BONE LABORATORY

A report to the May 1955 NEWS mentioned that moving into our new research wing would pave the way to expanded activity and that additional workers would be welcomed. Both expectations came true.

Although histopathological work has included organs from the entire field of otolaryngology, the central problem, especially in the technical sense, has remained the processing of temporal bones. Long training and dexterity are needed for this task, even when it is restricted to the usual laboratory animals. But with human material, the difficulties multiply. The hardest bone of the organism encloses the delicate sense organs, yet both have to be processed to be viewed together under the microscope. As this calls for sound experience, scarcity of adequate technical personnel keeps down the number of laboratories equipped for this kind of work. The official list of the American Academy of Ophthalmology and Otolaryngology contains no more than twelve institutions prepared to process temporal bones for histological investigation; and no more than four of these twelve are found on the East Coast.

As a consequence, widely varied material is constantly flowing into this laboratory. Human specimens of clinical importance are its central interest. Animal material arrives from a large number of institutes not equipped for temporal bone work but which are still eager to add information from this special direction to their experimental findings in other organs.

With this inundation by current work, a time lag in reaching the stage for microscopy is often unavoidable because of the long months required in histological preparation of temporal bones. A batch of animal heads may suddenly arrive, representing several months of activity for the technician. Miss Dorothy Linden, the mainstay of the laboratory, has to struggle valiantly indeed to keep our head above water.

Investigation into the pathology of congenital deafness—under a Public Health Grant—was prompted by the fact that, in many conditions where maternal disease was followed by deafness in the offspring, the pathologic basis remained unexplored. For a long time, well-defined and classified abnormalities in the hearing organ have been known—or at least were supposed—to form the basis for congenital hearing loss. After lesions in the wake of rubella of the mother in early pregnancy came into the limelight (among which deafness occupied a prominent position), the large and poorly explored field of embryopathies began to receive due attention. This laboratory considers itself lucky to have secured the wholehearted collaboration of the departments of pathology at the Massachusetts General Hospital, the Lying-in Hospital, the Children's Medical Center, and the Laboratory of Developmental Pathology in collecting rare specimens from the prenatal, perinatal, and early postnatal periods. Rubella, erythroblastosis fetalis, toxoplasmosis, and poliomyelitis have come under observation. This material was made up entirely of "firsts". So it was felt necessary to have recourse—to gain an adequate background for comparison —to conditions which had been thoroughly analyzed, at least in adult pathology: syphilis, nephritis, diabetes. In the latter field some of the findings turned out—to our surprise—to be again "firsts" in the field of intrauterine pathology. The rule was observed to investigate only such cases where a maternal disease had been followed and documented by competent observation through an adequate period. Only in this way was it possible to build on a solid basis when interpreting findings encountered in the hearing organs of the offspring.

Most welcome material for comparison was provided by participating, as to aural histopathology, in the work of other institutions engaged in animal experimentation on problems of their own. Along this line, the Department of Developmental Pathology of the Harvard Medical School and the Roswell Park Memorial Institute of Buffalo, N. Y., offered collaboration on the effects of radiation: the latter in the analysis of the effects of poisoning—by arsenious acid, and again by fluoroacetate, a potent antimitotic by enzyme prohibition; the Harvard School of Public Health in experiments on anoxia.

Around a subject which depends upon a random flow of material, no final integration can be expected at this time. But some features have started to emerge with fair regularity. The ear shows a remarkable resistance amid far-reaching destruction of other organs, even of those in its vicinity, such as brain and eye. While the ear goes on, seemingly undisturbed, to normal development, signs of vascular damage become manifest in characteristic locations. Fragility of the vessels will then show its effects at any period of strain in intrauterine life, at delivery, in the postnatal period. Vascular lesions are responsible, for example, when slow deterioration results in the comparatively later appearance of deafness, around puberty, as in syphilis and diabetes. Yet the wide field—embryopathies of the hearing organ—is hardly scratched at its surface; diligent search for related material, followed by careful processing and interpretation, is urgently needed.

In the field of otolaryngology, animal experimentation is severely handicapped by frequent and extensive pathology in the ear, and in the nasal and paranasal spaces. It is almost impossible to recognize a pathological condition in the living animal: rhinoscopy cannot be applied, X-ray is of little avail, and even serious otitic processes remain hidden, as the drum membrane often remains unperforated. Physiological, pharmacological, behavioral experimentations suffer—thus, a serious setback. Rat, guinea pig, rabbit were investigated in this laboratory, with the purpose of tabulating the changes, and it was found that roughly half the animals were affected by severe, hemorrhageous, suppurative conditions. Disregard of this factor can result in bizarre distortion, as in experimentation in audiology; or when the classic animal of comparative psychology, the rat, is supposed to solve maze problems with the help of its foremost sense—olfaction—and the animal is suffering from a hemorrhageous-suppurative pansinusitis. It would seem that only embryonic material is safe from this source of grave error; after birth no way is left except to carry out a careful postmortem pathohistological investigation and omit from the final tabulation individuals found to be infected. A number of publications from this laboratory have tried to elaborate the statistical and pathohistological aspects of this problem. Lately, collaboration with the Lobund Institute of Notre Dame University has given some hope that germfree breeding, in case it is more generally exercised, may be the way to procure experimental animals with uninfected ears and upper airways—uninfected, that is, for at least a few weeks after removal from the incubator, or remaining uninfected when the nature of the experiment permits the animal to stay permanently in the apparatus.

In the field of phonetics, the supraglottic speech organs were investigated, in collaboration with the Department of Slavic Languages of Harvard University, supported by a grant from the Rockefeller Foundation. The findings could be correlated with data obtained on newborn larynges, in cases with laryngeal stridor, from the Children's Medical Center. The laboratory participated in the launching of a new periodical—*Logos,* New York, National Hospital of Speech Disorders—comprising the entire field of speech communication.

Another field of interest to this laboratory is comparative anatomy. A number of whale's ears are ready, in sectional series, for interpretation. Here, as in other instances, collaboration by the Museum of Comparative Zoology, Harvard University, has been very helpful. The Field Museum of Natural History, Chicago, released the larynges of a rare species of tropical bats, to be studied in connection with the echolalia orientation of these mammals.

Comparative phonetics are represented with studies on the anatomical basis of phonation; the Wenner-Gren Foundation for Anthropology showed its interest in these studies by supporting them with a grant. These investigations yielded a conception regarding the controversial relation between structure and (phonatory) performance in animals.

During the last two years, the collection of sectional series of temporal bones underwent a radical systematization in storage, cataloguing, and description. Individual study of the material is open to every interested person and is facilitated very much by the current system. We have to thank Dr. Paul I. Yakovlev, Director of the Warren Museum of Pathology, for his consent to transfer the large Greene collection of temporal bones to the Infirmary. This very extensive macroscopical collection, together with our collection of sectional series, offers an all-round basis for temporal bone studies. A selection of our histological sections serves now as material for the examination on pathology at the American Board of Otolaryngology.

Among the authors of publications originating from this unit, nine members of the staff of the Infirmary are represented, as well as others from the Harvard Medical School and institutes within and outside the United States. During the last year, Dr. R. Niccoli Vallesi, assistant professor at the University of Florence, Italy, spent six months in the laboratory as a Fulbright fellow and published an essay on the problem of congenital hydrocephalus and the ear. Dr. R. Hinojosa, with a grant from the Cardiologia Institute of Mexico City, spent five months here studying general otolaryngologic pathology; part of these studies resulted in a publication on aural pathohistology in a case of pseudohypoparathyroidism. Dr. J. Sade came from Tel Aviv, with support of the Wenner-Gren Foundation for Anthropology, to pursue comparative anatomical studies on the larynges in higher monkeys.

The modest framework of the laboratory—one technician, two rooms—gives hardly any idea about the amount of material processed routinely or about the endless variety of problems for a large area converging at this clearing center. On the other hand, probably, this "bursting at the seams" testifies to the vitality of the unit. We propose to carry on in the expectation that plans for considerable expansion in personnel and physical plant will materialize.

Moses H. Lurie, M.D.,
Director of Otolaryngological Research
George Kelemen, M.D.,
Research Associate

The Executive Committee of the Massachusetts Eye and Ear Infirmary made the following appointments at their meeting held on January 19:

Dr. Arthur F. Calnan—Assistant in Ophthalmology;
Dr. Andrew J. Gay, Jr.—Fellow in Ophthalmology, assigned to the Howe Laboratory, for the period January 1 through June 30;
Dr. William S. Hagler—Fellow in Ophthalmology, assigned to the Retina Service, for one year, beginning July 1;
Dr. Leon J. Richard—Fellow in Ophthalmology, assigned to the Retina Service, for one

year, beginning May 1;
- Dr. Felix N. Sabates—Fellow in Ophthalmology, assigned to the Retina Service, for one year, beginning July 1;
- Dr. Benjamin Ziv—Fellow in Ophthalmology, in charge of the new Electro-Retinography Laboratory.

At a meeting of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on February 18, the following appointments were made:

- Dr. Thomas P. Cronin — Assistant Surgeon in Ophthalmology;
- Dr. Edwin B. Goodall — Assistant Surgeon in Ophthalmology;
- Dr. Linley C. Happ — Assistant Surgeon in Ophthalmology;
- Dr. John M. Hill — Assistant Surgeon in Ophthalmology.

At a meeting of the Executive Committee of the Eye and Ear Infirmary, held on February 24, the following appointments were made:

- Dr. Paul A. Chandler — reappointed as Associate Director of Ophthalmic Resident Training;
- Dr. Raniero Di Piero — Fellow in Anesthesiology for one year, beginning February 23;
- Dr. Carl Kupfer — Assistant in Ophthalmology;
- S. Peter Marfey, Ph.D. — Biochemist in Otolaryngology;
- Dr. Edward C. Sweebe — Fellow in Ophthalmology;
- Dr. Arthur S. Woodward — Fellow in Otolaryngology for one year, retroactive to July 1, 1958.

The resignation of Dr. Irvin S. Taylor was accepted.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

General Surgery

McCann, M. B., Trulson, M. F., Waddell, W. R., Dalrymple, W., and Stare, F. J.
The effects of various vegetable oils on the serum lipids of adult American males.
Am. J. Clin. Nutrition 7:35.

Waddell, W. R., and Grillo, H. C.
Metabolic effect of fat emulsion.
Am. J. Clin. Nutrition 7:43.

Physical Medicine

Watkins, A. L.
The nervous system — Rehabilitation of the patient with hemiplegia.
In Current therapy — 1959, sec. 12, p. 499.

Watkins, A. L.
Therapeutic exercise in rheumatoid arthritis.
Arthritis & Rheumatism 2:21.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American College of Surgeons.
Directory, 1959.
Chicago, American College of Surgeons, 1959.
(38E)

Anfinsin, C. B. J., and others. (Editors)
Advances in protein chemistry, vol. 13.
New York, Academic Press, Inc., 1958.
(5B)

Armstrong, J. R.
Lumbar disc lesions, ed. 2.
Baltimore, The Williams & Wilkins Company, 1958.
(18Ni)

Borrie, J.
The management of emergencies in thoracic surgery.
New York, Appleton-Century-Crofts, Inc., 1958.
(23Q)

Boyd, W.
Pathology for the physician, ed. 6.
Philadelphia, Lea & Febiger, 1958.
(8A)

Burdette, W. J. (Editor)
Etiology and treatment of leukemia. Proceedings of the First Louisiana Cancer Conference.
St. Louis, The C. V. Mosby Company, 1958.
(14N)

Carter, R.
The doctor business.
Garden City, Doubleday & Company, Inc., 1958.
(6Ge)

Dameshek, W., and Gunz, F.
Leukemia.
New York, Grune & Stratton, 1958.
(14N)

Dubos, R. J. (Editor)
Bacterial and mycotic infections of man, ed. 3.
Philadelphia, J. B. Lippincott Company, 1958.
(9A)

Eckstein, H.
English health service.
Cambridge, Harvard University Press, 1958.
(6Ge)

Edsall, J. T., and Wymans, J. (Editors)
Biophysical chemistry, vol. 1.
New York, Academic Press, Inc., 1958.
(5Am)

Farnsworth, P. R. (Editor)
Annual review of psychology, vol. 10.
Palo Alto, Annual Reviews, Inc., 1959.
(19L)

Fields, W. S. (Editor)
Pathogenesis and treatment of Parkinsonism.
Springfield, Ill., Charles C. Thomas, 1958.
(19F)

Fruton, J. S., and Simmonds, S.
General biochemistry, ed. 2.
New York, John Wiley & Sons, Inc., 1958.
(5A)

Green, D. E. (Editor)
Currents in biochemical research.
New York, Interscience Publishers, Inc., 1956.
(5A)

Harris, R. J. C. (Editor)
Biological applications of freezing and drying.
New York, Academic Press, Inc., 1954.
(2Ah)

Hosler, R. M.
A manual of cardiac resuscitation, ed. 2.
Springfield, Ill., Charles C. Thomas, 1958.
(15E)

Huxley, J.
Biological aspects of cancer.
London, George Allen & Unwin, Ltd., 1958.
(8J)

International Congress of Psychiatry, Second.
Proceedings of the psychopharmacology symposium. Psychopharmacology frontiers, edited by N. S. Kline.
Boston, Little, Brown and Company, 1959.
(22Eh)

Jaffe, H. L.
Tumors and tumorous conditions of the bones and joints.
Philadelphia, Lea & Febiger, 1958.
(18H)

Katz, L. N., and others.
Nutrition and atherosclerosis.
Philadelphia, Lea & Febiger, 1958.
(15F)

McElroy, W. D., and Glass, B. (Editors)
Symposium on the chemical basis of development.
Baltimore, The Johns Hopkins Press, 1958.
(3G)

Martin, G. J.
Biological antagonism.
New York, The Blakiston Company, 1951.
(22Yc)

Masland, R. L., and others.
Mental subnormality.
New York, Basic Books, Inc., 1958.
(19R)

Rathman, D. R.
Unsaturated fats and serum cholesterol.
New York, Corn Products Refining Company, 1958.
(5D)

Rudnick, D. (Editor)
International symposium on cytodifferentiation.
Chicago, The University of Chicago Press, 1958.
(2Am)

Segaloff, A. (Editor)
Breast cancer. The Second Biennial Louisiana Cancer Conference.
St. Louis, The C. V. Mosby Company, 1958.
(13V)

Smith, Kline & French Laboratories. Medical Department.
The clinical uses of prochlorperazine (compazine).
Philadelphia, Smith, Kline & French Laboratories, 1958.
(22Eh)

Stephenson, H. E.
Cardiac arrest and resuscitation.
St. Louis, The C. V. Mosby Company, 1958.
(15E)

Symposium on preventive and social psychiatry, 15-17 April 1957.
Sponsored by Walter Reed Army Institute of Research, Walter Reed Army Medical Center and National Science Foundation.
Washington, The Government Printing Office, 1958.
(19M)

Wynn Parry, C. B.
Rehabilitation of the hand.
London, Butterworth & Co., Ltd., 1958.
(18O)

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SOUTH WITH THE SUN

Last November I had the good fortune to venture forth from my usual confines in the Bulfinch Basement and journey to Porto Alegre, Brazil, to give a two-weeks' course on "The medical uses of radioisotopes". The trip was jointly sponsored by the Instituto de Aposentadoria e Pensoes Dos Comerciarios (IAPC) and the Rio Grande de Sul State Medical Society.

The IAPC, one of a group of semiautonomous governmental agencies analogous to our Social Security Administration, provides medical care and pensions to commercial workers in return for around a 15% (7½ employer, 7½ employee) tax on their wages. The IAPC center in Porto Alegre recently set up an elaborately equipped Isotope Unit, largely on the initiative of their radiologist, Dr. Levy de Albuquerque Souza. Twenty-six physicians from Porto Alegre and other cities throughout Brazil (a country larger than the U.S., I found) gathered there for the session. Although I had ample assurance that I need not speak Portuguese, it developed that about one-half of the group understood my English very poorly. We, therefore, ended up with translating everything, for about eight hours a day. This was arduous, but in one respect rather fortunate, since it gave me time to compose my thoughts while my Brazilian colleague explained the previous sentences in his own tongue.

My hosts were fabulously hospitable—so much so that the experience now seems almost like a story I recently read in a book! Eating huge meals and sampling the local spirits was a necessary part of my visit, and a pleasant one. Rio Grande de Sul wine was excellent—both red and white were full-bodied, somewhat fruity, yet dry. The beef was plentiful and good, usually served broiled on a spit. Interestingly, a well-advertised "regional" dish, the "Galleto de primo canto" or the "Chicken's first song", turned out to have been introduced by Italian cooks only four or five years ago! Lunch, with wine, always lasted for two hours, and was followed by an excellent but thimble-sized cup of coffee. This combination had a marked relaxing and even soporific effect. I would like to suggest that the practice be inaugurated in the White Building dining rooms at once. Certainly, our staff would survive longer on this regimen.

Brazil seemed to be a nation undergoing rapid growth, with abundant natural resources, but a weak industrial base. It is at present gripped by inflation, and the middle class is especially hurt. Naturally, leftist organizations are busy kindling strife and resentment among the laborers. Brazil is presently struggling to overcome deficiencies in basic industry, and in transportation.

Medical care in Porto Alegre appeared not greatly different from ours, but over one-half is supplied via the government "Institutes". This portion is rapidly enlarging, and the Brazilian M.D.'s know they will face the problem of essentially complete government medical care within a few years.

Most astonishingly, in Porto Alegre was a huge medical center being developed by the University Rio Grande de Sul. The plant is ultramodern in design and is in a "garden" setting. The fact that work seems to be progressing rapidly after years of delay is attributed by some to the recent appointment of a surgeon as Rector of the University!

My wife joined me in Porto Alegre toward the end of the course and after a round of farewells we flew on to Buenos Aires. In Buenos Aires we met a large group of endocrinologists, including Drs. Felipe A. de la Balze (res. fel. *M.* 1946), Alberto B. Houssay (clin. & res. fel. *M.* 1950), Enrique del Castillo, J. Reforzo Membrives, friends of Drs. Means and Stanbury. During our visit of three days I toured the hospitals and laboratories and gave informal talks, while Mrs. DeGroot surveyed the shops on Avenida Florida, which, alas, compare favorably with those of Paris. Dr. Bernardo Houssay was a most gracious host at a luncheon which, in typical Argentinian style, consisted of three meat courses and two varieties of wine.

We went next to Mendoza, the capital of Argentinian wine-making industry and, fortuitously, an area of endemic goiter. Readers of THE NEWS probably will recall the 1951 expedition to Mendoza by Drs. Stanbury, Brownell, and Riggs, and their subsequent report published by the Harvard University Press entitled "The adaptation of man to iodine deficiency". Our Thyroid Laboratory has continued to maintain close contact with Dr. Hector Perinetti, Director of the Instituto del Bocio (Goiter Institute). This Institute recently received financial aid from a Rockefeller grant to its parent University, and isotope studies of endemic goiter will be accelerated when their new equipment arrives. The results of salt iodination, mandatory for the last seven years, have not yet been studied.

In December the University de Cuyo Medical School in Mendoza graduated its second class. The Medical School has a six-year program but, in contrast to other Argentinian schools, has a selective admission policy. I was impressed by the research going on under Dr. Fasciola in the Department of Physiology on a biosynthesized polypeptide with marked hypotensive properties. The School is at present situated in the Municipal Hospital Building, where ample clinical material is available. The Hospital, in similarity to many South American institutions, was characterized by more space than needed for both clinical and laboratory use.

Mendoza is a delightful town, on an arid plateau at the very foothills of the Andes. Irrigation and hot weather combine to produce lush vineyards. The province produces vast quantities of superb wines, but none are exported. The explanation, simply, "We drink it all."

The political scene in Argentina was tense during the time of our visit, as Frondizi had just lost his Peronista supporters, and violence threatened over a railroad strike and the recently negotiated oil exploration contracts. Inflation is going on at the rate of several percent per month, despite governmental crackdowns on merchants who increase their prices too actively. A new Chevrolet, for instance, now costs over $10,000 in Argentina.

The organization of their medical profession is quite different from ours. All who wish (many thousands, actually) may enter the free six-year medical schools, although only 300 to 400 ultimately graduate. The sixth year of medical school provides much practical experience, but internships and residencies are not yet established. Instead, most practising physicians donate each morning to the City Hospital, caring for service cases and, in turn, furthering their education. There is general agreement that this arrangement is not consonant with changing times, and should be eliminated.

After four days in Mendoza, we flew, literally, *through* the Andes, to Santiago, and there visited Dr. Jorge L. Litvak and Dr. Jose Barzelatto, both former Fellows in the MGH Thyroid Laboratory.

After this, we flew north, via La Paz, Lima, Panama, and then, with a descending thermometer, to Miami and New York. At Idlewild we put back on the coats we had carried for eight thousand miles. In what seemed like only hours, I was again dodging laundry trucks in the spacious corridors of the Thyroid Laboratory.

Leslie J. DeGroot, M.D.,
Clinical and Research Fellow in Medicine

* * *

Brief bits:—

Mr. Alexander Armour, Director of Purchasing at McLean Hospital, was one of the leaders at a program for registered dieticians, held February 16-20 in Detroit, under the sponsorship of the Catholic Hospital Association of the United States and Canada. Mr. Armour also led a conference on food purchasing at the New England Hospital Assembly, held March 23-25 at the Statler Hilton Hotel in Boston.

Dr. Chester M. Jones served as Physician-in-Chief at the Rhode Island Hospital for three days last February. Every year the Rhode Island invites outstanding physicians to join its medical staff for a few days. Dr. Jones was the ninth to be invited.

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

Eight concerts have been given in our Chapel during the past three months, planned by the Staff Wives Association and under the able direction of Mrs. Milford D. Schulz, chairman of the Music Committee. As always, these concerts have been deeply appreciated by the many wheel-chair patients who have been brought from the various floors of the Hospital, entertained in the Chapel, and returned to their respective areas by members of our Association. Any vacancies left in the Chapel after the patients are in place are always filled by members of the Hospital personnel, who enjoy the talents of the fine artists.

As he has done each year since the concerts were instituted, the renowned pianist, Rowland Sturges, appeared—to open the series this season. Three Staff Wives — Mrs. Josip Matovinovic, a pianist, Mrs. Nathan B. Talbot, a vocalist, and Mrs. John B. Stanbury, a violist—have been among the artists giving the concerts. The Hospital family has been further represented by Miss Adele Khoury from Dr. Beecher's office and Miss Natalie Goregliad of Dr. Nardi's department, both of whom gave song recitals. On February 18, the twenty-four girls of the Buckingham School Special Chorus charmed their audience.

Concerts are planned for the remainder of the season at two-week intervals, on Wednesday afternoons at three o'clock. Watch the bulletin board at the Staff Wives Reception Center for the detailed programs.

DISTAFF CLUB

Under the supervision of Mrs. W. G. Constable, members of the Distaff Club met on February 10 in the Pent House, to mount pictures for the art wagon. Mrs. W. M. Daggett was the hostess for the evening.

At the March 19 meeting our topic was interior decorating, and we all learned many new and creative ideas.

No. 82 in a series of Staff photographs
Dr. Hermes C. Grillo—Assistant in Surgery

Mrs. J. C. Oakley was hostess for the refreshment period after the talk.

Dr. Robert Anderson of the Harvard Graduate School of Education will speak to the Club on April 28. His subject, "Trends in elementary education", is of great interest to us all. We are looking forward to the meeting and to having the members of the MGH Staff Wives Association and the Wives of the Boston City Hospital House Officers as our guests.

New addresses:—

Dr. Richard M. Barry (a.r.p. 1957), Memorial Center for Cancer and Allied Diseases, 444 E. 68th St., New York, N. Y.
Dr. Robert L. Berg (*M.* 1944), Strong Memorial Hospital, Rochester 20, N. Y.
Dr. William R. Blade (r.p. *R.* 1958), 1604 Dockery Ave., Selma, Calif.
Dr. Harry A. Bliss (*M.* 1945), 1853 W. Polk St., Chicago, Ill.
Dr. Parker C. Carson (r.s. *Or.* 1940), 130 Maple St., Springfield, Mass.
Dr. Frederick H. Cummer, Jr. (sr. r.p. *Psychiat.* (*McL.*) 1950), 80 E. Concord St., Boston, Mass.
Dr. Robert C. Detwiler (a.r.s. *Or.* 1956), 68 Charlton Ave., West, Hamilton, Ontario, Canada
Dr. Robert B. Dodd (a.r.p. *An.* 1950), Barnes Hospital, 600 S. Kingshighway, St. Louis 10, Mo.
Dr. Margaret M. Glendy (*C.M.* 1932), Commissioner of Health, Health Dept., Roanoke, Va.
Dr. Frederick A. H. Greenwood (a.r.s. *Or.* 1959), Montreal Children's Hospital, Montreal, Canada
Dr. Falls B. Hershey (*E.S.* 1947), 18 S. Kingshighway, St. Louis 8, Mo.
Dr. Robert E. Key (sr. r.s. *Or.* 1958), 915 5th Ave., Fort Worth, Tex.
Dr. John J. Kneisel (*E.M.* 1940), 170 Maple Ave., White Plains, N. Y.
Dr. Ernest G. Kuhlman (*C.M.* 1925), 122 W. 5th St., E. Liverpool, Ohio
Dr. Ralph H. Luikart (*W.S.* 1917), 708 Medical Arts Bldg., Omaha, Nebr.
Dr. Richard F. Mayer (a.r.p. *N.* 1957), 207 N. Clinton St., Olean, N. Y.
Dr. Kenneth M. Metcalf (r.p. *C.M.* 1925), 115 E. 77th St., New York 21, N. Y.
Dr. Harry D. Morris (*Or.* 1937), 3503 Prytania St., New Orleans, La.
Dr. Tsutomu Oyama (clin. & res. fel. *An.* 1959), 46 Minatomachi, Kushiro, Hokkaido, Japan
Dr. Carl M. Pearson (a.r.p. *Path.* 1948), University of California Medical Center, Los Angeles, Calif.
Dr. Willard C. Rappleye (*W.M.* 1919), Josiah Macy, Jr. Foundation, 16 W. 46th St., New York 36, N. Y.
Dr. Howard Rasmussen (*M.* 1953), Rockefeller Institute, 66th St. and York Ave., New York 21, N. Y.
Dr. Jane S. Rasmussen (*C.M.* 1954), 445 E. 65th St., New York, N. Y.
Dr. Albert E. Rauh (*C.M.* 1936), 725 S. 2d St., Springfield, Ill.
Dr. Hilbert S. Sabin (r.s. *U.* 1941), 4903 Rockwood Parkway, N.W., Washington 16, D.C.
Dr. Myron G. Sandifer, Jr. (*M.* 1948), University of North Carolina School of Medicine, Chapel Hill, N. C.
Dr. Robert B. Sloane (r.p. *Psychiat.* 1953), Queen's University, Kingston, Ontario, Canada
Dr. Shen Kuang Wang (a.r.s. *Or.* 1957), 624 Fairmont Ave., Fairmont, W. Va.
Dr. William C. Wigglesworth (*E.S.* 1945), 78 County Rd., Ipswich, Mass.

* * *

This very interesting letter has come from Lt. William L. Strickler, MC, USNR (a.r.s.), Station Hospital, Navy 103, c/o Fleet Post Office, New York, N.Y. The letter was written on October 25.

Enclosed is my check for The News. Thanks very much for sending it. The News certainly helps close the gap between Newfoundland and Boston.

Since leaving the Surgical Service, I have been working as the surgeon at the U.S. Naval Station hospital here in Argentia. We serve about 8,000 military men and their dependents. We have a 60-bed hospital, with a staff of 8 doctors and 7 nurses. I replaced Jim Rosenkrantz up here, incidentally.

So far, my most interesting experiences have been taking care of the 18 survivors of the recent airplane crash in Placentia Bay, and a 3-day voyage, with helicopter landing, to see a man with head injury on an island outpost following hurricane Helene.

This coming week three of us will attend a medical convention at St. John's, which is the capital as well as the oldest city in North America. John Cabot landed there in the 1500's. It is also the point from which Marconi sent his first trans-Atlantic message.

Argentia is the main airbase for a fleet of $9,000,000 Super Constellation radar patrol planes which provide the distant early warning network over the North Atlantic. These Navy pilots have to be good, because not only is Argentia the only year-round ice-free port in Newfoundland, but it is the most fogbound weather station in the world.

The country is beautiful and abounds with good trout and salmon fishing. Jim Rosenkrantz had quite a reputation as a fisherman before he left. There are many other activities going on up here, in addition, and the time passes very quickly and enjoyably. Nevertheless, I am looking forward with much eagerness to returning to Boston and the M.G.H.

Dr. William J. James (r.s. *N.S.* 1949) sends us this note from 27 Live Oak Drive, Ventura, California:

On September 1, 1958, I was retired from the U.S. Navy with the rank of Rear Admiral, after having served twenty-seven years as a medical officer in a regular and a reserve status. I have opened practice in Ventura in the specialty of Neurosurgery.

This brief line has come from Col. Henry A. Kind, MC, USA (*C.M.* 1935):

Have been in the Army Medical Corps for 23 years and expect to make it 30!

THE NEWS

1811

No. 186 Boston, Mass. May 1959

THE SILVER IMAGE—1821-1959

Most doctors are familiar with practical photography and many are using it in scientific research, but how many are familiar with its background? How many can name the physician who touched off a complete revolution in photography about 8 decades ago?

When the Massachusetts General Hospital was incorporated in 1811, photography did not exist, although the pioneers of photochemistry had long been at work on the idea. Johann Schulze, a natural philosopher in Germany who gave lectures in anatomy and surgery, had published his demonstration of photosensitivity in 1727. He admitted sunlight through the openings of a stencil into a flask containing chalk and lunar caustic (silver nitrate), thereby obtaining a momentary dark image. Exactly 50 years later, the Swedish chemist Scheele found that luna cornea (silver chloride) is sensitive mostly to the violet and blue portions of Newton's color spectrum, that the silver salt is reduced to dark metallic silver by sunlight, and that ammonia would separate the darkened salt from the unchanged salt by dissolving the latter. About 1800, Wedgwood and the chemist Davy of England obtained evanescent "profiles" on sensitized paper by a simple contact method, but they failed in trying to combine photochemical and optical principles in the camera obscura. Subsequent pioneers followed independent lines, but they were all trying to find a chemical agent that would bring out the image faster than sunlight alone, and a suitable solvent that would arrest the process of development at the proper moment — without affecting the silver image.

A few years after the opening of the M.G.H. in 1821, Niépce of France made a primitive photograph of his courtyard (exposure time 8 hours) on a pewter plate, which is now preserved in the Gernsheim collection in England as the world's oldest surviving photograph. Photomicrography is nearly as old, for in 1835 Fox Talbot of England made crude photomicrographs on silver chloride paper of objects magnified 17 times. Two years later, another Briton named Reade was making photomicrographs of objects enlarged 50 to 100 times.

Reade was the first, in 1837, to use hyposulphite of soda ("hypo", or sodium thiosulfate) as a fixing agent. It seems strange that the pioneers took so long to become acquainted with hypo, which had been described by Herschel in 1819. Its solvent action upon silver nitrate and chloride was also described shortly afterward in Brande's *Manual of Chemistry* (London). The explanation for the delay was probably due to the lack of communication among the scientists and inventors of that time.

Fox Talbot's negative-to-positive paper process was published prematurely in England in February 1839 and reprinted in America 2 months later. Two Harvard College seniors, Edward Everett Hale and Samuel Longfellow, then succeeded in making a dark brown print of Harvard Hall in which a bust of Apollo "came out" distinctly on a window sill. In his later method, Fox Talbot used silver iodide or bromide as the sensitive material and gallic acid as the developer. The waxed paper negative being translucent, positive copies could be printed in quality, although the fibers in the negative caused fuzziness in the prints.

The details of the process of Daguerre, a former partner of Niépce, were revealed to the world at an adroitly staged joint session of the Académie des Sciences and the Académie des Beaux Arts in Paris on August 19, 1839. Daguerre had stumbled upon the phenomenon of the latent image when an underexposed iodized silver plate was accidentally developed by mercury vapor. Being a direct positive on metal, the daguerreotype could not be used as a negative for duplication; however, it could be converted by an engraver into an etched printing plate.

It would be difficult and perhaps fruitless to try to ascertain who made the first daguerreotype in New England, but it is a historical fact that one of the claimants of this honor was Dr. Henry Coit Perkins of Newburyport, who, in 1866, was elected president of the Massachusetts Medical Society. In Boston, Albert S. Southworth and Josiah J. Hawes established a daguerreotype studio at 5½ Tremont Row (Scollay Square). In their hands the craft became art; according to Beaumont Newhall of the George Eastman House in Rochester, N. Y., they produced many of the finest daguerreotypes ever made, some of which are now in the Boston Museum of Fine Arts and the Metropolitan Museum of Art in New York. Southworth and Hawes made this interesting statement in a long advertisement placed in the 1852 *Massachusetts Register and Business Directory* (pp. 327-328): "We have made several pictures of the Surgeons of the Massachusetts [General] Hospital with the patient under the influence of ether, all accurate likenesses." It is reasonable to believe that the 3 daguerreotypes which are in safe keeping in the MGH Archives and which comply with the above description were produced by Southworth and Hawes.

The daguerreotype found only limited use in medicine, but Dr. Henry J. Bigelow, an MGH surgeon who regularly employed a medical artist, had daguerreotypes taken of some of his patients. Evidence of this may be found in the *Descriptive Catalogue of the Warren Anatomical Museum* (Boston, 1870), which was compiled by Dr. John B. S. Jackson, curator of the museum and an MGH physician. This museum was in the Harvard Medical School, then located close to the Hospital. Item no. 3004-5 in the catalogue (p. 652) reads in part: "Daguerreotypes of a boy, eleven years old, and showing quite a prominent tumor below the lower jaw. . . . the case occurred in 1851." These daguerreotypes were given to the museum 7 years later by Dr. Bigelow.

A new era of photography opened in 1851 when Scott Archer of England introduced the wet collodion emulsion, which was coated upon a glass plate. In America the technique was mastered by John Whipple of Boston, whose work drew international recognition. The other professionals in this country, even the renowned Mathew Brady of New York, had to come to Whipple's studio on Washington Street to relearn their craft as the popular demand for daguerreotypes declined. The collodion wet process has survived in some methods of photomechanical reproduction and was recently given a trial in radioautography.

Oliver Wendell Holmes, who was an MGH physician and a Harvard professor of anatomy and physiology as well as a writer, learned photography from Whipple's partner, James Black. With characteristic wit, Holmes described the sensitized plate as a "mirror with a memory". He became fascinated with the binocular effect of the stereoscope, and invented the simplest and best stereographic hand-viewer, which was mass-produced by Underwood and Underwood. He also submitted articles on photography to the *Atlantic Monthly,* in one of which he presented an analysis of the act of walking based on a series of stereoscopic views. Perhaps someone may some day bring to the MGH Archives a stereograph of the Bulfinch Building as it looked a century ago.

The *Boston Medical and Surgical Journal* published an editorial on December 10, 1857, complimenting Dr. John B. Brown, the pioneer orthopedic surgeon of Boston and formerly of the MGH staff, for his use of photography in documenting the progress of his patients. It was also stated that "the daguerreotype apparatus may be fairly considered one of the articles of the surgeon's armamentarium". On September 2, 1858, the same journal presented another editorial on the same subject, requesting the medical profession to make more use of photography and stating: ". . . we would express the hope that our hospitals and similar institutions may have photographists attached to them, in like manner as they now have microscopists, pathological anatomists, chemists, etc.".

Several branches of applied photography had their beginnings in the wet plate era. For example, the larynx was photographed successfully in 1861 by the physiologist Czermak of Vienna. The Young-Helmoltz theory of color vision was demonstrated photographically in 1861 by the British physicist Clerk Maxwell. This event set in motion decades of experiments in color synthesis based on the additive principle (combining primary colors to produce a desired color). Several years later the subtractive principle (subtracting colors from white light to produce a desired color), the basis of most color processes today, was described clearly by du Hauron.

One of the earliest photographic prints that can be found in the MGH patient records is dated 1863. A young farmer was admitted to the service of Dr. Henry J. Bigelow with a huge enchondromatous tumor of the scapula, which on subsequent autopsy was found to weigh 31 pounds. The case history appears in the MGH *Surgical Records* (East), vol. 111, p. 186, with 4 small prints pasted thereon; the case was reported in the *Boston Medical and Surgical Journal* for March 31, 1864. It is also referred to in items 3007-18 (pp. 653-657) in the previously mentioned *Descriptive Catalogue of the Warren Anatomical Museum,* with this statement: "Large photographs . . . taken by one of the best artists [James Black] in the city, whilst the patient was in the hospital. A duplicate of one of them is in the Army Med. Museum, at Washington." In the introduction to this catalogue, Dr. J. B. S. Jackson wrote that the museum possessed 60 photographs and an unspecified number of daguerreotypes. Several specimens of wet plate photography, including ambrotypes, are preserved in the MGH Archives. The ambrotype was merely an underexposed collodion glass negative backed with a dark surface so that the image could be viewed directly by reflected light, as in the daguerreotype.

The event that was to revolutionize photography occurred in 1871, when Dr. Richard L. Maddox, a British physician engaged in photomicrography, reported his "gelatino-bromide" emulsion, which could be spread on a glass plate, allowed to dry, and stored in quantity for future exposure. When Bennett of England, who ripened the gelatin emulsion by heat, took pictures in 1878 at snapshot speed (1/25 of a second), the collodion wet plate was doomed.

Orthochromatic emulsions had become possible when Vogel of Berlin discovered in 1873 that the addition of aniline and other dyes to the silver bromide emulsion would correct its relative insensitivity to green, thereby making more accurate the rendition of natural tonal values into the black-and-white scale. When critics attacked Vogel's theoretical basis, Dr. Robert Amory of Brookline, Massachusetts, was able to demonstrate its validity by spectrum analysis of an emulsion sensitized with eosin.

Rapid serial photography of figures in motion was begun in America by Muybridge, who set up a battery of cameras, and in France by the physiologist Marey, who devised a camera gun with a revolving shutter. Their work, together with the improvement of the focal plane shutter, opened the way to motion pictures.

The newly organized George Eastman Company marketed the paper roll film, the transparent celluloid film, and the Kodak camera, which brought push-button picture-taking to a host of amateurs who formed clubs everywhere. The Boston Camera Club was organized formally in 1886.

Articles on the applications of photography were appearing in the medical journals. At the M.G.H. the new photography began to assume the status of an institutional function in 1887, when Mr. Waldo March donated $100 for the purchase of photographic apparatus. According to Washburn's history of the Hospital (p. 136), the task of clinical photography was first assigned to the pharmacy. William A. Cameron was then the Hospital apothecary and his assistant was Charles H. Sampson, who probably did most of the photography. At least, there is a card in the MGH Archives with a notation that Sampson was doing such work for the staff in 1891.

A house pupil named George L. Kingsley donated about $800 in 1890 for a small building to house a photography studio. Before completion of the structure he became ill and died, and the building was named the Kingsley Studio in his memory. It was located near the western end of the Bulfinch Building, beside the corridor that connected the Bulfinch with the 1868 surgical building; in 1901 the Kingsley Studio was moved to a one-story ell in the then new Domestic Building, at the location of the present Blood Bank. Sampson became head apothecary in 1892, with Walter J. Dodd as assistant. In the MGH *Annual Report* for 1895, the year when Walter Dodd became head, the Hospital treasurer began to report expenditures under the account of "Photographic Materials", the sum being $49.53. Dodd was an excellent photographer. When the Roentgen ray was discovered in December 1895, he and his assistant, Joseph Godsoe, immediately became interested. It was taken for granted that the production of X-ray pictures would be a branch of photography, since the silver halide emulsion was sensitive to the newly discovered radiations. Dodd later obtained a medical degree (1908) and became head of what is now the Department of Radiology. He succumbed eventually to the complications of radiation dermatitis, first acquired in 1896 — a martyr to science. Radiography was done on glass plates until about 1920, when these were replaced by the double-coated film. Mr. Godsoe became head apothecary and photographer in 1908, and served the Hospital until 1943.

In the meantime, photography had maintained its steady advance. Various methods of taking and projecting motion pictures were devised, one of them being Thomas Edison's kinetographic camera, which was designed to take 16 pictures per second — a rate in accord with the physiological principle known as persistence of vision. About 1904 Lauste, a former associate of Edison, found a way to record sound and visual images on the same film, which led eventually to optical sound recording. Panchromatic emulsions began to appear after German chemists had discovered that the addition of isocyanine and other complex dyes would extend the sensitivity of emulsions to red and infrared radiations.

About the time of World War I, the MGH pharmacy dropped its side line of photography, and the Hospital then engaged the services of a commercial photographer (Nutting) upon a commission basis. In the middle 1920's the versatility of photography was increased by the extremely fast lenses of the 35 mm. precision cameras, such as the Leica. Their speed was somewhat offset, however, by loss of detail in the image. The development of powerful flashbulbs in 1929 compensated for the lower light transmission of the lenses to which the larger cameras are restricted.

The MGH Board of Trustees, perhaps influenced by the technical advance of photography and by the prospect of an increased volume of clinical photography after the opening of the forthcoming Baker Memorial Hospital (1930), voted to establish a photography laboratory in 1927, although it was not until 3 years later that Mr. Wilbour C. Lown was appointed our first full-time staff photographer. Space was provided in the basement of the Bulfinch Building, which now seems so cramped.

The work was limited at first to black-and-white processes, although workable color processes had already appeared on the market. The first widely successful color process was Kodachrome (1935). After the Cocoanut Grove fire of November 28, 1942, numerous photographs in Kodachrome were taken (mostly by Mr. Bruno Micheleit) to depict the various aspects of the treatment of the burned victims brought to the M.G.H., and the classic symposium report that takes up the entire June 1943 issue of *Annals of Surgery* has an impressive color section containing forty-nine of these pictures.

When Mr. Lown joined the Armed Forces in 1944, Richard St. Clair was appointed head photographer and Donald C. Withee his assistant. Mr. St. Clair was replaced by Mark J. McCann in 1947. Mr. Withee succeeded McCann as department head in 1952, and since that time his staff has grown to 5 assistants and associates. Frank T. McCarthy and Stanley M. Bennett have alternating schedules, so that while one is taking pictures in the studio, wards, operating rooms, or laboratories, the other is busy with the developing and printing. Miss Gerdi A. Loeser is the department's expert on 35 mm. transparencies. The 2 young ladies who greet callers with a smile are Miss Mary T. Burke, secretary, and Miss Dorothy R. Gabardi. They follow each order from its initial requisition form to final delivery of the finished product.

Present-day medical photography requires elaborate equipment and materials, and in the MGH Photo Lab use is being made of 8 types of camera and 20 types of film, the latter ranging from high-contrast lithograph film for photomechanical reproduction to soft film for delineating the minute features of skin tissue in patients or for routine portraiture. The production of black-and-white prints has increased about fourfold during the past 2 decades, many of them being reproductions of charts, diagrams, tables, and radiographs to accompany published works. During the past year, about 22,000 35 mm. slides were made, both in color and in black and white, largely for use as illustrative material for lectures and conferences. This figure represents a decided trend away from the old standard-sized slide. Photomicroscopy is done in the Photography Laboratory for many of the Hospital departments.

Motion picture photography is largely the province of Mr. Withee. In 1957, almost 22,000 feet of film were made, ranging from the time-lapse to the high-speed categories. Many sequences on 16 mm. color film are taken in the operating rooms. A current project, initiated by Dr. George L. Nardi, includes 2 film productions in color and magnetic sound — one showing sphincterotomy and sphincteroplasty in the treatment of pancreatitis, the other showing total esophagectomy with colon or gastric tube replacement. Other color films are produced in association with Dr. John W. Irwin's Microvascular Laboratory. Another type of motion picture is designed to study movement, gait, facial expressions, deformities, and other phenomena observed in patients. A documentary film was made of the treatment of the polio patients at the M.G.H. during the epidemic of 1955. Last year a film was made for the National Cystic Fibrosis Research Foundation, and it is being shown all over the country.

Radioautographs, which would have mystified the medical photographer of a decade ago, are now prepared in the Thyroid Laboratory and processed in the Photo Lab. Such films record tracer particles emitted from radioactive tissue sections and brought into contact with the grains of the silver halide emulsion — an "image" thereby being formed. Radioautography is one practical result growing out of the basic investigation into the most fundamental process in photography — the formation of the silver image. Such research, necessarily of a highly technical kind, is being done at centers such as the Eastman Kodak Company. The sensitivity speck theory of Sheppard (1925) and the Gurney-Mott theory (1938) are undergoing intensive re-examination and modification with the aid of X-ray diffraction analysis and electron microscopy. The theoretical basis of photography has come a long way since 1777, when Scheele exposed luna cornea to the spectrum cast by his prism.

Just as the functions of the Hospital as a whole have multiplied and expanded since its founding, so have those of the MGH Photography Laboratory. In all cases, the most important function is still the one related directly to the patient — clinical photography being a useful adjunct to medical care. In the field of education, a student of photography is often taken under wing; in addition, 7 or 8 students from the MGH School of Medical Illustration are given photographic instruction during their course. With respect to community relations, the services of the Photo Lab are often utilized by outside agencies, such as the newspapers. As for research — if those members of the Hospital staff who apply scientific photography to their research will continue to maintain close liaison with the Photography Laboratory, each function being complementary to the other, notable contributions to medical photography and medical science will be made in the name of the Massachusetts General Hospital.

George Jacobsen

The Board of Trustees, at their meetings on March 6 and 20, voted:

That the records be changed so that the first year of service of Dr. Harold L. May be considered in the rank of Third Assistant Resident in Surgery, rather than Intern in Surgery.

To promote:

Dr. Charles E. Huggins to the position of Resident in Surgery on the West Surgical Service, beginning August 1.

To appoint:

Dr. John R. Baringer as Intern in Medicine for one year, beginning July 1;

Dr. Robert W. Carey as Intern in Medicine for one year, beginning July 1;

Dr. James R. Carter, Jr. as Intern in Medicine for one year, beginning July 1;

Dr. Frank F. Davidoff as Intern in Medicine for one year, beginning July 1;

Dr. Karl Engelman as Intern in Medicine for one year, beginning July 1;

Dr. Paul F. Griner as Intern in Medicine for one year, beginning July 1;

Dr. Arthur L. Herbst as Intern in Surgery for one year, beginning July 1;

Dr. Frederick B. Hodges as Exchange Assistant Resident on the Children's Medical Service for the period March 1 through April 12;

Dr. Lewis P. James, Jr. as Third Assistant Resident in Pathology for one year, beginning July 1;

Dr. David Korn as Intern in Pathology, for the period September 1, 1959 through June 30, 1960;

Dr. Nelson R. Lampert as Intern in Surgery for one year, beginning July 1;

Dr. Lucian L. Leape as Intern in Surgery for one year, beginning July 1;

Dr. Cavin P. Leeman as Intern in Medicine for one year, beginning July 1;

Dr. Robert S. Lees as Intern in Surgery for one year, beginning July 1;

Dr. Raphael H. Levey as Intern in Surgery for one year, beginning July 1;

Dr. Kilmer S. McCully as Intern in Medicine for one year, beginning July 1;

Dr. Alfonso Mangoni as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Mart Mannik as Intern in Medicine for one year, beginning July 1;

Dr. Robert W. Milam as Assistant Resident in Orthopedic Surgery for one year, beginning April 18;

Dr. Donald M. Muirhead, Jr. as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Eldred D. Mundth as Intern in Surgery for one year, beginning July 1;

Dr. Richmond Prescott as Intern in Medicine for one year, beginning July 1;

Dr. John B. Robbins as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Irwin H. Rosenberg as Intern in Medicine for one year, beginning July 1;

Dr. Kevin G. Ryan as Intern in Medicine for one year, beginning July 1;

Dr. David B. Skinner as Intern in Surgery for one year, beginning July 1;

Dr. William G. Stewart, Jr. as Intern in Surgery for one year, beginning July 1;

Dr. John Urquhart, III, as Intern in Surgery for one year, beginning July 1;

Dr. Elliot S. Vesell as Intern on the Children's Medical Service for one year, beginning July 1;

Dr. Karl H. Wegner as Intern in Pathology for one year, beginning July 1;

Dr. Richard H. Wohl as Intern in Surgery for one year, beginning July 1.

At their meetings on February 25 and during March, the General Executive Committee voted:

To accept the resignation of Elizabeth M. Sparrow, Ph.D. (Mrs. Cobb) from the position of Research Fellow in Medicine, effective as of April 7. It is our understanding that Mrs. Cobb is returning to England;

To extend the appointment of Dr. John B. Tallon as Senior Resident in Orthopedic Surgery from July 1 to August 31.

To promote:

Dr. Stanley P. Bohrer to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Mortimer J. Buckley, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Willard M. Daggett, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. M. Judah Folkman to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Abdollah Gashgai to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. A. Erik Gundersen to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. John B. Herrmann to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Mark M. Kartchner to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. John L. Lewis, Jr. to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. John W. Madden to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Ronald A. Malt to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Harold L. May to the position of First Assistant Resident in Surgery, beginning April 1;

Dr. Anthony S. Patton to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Don C. Pearl, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. John T. Porvaznik, Jr. to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. John P. Remensnyder, Jr. to the position of Second Assistant Resident in Surgery, beginning July 1;
Dr. Harold Simon to the position of First Assistant Resident in Radiology, beginning April 1;
Dr. Quentin R. Stiles to the position of Second Assistant Resident in Surgery, beginning August 1;
Dr. Harold C. Urschel to the position of Second Assistant Resident in Surgery, beginning July 1;
Dr. C. Gene Wheeler to the position of Second Assistant Resident in Surgery, beginning July 1;
Dr. G. Melville Williams to the position of Second Assistant Resident in Surgery, beginning July 1.

To reappoint:

Dr. Arthur E. Baue as Second Assistant Resident in Surgery, beginning July 1;
Dr. Donavin A. Baumgartner, Jr. as Second Assistant Resident in Surgery, beginning July 1;
Dr. David L. Collins, Jr. as Second Assistant Resident in Surgery, beginning August 1;
Dr. Laszlo L. Fekete, with a change of title to Research Fellow in Dermatology, effective as of January 23;
Dr. Ruth K. Freinkel as Clinical and Research Fellow in Dermatology for one year, beginning March 1;
Dr. Gilbert Hermann as Second Assistant Resident in Surgery, beginning July 1;
Dr. Walter E. Klingensmith as Second Assistant Resident in Surgery, beginning July 1;
Borge Larsen, M.S. as Research Fellow in Medicine for one year, beginning April 15;
Dr. John A. Mannick as Second Assistant Resident in Surgery, beginning July 1;
Dr. Anthony P. Monaco as Second Assistant Resident in Surgery, beginning July 1;
Annette M. C. Rapin, Ph.D. as Research Fellow in Medicine for one year, beginning February 1;
Dorothy K. Stearns, Ph.D. as Research Fellow in Medicine for one year, beginning January 23.

To appoint:

Dr. Harry S. Abram as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. William J. Adelson as Clinical and Research Fellow on the Children's Medical Service for one year, beginning July 1;
Dr. William C. Amman as Graduate Student Assistant in Medicine, assigned to Allergy, effective as of January 10;
Cecily P. Aronson, M.S. as Research Fellow in Psychology for one year, beginning April 1;
Dr. Jean R. Crabbe as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Ruben Dardano as Clinical and Research Fellow in Medicine, for a period of four months, beginning February 1;
Dr. David W. Florence as Clinical Assistant in Orthopedic Surgery, for the period April 18 through August 31, with the privilege of assisting Dr. Barr in the care of his private patients. It was further voted to reappoint Dr. Florence as Assistant Resident in Orthopedic Surgery, beginning September 1;
Dr. Robert E. Flynn as Clinical Fellow in Neurology, to act as Assistant Resident in Neurology, assigned to Pediatric Neurology, for one year, beginning July 1;
Dr. John W. B. Forshaw as Research Fellow in Medicine, beginning July 1;
Dr. William A. Hall as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Sigetosi Kamiyama as Research Fellow in Medicine for one year, beginning September 1;
Shelby Kashket, Ph.D. as Research Fellow in Medicine, beginning July 1;
Dr. Robert L. Kelley as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. William F. McCourt as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Carlos P. Mora-Mora as Graduate Student Assistant in Orthopedic Surgery, for a period of six months, beginning March 9;
Dr. Alberto Salama as Clinical and Research Fellow in Neurology, for a period of six months, beginning March 1;
Jayantilal M. Shah, S.M. as Research Fellow in Biomechanics on the Orthopedic Service, for the period February 1 through June 15;
Dr. Philip R. Sullivan as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. John D. Turner as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1.

* * *

VOLUNTEER GROUPS

Distaff Club

On Friday, May 8, the Annual Spring Dance, sponsored by the Trustees and Directors of the Hospital and the Distaff Club, will be held at the Commonwealth Country Club. We all anticipate a very gay evening, dancing to the music of Sammy Eisen's orchestra.

Plans are being made for the Club's last event of the year. This will be the annual picnic, held some time in the early part of June. Husbands and children are invited.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Endoscopy

Benedict, E. B.
Medical progress: Endoscopy.
New England J. Med. 260:478;535.

General Medicine

Hardy, H. L.
Medical control of beryllium: Discussion of paper by Dr. Zielinski.
A.M.A. Arch. Indust. Health 19:203.

Hardy, H. L., and Stoeckle, J. D.
Beryllium disease.
J. Chron. Dis. 9:152.

Isselbacher, K. J.
Panel: Bilirubin metabolism, as related to other forms of conjugation.
Gastroenterology 36:175;177.

Isselbacher, K. J., and Dawson, A. M.
Nicotinic acid.
Practitioner 182:40.

General Surgery

Churchill, E. D., and Scannell, J. G.
Tumors of the chest.
In Cancer—Diagnosis and treatment, John B. Field, Editor, Boston, Little, Brown and Company, chap. 5.

Finkbiner, R. B., McGovern, J. J., Goldstein, R., and Bunker, J. P., with the technical assistance of Yanakis, A., and Langer, R.
Coagulation defects in liver disease and response to transfusion during surgery.
Am. J. Med. 26:199.

Laboratory Science

Gergely, J.
Muscle proteins and energy utilization.
Ann. New York Acad. Sciences 72:12;538.

Psychiatry

Benda, C. E.
Dysraphic states.
J. Neuropath. & Exper. Neurol. 18:56.

Benda, C. E., and Melchior, J. C.
Childhood schizophrenia, childhood autism, and Heller's disease.
Internat. Record Med. 172:137.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

The British Commonwealth, ed. 2.
London, Europa Publications Ltd., 1958.
(1E)

Brown, J. B., and McDowell, F.
Skin grafting, ed. 3.
Philadelphia, J. B. Lippincott Company, 1958.
(23N)

Cohrs, P., Jaffé, R., and Meessen, H.
Pathologie de Laboratoriumstiere, 2 vols.
Berlin, Springer, 1958.
(2B)

Dawson, I., and Goldie, W.
Medical laboratory investigations: Their use and interpretation.
London, Butterworth & Co., Ltd., 1958.
(2As)

Dornette, W. H. L.
Hospital planning for the anesthesiologist.
Springfield, Ill., Charles C. Thomas, 1958.
(32O)

Experimental Cell Research, Suppl. 6.
The relationship between nucleus and cytoplasm.
New York, Academic Press, Inc., 1959.
(2Am)

Ferguson, A. B.
Orthopedic surgery in infancy and childhood.
Baltimore, The Williams & Wilkins Company, 1957.
(26F)

Field, J. B. (Editor)
Cancer: Diagnosis and treatment.
Boston, Little, Brown and Company, 1959.
(13V)

Hall, V. E., Fuhrman, F. A., and Giese, A. C. (Editors)
Annual review of physiology, vol. 21.
Palo Alto, Annual Reviews, Inc., 1959.
(4A)

Homburger, F. (Editor)
Physiopathology of cancer, ed. 2.
New York, Paul B. Hoeber, Inc., 1959.
(13V)

Hsia, D. Y.
Inborn errors of metabolism.
Chicago, The Year Book Publishers, Inc., 1959.
(13A)

International Who's who, 1958, ed. 22.
London, Europa Publications Ltd., 1958.
(1E)

Johnson, J., and Kirby, C. K.
Surgery of the chest.
Baltimore, The Williams & Wilkins Company, 1957.
(23Q)

Joslin, E. P., and others.
The treatment of diabetes mellitus, ed. 10.
Philadelphia, Lea & Febiger, 1959.
(13D)

King, E. J., and Wootton, I. D. P.
Micro-analysis in medical biochemistry, ed. 3.

New York, Grune & Stratton, 1956.
(5As)

Krugman, S., and Ward, R.
Infectious diseases of children.
St. Louis, The C. V. Mosby Company, 1958.
(26D)

Landau, T. (Editor)
Encyclopedia of librarianship.
New York, Hafner Publishing Co., 1958.
(1C)

Moritz, A. R., and Helberg, D. S. (Editors)
Trauma and disease.
Brooklyn, Central Book Co., Inc., 1959.
(34A)

Neuberger, A. (Editor)
Symposium on protein structure.
London, Methuen & Company, Ltd., 1958.
(5B)

Perkins, G.
Fractures and dislocations.
London, The Athlone Press, 1958.
(18J)

Pincus, G. (Editor)
Hormones and atherosclerosis.
New York, Academic Press, Inc., 1958.
(15F)

Quick, A. J.
Hemorrhagic diseases.
Philadelphia, Lea & Febiger, 1957.
(14E)

Rivers, T. M., and Horsfall, F. L., Jr. (Editors)
Viral and rickettsial infections of man, ed. 3.
Philadelphia, J. B. Lippincott Company, 1959.
(11A)

Smith, K., and Lauffer, M. A. (Editors)
Advances in virus research, vol. 6.
New York, Academic Press, Inc., 1959.
(8G)

U. S. Department of Defense.
NATO handbook. Emergency war surgery.
Washington, D.C., United States Government Printing Office, 1958.
(33J)

Varley, H.
Practical clinical biochemistry, ed. 2.
New York, Interscience Publishers, Inc., 1958.
(5As)

Ward, D.
Russian pronunciation.
New York, Hafner Publishing Co., 1958.
(1Mr)

Young, L., and Maw, G. A.
The metabolism of sulphur compounds.
London, Methuen & Company, Ltd., 1958.
(5M)

BIOGLETS

Dr. Barry G. W. Arnason, Assistant Resident in Neurology—born in Winnipeg, Manitoba, Canada, August 30, 1933; Intern, rotating, Winnipeg General Hospital, 1956-57; M.D., Manitoba Medical College, 1957; Assistant Resident in Medicine, Winnipeg General Hospital, 1957-58.

Dr. Donavin A. Baumgartner, Jr., Assistant Resident in Surgery—born in Cleveland, Ohio, March 10, 1930; A.B., Princeton University, 1952; M.D., Harvard Medical School, 1956; Intern and Resident in Surgery, Lakeside Hospital, Cleveland, Ohio, 1956-58; married.

Dr. Stanley P. Bohrer, Intern in Surgery—born in Washington, D.C., May 1, 1934; served as a Page in the House of Representatives, Washington, D.C., 1948-51; A.B., University of Michigan, 1954; M.D., Harvard Medical School, 1958.

Dr. Niels E. Brandstrup, Assistant Resident on the Children's Medical Service—born in Copenhagen, Denmark, February 23, 1929; M.D., University of Copenhagen, 1955; Intern in Medicine and Surgery, County Hospital, Randers, Denmark, 1955-56; Assistant Resident in Medicine, Blegdams Hospitalet, Copenhagen, 1956; Research Assistant, Washington University, St. Louis, Missouri, 1956-57; Clinical and Research Fellow in Children's Medicine, Massachusetts General Hospital, 1957-58.

Dr. Myron A. Hofer, II, Intern in Medicine—born in New York City, December 31, 1931; A.B., Harvard College, 1954; M.D., Harvard Medical School, 1958; married; one son.

New addresses:—

Dr. Thomas F. Broderick, Jr. (sr. r.s. *Or.* 1947), Medical Arts Bldg., 697 Cambridge St., Brighton, Mass.
Capt. Carl N. Brownsberger, MC, USAR (a.r.p. 1957), Madigan Army Hospital, Tacoma, Wash.
Dr. Joseph A. Capps (*E.M.* 1896), 21 Woodley Rd., Winnetka, Ill.
Dr. Paul H. Case (*Oph.* 1938), 461 W. Catalina Drive, Phoenix, Ariz.
Dr. Lincoln D. Clark (*M.* 1948), Salt Lake County General Hospital, Salt Lake City. Utah
Capt. Nathan T. Griscom, MC, USAR (*C.M.* 1957), U.S. Army Hospital, Fort Sill, Okla.
Dr. Gerald N. Hoeffel (*C.M.* 1922), Edgewood Farm, Truro, Mass.
Dr. Fleming McConnell (r.p. *R.* 1956), Montreal General Hospital, Montreal, Canada
Dr. Russell M. Nelson (a.r.s. 1954), Salt Lake Clinic, 115 E. South Temple, Salt Lake City. Utah
Dr. Renée B. O'Sullivan (*C.M.* 1957), Veterans Administration Hospital, 150 S. Huntington Ave., Boston, Mass.
Dr. Kenneth J. Ryan (*M.* 1953), Boston Lying-in Hospital, 221 Longwood Ave., Boston, Mass.
Dr. William D. Shorey (*E.S.* 1946), 112 S Michigan Ave., Chicago, Ill.
Dr. Arthur S. Spangler (r.p. *D.* 1945), 1101 Beacon St., Brookline 46, Mass.

Correction: The address for Dr. Katharine Spreng Waldmann (*M.* 1955), which appeared in the March issue of THE NEWS should have read 307B Dawson Ave., Rockville, Md.

⁂

Brief bits:—

Dr. Henry F. Allen lectured before the Ophthalmological Section of the American College of Surgeons, at their meeting held in St. Louis on March 12. His subject was "Infectious agents, exogenous and endogenous".

Dr. Henry K. Beecher has recently been lecturing as a guest of the Polish Academy of Sciences at Warsaw and Kraków. He also spoke to a group in Professor Moruzzi's Department at the University of Pisa.

Dr. George Kelemen has been appointed Consultant to the Department of Research at the New York Eye and Ear Infirmary.

Miss Mary Ruth Wolf, Director of Volunteers at M.G.H., will serve as consultant and guest speaker at the Hospital Auxiliary Workshop, sponsored by the Pennsylvania Association for Hospital Auxiliaries, the Hospital Association of Pennsylvania, and the Pennsylvania State University, held from June 16 through 19, at the Pennsylvania State University, University Park, Pa.

⁂

Dr. Robbins has very kindly handed over to us this interesting letter from Dr. Paul M. G. St. Aubin, who has been serving as a member of the Atomic Bomb Casualty Commission, APO 354, c/o Postmaster, San Francisco. The letter was written last February and says, in part:

I expect the remaining months here to be hectic, to say the least, with a number of projects in the process of termination. The one project that appears to have borne some fruit, relative to the ABCC study, has been the local Hiroshima X-ray dosimetry study in which, in certain instances, we have found as much exposure in some radiological procedures as was received by some of the more distally exposed groups of patients being examined. I have just completed a rather strenuous project of taking X-ray studies on some 4,000 patients, made up of an equal number of control and exposed patients matched for sex, age, and economic status. These were distributed amongst the radiologists in Hiroshima, in order to check the radiological diagnostic ability of these men against ABCC. Also, to pick up errors and inaccuracies in diagnosis at ABCC, a better survey of this group of patients for incidence of disease can be made.

I am up to my neck in diagnostic summaries on these films, written partly in Japanese, German, and English; and with my two assistants am in the process of getting them all translated into English, so that we can make some sense out of them.

In addition, I am trying to complete the study of child growth from the hand films taken at yearly intervals on a group of matched control and exposed children. I hope you appreciate from this that, together with my routine duties here, I am somewhat swamped.

Dr. Darling will be returning to America this spring for conferences in Washington regarding the ABCC program. Under his leadership, this organization has developed a research direction such as it has not enjoyed before, and now, with a sound population-study program, a more substantial research productivity is assured. Dr. Darling will possibly visit Boston and if he can get there would like to have the opportunity of seeing you, to give you better insight into the present program. In relation to this visit, I would like to ask you if you have two residents about to finish their training or a young Board radiologist who would like to come to Japan to work for the ABCC to replace me, bringing with them a technician trained in your department who can further train the Japanese technicians. The type of radiologist I would like to see here is one who is interested in continuing the present dosimetry survey, extending it to the Nagasaki area, and who would also exploit the tremendous opportunity available for film review of the many disease processes that turn up in this population survey.

Would you also let me know if you hear of any radiology departments which would accept Japanese for residency training. I would like to get decent radiological and pathological training for the two men who have been working as my associates for the last year and a half. Their training in Japanese hospitals has been inadequate and, since they have ability and could be of greater value to this organization and Japanese radiology, I would like to see them receive further American training.

I would like to digress from business to tell you about my Christmas vacation. On 21 December I flew to Hong Kong, where I spent three very pleasant days enjoying a delightful change in climate from wintery Japan. Although Hiroshima rarely has freezing temperature, this winter has been a succession of cold days with several inches of snow. On landing in Hong Kong I was overwhelmed by the delightful summery weather and the bright and clear atmosphere. The three days of rest that I had planned were disturbed by many sightseeing trips round the island of Hong Kong, the city of Victoria, and the fishing village of Aberdeen. My hotel was in Kowloon, which is on the mainland, and from there I took a second trip to the New Territories at the Red Chinese border. Things looked rather glum on the other side of the border, although they didn't look very much better in Hong Kong. The little colony which had a population of about half a million right after the war has had its population swelled to somewhere near three million, made up of poverty-stricken Chinese refugees from all parts of Red China. What I saw really broke my heart.

While I was in Hong Kong I telephoned C.C.'s brother. We had a very pleasant talk but, unfortunately, I did not get hold of him until the day I was leaving so missed seeing him.

After this three-days' whirlwind in Hong Kong I flew to Rangoon, where I spent Christmas with some friends. Rangoon is without doubt the filthiest and most vile-smelling place I have ever been in. Decaying refuse is seen everywhere. A revolution occurred a few months back and the chief of the army who took over and who assumed the role of guard-

MR. DONALD WITHEE — DIRECTOR OF MEDICAL PHOTOGRAPHY

ian for a period of six months, guaranteeing a parliamentary system of government following this time, has made great efforts to clean up the country. He has outlawed betel nut chewing, but the crimson red stains from spittle are still seen marring the street surfaces. Beggars are everywhere. Leprosy is an exceedingly common disease and is claimed by some local physicians to afflict somewhere between 10% and 30% of the population. I am somewhat inclined to believe the latter figure, since I was startled at the number of deformed individuals with nose, hand, and various and sundry portions of the body missing.

The people of Southeast Asia are mostly Buddhist, varying in devoutness, of course. Many saffron-robed priests are seen wandering about in the morning until about 10 o'clock, begging for their food for that day. The Buddhist nuns wear salmon-colored robes and carry their begging bowls on their heads. The Shwe Dagon is the holy of holy pagodas in Burma and, since it represents one of the stopping-off places of the Buddha, is one of the shrines of Buddhism in the southeast. The magnificent central spire of the pagoda is covered with gold leaf and sparkles beautifully in the sun. Numerous smaller pagodas encircle the Shwe Dagon and at the base of the pagoda is a flat walk where only the unshod may walk. Fortunately for me, the clean-up campaign had extended rather scrupulously to this particular location, so that taking off shoes and walking in bare feet was made more pleasant by virtue of the relative cleanliness of the plaza. The soles of my feet, however, are still itchy from this experience.

The American Embassy counsellor and his wife, with whom I was staying, have a lovely home on an artificial lake just on the outskirts of Rangoon and, fortunately, during the few days I was there I was spared the experience of much contact with the people. One of the pleasant customs on this lake is punting, and one evening when the moon was full we went punting across to the British Ambassador's home, a distance of about half a mile. About halfway there, as we were passing the Burmese Air Minister's estate on a point of land, a guard hailed us from the shore, inquiring who we were. At the same time the sound of rifle bolt clicking was heard. He warned us to keep our distance and to move away or he would be required to shoot at us. We punted like mad and were much relieved to hear reassurance from him that we were no longer trespassing. Apparently all the higher officials in Burma are terrified of assassination. To say the least, I was happy to depart from this unhealthy climate.

My next port of call was Bangkok, where I spent three wonderful days visiting temples, early morning floating markets on the canals, jewelry and silver shops, and a classical Siamese theatre that was one of the most amusing experiences I have ever had.

My next stop-off was at Angkor Wat. We flew from Bangkok to Siem Reap by Air Vietnam since Thailand and Cambodia were having a border dispute and had broken off diplomatic relations. I believe these relations have been restored since I have returned to Japan. Air Vietnam is tied up in some way with B.O.A.C. but uses French pilots and flies D.C.3's. The plane I was in was filled with some 24 American elementary school teachers from Okinawa, mostly women. The flight started off well but, although the time in the air was only an hour and a half, by the end of the first hour the pilot had consumed a large quantity of beer and wine and the flight became somewhat wobbly. We landed safely, however, and for three days toured the ruins of Angkor Wat, Angkor Thom, and many lesser ruins. These represent the height of Cambodian culture, extending from the 8th century B.C. to the 15th century A.D. This culture, like Thai and Burmese cultures, was the result of Indian influence, and these ruins, which were discovered by a Frenchman round 1865, are the remains of buildings constructed during the period indicated above by successive Cambodian kings who were influenced strongly by Buddhism — some very purely Buddhist, others a mixture of Buddhist and Hindu. The temples and palaces are entirely built on the square and the land area covered is incredible. The carving and architecture is, to say the least, breath taking. It is hard to describe in words the magnificent experience and the feeling of awe one has in the presence of these ancient ruins.

For many years the secret of these ruins was not understood, but today it is pretty well accepted that in the 15th century the Thais plundered this civilization, forcing the Cambodians to flee to the southeast. After sacking and plundering the city, the Thais returned to Siam, but the Cambodians never returned to Angkor, leaving it to the jungle. On fleeing, the Cambodians apparently took most of the articles of value with them, except for the troupe of Court dancers who were carried away by the Siamese. These presumably represent the forefathers of the present Siamese classical dance troupe.

On leaving Angkor Wat I went to Saigon, which is a delightful sleepy French city. You would hardly suspect that you were in the orient in this city, except for the citizenry, who are very Chinese in appearance, unlike the Cambodians and Siamese who appear more like the Polynesians.

After this, back to Hong Kong, then to freezing Japan. It was actually delightful to get back. No more bargaining with cab drivers, such as is the custom in Bangkok; no more fear of being hit on the head and robbed; and no more fear of having pickpockets clean you out. The Japanese have a very high standard of honesty, which is certainly one of their higher virtues.

My best to everyone.

Dr. F. Gorham Brigham (*E.M.* 1910) wrote this letter to Dr. James M. Faulkner (*E.M.* 1925) along in January. Dr. Faulkner forwarded the letter to Mr. David C. Crockett, who has passed it along to us, knowing that Dr. Brigham's many friends will be interested in what he has to say.

It was most kind of you to send me the circular letter about the Treadwell Library and the Salute of the Massachusetts General. I, of course, was very disappointed not to be able to attend Ether Day, and I wrote thus to Dr. Means, but my health has been very poor these last four years and I am able to do nothing very much.

You mention Dr. Reed Harwood. I wonder if you know that I started the Diabetes Clinic at the General which he has taken over. It was the first Diabetes Clinic in this country. I was supervisor of it for twenty years, and then retired from the General to take Dr. Joslin's place at the Deaconess as Physician in Chief, Dr. Joslin having then reached the age of 66. He is now 93.

THE NEWS

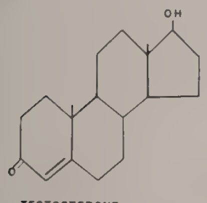
MASSACHUSETTS GENERAL HOSPITAL 1811

No. 187 Boston, Mass. June 1959

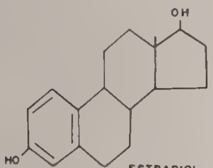
AN INTERDEPARTMENTAL PROGRAM IN THE VINCENT RESEARCH LABORATORY

THE OVARY

It is appropriate that the Vincent Research Laboratories should be concerned, at least in a restricted sense, with the question, "What makes women the way they are?" It has been remarked (not the writer's opinion, of course) that the essential difference between male and female is only a matter of four hydrogens and a carbon atom:



TESTOSTERONE



ESTRADIOL

This is, after all, the difference between the principal sex hormone elaborated by the testis and the most potent of the hormones thought to be elaborated by the ovary. When the shouts of "Vive la différence!" have died down, let us quickly note that Dr. Billy Baggett and Dr. Lewis L. Engel in this Hospital have published work which for the first time proves that in the test tube the ovary, the testicle, the adrenal, and the placenta can all convert testosterone to estradiol. This, fitted together with other evidence in the literature, makes plausible the hypothesis that testosterone is a necessary intermediate step in the normal manufacture of estrogenic hormone.

It may be surprising that these basic matters of sex remain as a frontier at all, in view of the fact that by 1935 Doisy had isolated estradiol from the ovary and had characterized it with the structure shown above. The method he used—the extraction of a ton of sow ovaries—has not been duplicated with human material for obvious reasons. Determinations on twenty-four hour urine collections have given the most information about human estrogen secretion, and yet, obviously, it is not satisfactory to assume that any material present in the urine is identical with any one secreted in the body, particularly since both ovary and adrenal seem to be able to make similar hormones. There remains for the investigator even today, then, the challenging question, *"What is the chemical nature of the estrogen the human ovary normally secretes?"* After this comes the endless chain of questions which confront the biochemist, the endocrinologist, the cancer specialist, and even the surgeon; and in the Vincent Memorial operating rooms the surgeon, for very good reasons, removes human ovaries and, so to speak, holds the enigma in his hand. Among these are perfectly normal ovaries which are being taken out in order to help patients who are the victims of cancer of the breast. That ovarian removal can help these patients has been known since 1896, but, as indicated by the foregoing, the exact mechanism involved is not yet clear.

It is worth remarking at this point that this question, among many others, was uppermost in the mind of the late Dr. Ira T. Nathanson at the time when Dr. Lewis L. Engel first came to the Huntington Laboratories, bringing to this Hospital the powerful and elegant tools which are necessary for this kind of hormone research; and that it is because of the inspiration of Dr. Nathanson and the instruction of Dr. Engel that it has been possible for the writer to proceed with a restricted aspect of this research.

How to isolate the ovary, and find out what it secretes? The ovary, with all due respect to women, is a tough, dense tissue, inactive at any given time except in the small zone where each month's egg has developed. It is not convenient to homogenize it, as has been done most fruitfully in biochemical work with other tissues—for example, the outstanding work of Dr. Kenneth J. Ryan (*M.* 1953) on the placenta. The work of Drs. Baggett and Engel was accomplished with tissue slices. We have chosen, however, to *perfuse* it, hoping to take advantage of the vessels which are poor in the rest of the organ but surround the developing egg like a basketwork. There is an appealing simplicity to the notion of keeping the ovary alive the way the body does—by providing a continuous flow of well-oxygenated blood. Long ago, Carrel and Lindbergh worked on this idea, and it has been applied to the adrenal gland in a series of studies at the Worcester Foundation for Experimental Biology. Efforts at the same institution to work with the ovary were less rewarding, however. The method was elaborate and the results less satisfactory than those obtained with the simpler slice preparation. These workers in adrenal perfusion used backward perfusion—into the vein and out of the excoriated surface of the gland—with whole blood; while in ovarian perfusion they used whole blood half diluted with White's tissue-culture medium. The use of whole blood in most *in vitro* perfusion work has had to be abandoned for one reason or another: 1) vasoconstriction materials, commonly present in whole blood (serotonin, epinephrine) can cause an irreversible block to perfusion; 2) even in the presence of an excess of anticoagulant, minute clots can occur and obstruct flow; 3) unless flow is very rapid, red cells settle and may be presented to the organ in excess with too much viscosity, or in insufficient numbers; 4) blood and organ donors need to be cross-matched to eliminate hemagglutination in the system; 5) the blood contains steroids, and a "blank" determination must be done for steroid studies. We have followed a suggestion made by Dr. J. R. Pappenheimer at the Medical School and use a hemoglobin solution rather than diluted whole blood. The hemoglobin molecule (m.w. 68,000) is only slightly smaller than that of serum albumin (m.w. 69,000) and will remain within systemic capillaries quite well. If it is present in an amount equal to the normal total protein of plasma—about 6 gm.%—it will then exert a similar colloid osmotic pressure. In this concentration, if it is active hemoglobin, it has as much oxygen-carrying capacity as half-diluted blood—anemic, but capable of supporting life in a whole animal or man. Its viscosity is low, and it cannot clot. We have prepared it in bulk, using as many as 40 units of outdated bank blood at a time. We wash the red cells free of other protein, lyse them with distilled water, precipitate the cellular stroma, remove the excess of intracellular ions with an ion-exchange resin, filter, and then, by special arrangement with Dr. R. B. Pennell of the Protein Foundation in Jamaica Plain, have the whole batch Seitz-filtered and bottled under sterile conditions. This material then remains 90% or more active with respect to oxygen-combining power at ordinary icebox temperature for 6 months or longer. At the time of perfusion we add electrolytes and antibiotics to the solution.

The perfusion technique is almost ridiculously simple. The ovaries are resected in the operating room in such a manner as to preserve a long vascular pedicle without crushing it. They are flushed at once with heparin. The perfusion is carried out with a gravity head of about 100 cm. of water. The hemoglobin is kept refrigerated except just before entry into the ovary, where it is warmed to 37° C. Because of this, a single volume of 500 cc. can be repeatedly recycled through the gland and does not lose its activity even after several hours of perfusion. The solution enters the arteries which are cannulated and drips out of the open veins. By studies on the rabbit kidney, which has a simple artery and a simple vein, both of which can be cannulated, we know that the organ remains alive in terms of maintaining an arteriovenous oxygen difference for longer than six hours; and we have noted an over-all consumption of glucose in our ovarian perfusions of an order of magnitude comparable to that published for the rabbit ovary *in vivo*.

Our first steroid experiment undertaken with Dr. Engel's advice was to repeat the conversion of testosterone to estrogen. We have found this in post-ovulatory ovaries, obtaining 10% of our recovered steroid as estradiol. Although we extracted the ovaries themselves as well as the perfusion fluid, we did not recover any estradiol other than that newly formed from the testosterone we had provided. In other experiments we have had conversion of testosterone to unknown substances, some of which we are still in pursuit of. Initially we found that some of our radioactivity remained in water-soluble form, and we have studied this material under the guidance of Mr. Robert Purdy, whose thesis work under Dr. Engel has been on conjugated estrogen in human blood. Using his methods, we find that some testosterone sulfate has been formed in our perfusions. This is intriguing, since Purdy's work shows estrone sulfate to be a major form of estrogen in blood. Obviously, we need to do more experiments of the same type, but also some new ones. Ideally, we should like to dispense with precursor materials, radioactive or otherwise, and find what the ovary will do on its own.

Parenthetically, we are collaborating with Dr. Thomas C. Peebles, who works both on the Pediatric Service and in the Vincent Research Laboratory. We have found that his endometrial cells in tissue culture can convert estradiol into estrone.

It is also our pleasure to work with Dr. Engel in another project: a search for estrogen synergists and antagonists, more especially the latter. The steroid hormones are all alike in the way snowflakes are all alike. If we can find one with no hormonal activity, but which can fool the machinery of the body into thinking that it is an estrogen, then perhaps no more women will need to come in to have normal ovaries removed! A group of compounds have been synthesized by Dr. Anne M. Stoffyn in the Hormone Laboratory, with properties suggested by Dr. Lorna J. Langer's work with her purified estradiol-17 beta dehydrogenase. We have tested about a dozen such compounds in the Vincent Laboratory, using the uterine weight of the immature mouse as the test system. Three estrone-derived compounds have had some effect in preventing the normal response to estrone by this test. The mouse is very sensitive, responding with an increase of weight to a total dose of 0.3 micrograms of estrone. However, we are now in the process of shifting to a still more sensitive test: the response of the vaginal cells, as tested by the smear method, to the direct application of estrogen. According to published reports, this preparation is sensitive to as little as 0.0007 micrograms of estrone. Since test compounds are often available in only very small amounts, we may be able to obtain a biological measurement on materials which could be tested in no other way.

There is, finally, one other area in which we have designs on the ovary. Cancer of the ovary is a fairly common cancer, in the treatment of which there has been little improvement in comparison with that of other gynecologic cancers. We are surveying the cases which have been treated since 1943, when they were studied by Dr. Frank C. Wheelock, Jr. and Dr. Joe V. Meigs. Dr. Thomas H. Green, Jr. has had success in treating advanced cases with hemisulfur mustard, and we are now starting to carry out mustard treatment by perfusion with the pump-oxygenator in conjunction with the Hospital-wide program initiated by Drs. W. Gerald Austen and Anthony P. Monaco. The study of old cases has turned up interesting aspects, some of which we have had occasion to report in collaboration with Dr. Robert E. Scully of the Pathology Department: the possibility of hormonal activation of the postmenopausal ovary by cancer which contains cancerous metastasis.

The above-mentioned activities are, of course, only a fraction of the work now being conducted in the Vincent Memorial Laboratory under the aegis of Dr. Howard Ulfelder. In these particular projects we have had the excellent help of Dr. Laszlo O. Vincze, who came to us after the completion of a project in cytology carried out in collaboration with Drs. Priscilla D. Taft and Janet W. McArthur; and of Mrs. Heidi Duda, who previously worked on steroids at Johns Hopkins.

George S. Richardson, M.D.,
Assistant in Surgery

* * *

Miss Ida M. Cannon received the Lemuel Shattuck Award at the annual meeting of the Massachusetts Public Health Association, held at the Massachusetts Institute of Technology on April 30.

Miss Cannon, now in her 82d year, began her work at Massachusetts General Hospital in 1906 as a volunteer in Dr. Richard C. Cabot's newly organized Medical Social Service Department—the first such project in existence anywhere in the world. In 1907 Miss Cannon became the head of the Department, in which capacity she served until her retirement in 1945. As a veritable pioneer in this field of work, Miss Cannon has been recognized for many years as one of the best-known social workers in this country and abroad. Her book—*On the social frontier of Medicine: Pioneering in Medical Social Service,* published by Harvard University Press in 1952—is invaluable to all medical social workers.

Five hundred or more public health experts attended the afternoon sessions of the Association and the dinner. Dr. A. Daniel Rubenstein, Director of the Division of Hospitals, in conferring the Award, said to Miss Cannon: "Like Lemuel Shattuck, your untiring work, high aims, and signal accomplishments in the several public health disciplines associated with your inspired activities in medical social work were far in advance of your times."

Dr. James Howard Means was given a mastership in the American College of Physicians for outstanding contributions in medicine, at their 40th annual meeting, held in Chicago last April. The mastership symbolizes eminence in medical practice or research.

Dr. C. Sidney Burwell (*W.M.* 1919) was given one of three memorial awards for achievement in medicine.

* * *

Dr. H. Thomas Ballantine, Jr. has returned from a 7-weeks' tour, at the invitation of the U. S. State Department, as an American Medical Specialist in Haiti and several countries in South America. Dr. Ballantine lectured before and consulted with medical professors on problems relating to medical care and education, as well as the interchange of men and ideas between North and South America. We are looking forward to a report on Dr. Ballantine's mission which will appear in an early issue of THE NEWS.

Dr. Harriet L. Hardy has returned from a visit to Czechoslovakia, where she presented a paper on "United States' experience with proposed safe levels of exposure to toxic beryllium compounds", at the meeting of the Permanent Committee and International Association on Occupational Health. On the way back, she spoke in London, at St. John's Hospital for Skin Diseases, on the subject "Skin lesions of beryllium disease". Dr. Hardy tells us that she spoke in the same room in which Hutchinson first described to the staff of St. John's Hospital the skin lesions of Boeck's sarcoid, which are indistinguishable from those of beryllium disease.

The Board of Trustees, at their meetings on March 20, and April 3 and 17, voted:

To accept the resignation of Dr. Robert S. Richards from the position of Assistant in Radiology, as of June 30;

That the appointment of Dr. Roman W. DeSanctis as Resident in Medicine become effective July 1 rather than October 1;

That the appointment of Dr. Glenn A. Langer as Resident in Medicine become effective October 1 rather than July 1.

To appoint:

Dr. Henry G. Dunn as Visiting Physician pro tempore on the Children's Medical Service, for the month of June;

Dr. Nathan T. Griscom as Second Assistant Resident in Radiology, beginning July 1, 1960;

Dr. C. V. Harrison, Professor of Pathology at the Postgraduate Medical School in London, as Pathologist pro tempore, for the week beginning April 20;

Dr. Harriet A. Hughes as Exchange Assistant

Resident on the Children's Medical Service, for the period April 12 through May 21;
Dr. Guy W. Leadbetter, Jr. as Assistant in Urology, effective July 1;
Dr. Herbert O. LeVine as Assistant in Psychiatry, beginning April 1;
Dr. Walter G. J. Putschar as Consultant in Pathology, for a period of four months, beginning May 1;
Dr. Claire M. Stiles as Assistant Resident in Anesthesia for one year, beginning July 1, 1960.

At their meetings during April, the General Executive Committee voted:

That Dr. David W. Florence's appointment on the Orthopedic Service, beginning September 1, is to be that of Resident rather than Assistant Resident;
That Dr. C. Norman Shealy be assigned to serve as Junior Resident at the Boston V.A. Hospital, beginning May 1.

To promote:

Dr. Betty J. McClellan to the position of Second Assistant Resident in Pathology for one year, beginning July 1;
Dr. John Mealey, Jr. to the position of Senior Resident at the Boston V.A. Hospital, for the period May 1 through December 31;
Dr. Dagoberto Sosa to the position of Resident on the Neurosurgical Service, for the period May 1, 1959 through January 31, 1960;
Dr. Giles D. Toll to the position of First Assistant Resident in Pathology for one year, beginning July 1.

To extend the appointments of:

Dr. Ruben Dardano through January 31, 1960, and that his title be changed to Research Fellow in Medicine rather than Clinical and Research Fellow in Medicine;
Dr. Harilaos T. Sakellarides as Clinical Fellow in Orthopedic Surgery, for the period April 6 through June 30.

To reappoint:

Dr. Nancy A. Durant as Clinical Fellow in Psychiatry for one year, beginning July 1;
Karl Dus, Ph.D. as Research Fellow in Medicine for one year, beginning April 29;
Dr. David M. Klein as Assistant Resident in Neurosurgery, for the period May 1 through December 31;
Dr. George F. Kwass as Clinical Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;
Dr. Sanford I. Roth as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Richard H. Smith as Clinical Fellow in Psychiatry for one year, beginning July 1;
Dr. Nicholas T. Zervas as Assistant Resident in Neurosurgery, assigned to Neuroradiology, beginning May 1.

To appoint:

Dr. Cesare G. Coletta as Clinical Fellow in Anesthesia for one year, beginning November 1;
Dr. Bernard D. Grant as Clinical Fellow in Orthopedic Surgery for one year, beginning March 1, with the privilege of caring for the patients of Drs. Cave and Rowe in the Baker Memorial and Phillips House;
Dr. Lars W. F. Linden as Graduate Student Assistant in Surgery, for the period April 1 through June 30;
James W. Mayer, Ph.D. as Research Fellow in Medicine (Physics) for one year, beginning May 1;
Dr. Robert G. Ojemann as Clinical and Research Fellow in Neurosurgery, for the period May 1 through December 31, and to return to the resident staff on January 1, 1960;
Dr. Serge D. Orloff as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Dr. Kenneth G. Potee as Clinical and Research Fellow in Medicine for one year, beginning March 1;
Dr. Victor J. Rosen, Jr. as Clinical Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;
Dr. Herbert C. Wimberger as Clinical and Research Fellow in Psychiatry, beginning July 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Cardiology

Christian, H. J., and Currens, J. H.
The carcinoid syndrome and related cardiac disease: Report of a case with predominant tricuspid disease.
New England J. Med. 260:629.

Dermatology

Lever, W. F.
Xanthomas.
In Current therapy, H. F. Conn, M.D., Editor, Philadelphia, W. B. Saunders Company, p. 482.

General Medicine

Graham, J. R.
Headache in systemic disease.
In Headache: Diagnosis and treatment, Arnold P. Friedman, M.D. and H. Houston Merritt, M.D., Editors, Philadelphia, F. A. Davis Company, chapter 7.

General Surgery

Daland, E. M.
Malignant melanoma: Personal experience with 170 cases.
New England J. Med. 260:453.
Darling, R. C., and Welch, C. E.
Tumors of the small intestine.
New England J. Med. 260:397.
McDermott, W. V., Jr.
Le traitement du coma hépatique.
Méd. et Hyg. 16:439.

Neurophysiology

Brazier, M. A. B.
The control of input from sensory receptors by output from the brain.
In Proceedings of the 1st International Congress on Cybernetics, p. 857.
Brazier, M. A. B.
The evolution of concepts relating to the electrical activity of the nervous system: 1600 to 1800.
In The brain and its functions, Oxford, England, Blackwell Scientific Publications, p. 191.
Dunlop, C. W., Killam, K. F., Brazier, M. A. B., and Adey, W. R.
Effects of gamma-aminobutyric acid and cerebellar activity in the cat.
Federation Proc. 18:38.

Orthopedic Surgery

Cave, E. F.
Complications of medullary fixation of fractures of long bones.
In The American Academy of Orthopaedic Surgeons: Instructional Course Lectures, Ann Arbor, J. W. Edwards, vol. 15, p. 86.

Psychiatry and Psychology

Palmer, R. S.
Ego crisis with recovery.
Pastoral Psychol. April 1959:27.
Sifneos, P. E.
Preventive psychiatric work with mothers.
Ment. Hyg. 43:230.

Radiology

Wang, C. C., Daland, E. M., and Gephart, T.
Carcinoma of the sigmoid colon: Report of two inoperable cases with favourable results five or more years following radiation therapy.
J. Faculty of Radiologists 10:50.

Books

Brazier, M. A. B., Editor.
The central nervous system and behavior.
New York, The Josiah Macy, Jr. Foundation.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Adams, F. D.
Physical diagnosis, ed. 14.
Baltimore, The Williams & Wilkins Company, 1958.
(7D)
Bellak, L.
Dementia praecox: The past decade's work and present status: A review and evaluation.
New York, Grune & Stratton, 1947.
(19S)
Brachet, J., and Mirsky, A. E. (Editors)
The cell: Biochemistry, physiology, morphology, vol. 1.
New York, Academic Press, Inc., 1959.
(2Am)
Brauer, R. W. (Editor)
Liver function: A symposium on approaches to the quantitative description of liver function.
Washington, D. C., American Institute for Biological Studies, 1958.
(16K)
Cecil, R. L., and Loeb, R. F. (Editors)
A textbook of medicine, ed. 10.
Philadelphia, W. B. Saunders Company, 1959.
(6G)
Drill, V. A. (Editor)
Pharmacology in medicine, ed. 2.
New York, McGraw-Hill Book Company, Inc., 1958.
(22C)
Ferenczi, S.
Sex in psychoanalysis, 2 vols.
New York, Basic Books, Inc., 1950.
(19Op)
Gerard, R. W.
Mirror to physiology: A self-survey of physiological science.
Washington, D. C., American Physiological Society, 1958.
(4A)
Hawkins, R. R. (Editor)
Scientific, medical, and technical books published in the United States of America, ed. 2.
New York, R. R. Bowker Co., 1958.
(1Ba)
Heaf, F., and Rusby, N. L.
Recent advances in respiratory tuberculosis, ed. 5.
Boston, Little, Brown and Company, 1959.
(20D)
Kelly, G. A.
The psychology of personal constructs, 2 vols.
New York, W. W. Norton & Company, Inc., 1955.
(19L)
May, J. M.
A physician looks at psychiatry.
New York, The John Day Company, 1958.
(19S)
Pack, G. T., and Ariel, I. M. (Editors)
Treatment of cancer and allied diseases, ed. 2, vol. 3. Tumors of the head and neck.
New York, Paul B. Hoeber, Inc., 1959.
(13V)

Ramon y Cajal, S.
Degeneration and regeneration of the nervous system, 2 vols.
New York, Hafner Publishing Co., 1959.
(19E)
Zischka, G. A. (Editor)
Index lexicorum.
New York, Hafner Publishing Co., 1959.
(1B)

* * *

All subscribers to THE NEWS, whose subscriptions expire during the summer months, are receiving expiration notices with this issue. The summer renewals are the heaviest of the year, and this arrangement is being made in order to save the extra postage which would be required should such warnings be mailed out during the months when THE NEWS is taking its summer respite.

* * *

The Warren Triennial Prize Lectures of the Massachusetts General Hospital for 1959 were delivered by Francis Crick, Ph.D., F.R.S., of the Medical Research Council Unit for Molecular Biology, Cavendish Laboratory, Cambridge, England, Visiting Professor of Chemistry at Harvard University, and James Watson, Ph.D., Associate Professor of Biology at Harvard. The lectures were given in the Morse Auditorium of the Museum of Science on the evening of May 18. Dr. Crick spoke on "The structure and replication of deoxyribonucleic acid". Dr. Watson's subject was "The role of nucleic acids in the viral induction of cancer".

The following notice, regarding the new arrangement in our Pharmacy Department, was issued by Dr. Clark last April:

> For the purpose of improving both the manufacturing and dispensing functions of the Pharmacy, each of which has now become so complex as to require separate administration, the two functions will be separated, effective Monday, April 20.
>
> Mr. John T. Murphy, Director of Pharmaceutical Research and Manufacturing, will be in charge of the manufacturing and development functions. Mr. John Webb, whose title will be changed to Director of the Pharmacy, will be in charge of the dispensing function. . . . Both will serve on the Pharmacy Committee. Mr. Murphy, in addition, will serve on the Surgical Instruments Committee.
>
> Mr. Murphy's duties will include, besides manufacturing and product development, research in pharmaceuticals, supervision of the Central Sterile Supply Room, supervision of the changing over of the drug rooms on all floors of the Hospital to the new "package" type already installed on some Baker floors, responsibility for requisitioning the raw materials needed in manufacturing, product development, and research in pharmaceuticals, and responsibility for requisitioning surgical instruments. He will also, in cooperation with Mr. Degen and Mr. Goff, make architectural plans permitting the physical separation of the manufacturing, product development, and research functions from the dispensing function. When these physical changes have been accomplished, Mr. Murphy's permanent office will be located in the new quarters for these functions.
>
> Mr. Webb will be responsible for the dispensing pharmacy. He will also be responsible for requisitioning all pharmaceuticals for later dispensing, for storing them, and for controlling them by means of keeping a perpetual inventory of them.

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

The Staff Wives Association of the Massachusetts General Hospital gathered on May 12 for their annual meeting. Reports from the various committees summarized another year of active service to the Hospital.

Mrs. Milford D. Schulz, chairman of the Music Committee, told about the 15 concerts for patients that have been given in the Chapel. The artists have ranged from concert pianists, to the M.I.T. Dames Chorus, to an ensemble playing old-time recorders.

The usual assistance to the many doctors from other lands who are studying in the Boston hospitals has continued with the activities of the Reception Center, directed by Mrs. Francis G. Barnum, Jr. and Mrs. Byron H. Waksman; the Furniture Exchange, under Mrs. Gerald S. Foster; and the Housing Committee, with Mrs. Richard G. Whiting, Mrs. H. Peter Mueller, and Mrs. Leslie J. DeGroot in charge.

Under the chairmanship of Mrs. H. Dunster Howe, a new service has been instituted for the distribution of tickets donated by friends of the Hospital. These symphony and theatre tickets are gratefully received by our foreign visitors or members of the Hospital staff.

Current and future plans of the Hospital were outlined for the group by Dr. Dean A. Clark.

A coffee hour, supervised by Mrs. Glenn E. Behringer and Mrs. Walter T. St. Goar, preceded the meeting. Mrs. C. Miller Fisher and Mrs. Charles B. Burbank poured.

The names of officers presented for next year are those of Mrs. Alfred Kranes, president, Mrs. Vincent P. Perlo, vice-president, Mrs. Avery D. Weisman, treasurer, Mrs. Edwin P. Maynard, III, corresponding secretary, and Mrs. Gerald Caplan, recording secretary.

DISTAFF CLUB

On June 7, the Distaff Club program for the year ended with a family picnic at Punktasset Farm in Concord. Mrs. Jens G. Rosenkrantz was hostess for the day, and planned a wonderful time for all the children and husbands who were able to join us.

This spring, some members of the Club redecorated the waiting room across from the Emergency Room. This project was made possible by the financial help of the Ladies' Visiting Committee. With bright curtains, a new rug, and some modern chairs, the room is now comfortable and pleasant.

Another one of our projects—the publication of a "Welcome pamphlet", to be sent to new Distaff Club members before their arrival in Boston—passed its final stage of printing and was mailed out on May 21. It includes general information about housing, employment, shopping, amusements, etc., and will (we hope) assure newcomers of the many opportunities the Boston area offers.

BIOGLETS

Dr. Caesar Briefer, Jr., Intern in Medicine—born in New York City, December 4, 1929; B.S., Allegheny College, Meadville, Pennsylvania, 1950; University of Massachusetts, Physical A.E.C. Fellow at Brookhaven National Laboratories, 1951-52; military service: Corporal in the American Medical Service, 1952-54; M.D., University of Chicago Medical School, 1958; married; one child.

Dr. Mortimer J. Buckley, Jr., Intern in Surgery—born in Worcester, Massachusetts, July 1, 1932; A.B., Holy Cross College, 1954; M.D., Boston University School of Medicine, 1958; home: Worcester, Massachusetts.

Dr. William T. Butler, Intern in Medicine—born in Boston, Massachusetts, August 10, 1932; has lived for the most part in St. Louis, Missouri; A.B., Oberlin College, Oberlin, Ohio, 1954; M.D., Western Reserve Medical School, Cleveland, Ohio, 1958; married.

Dr. Fernando A. Cardenal, Assistant Resident in Orthopedic Surgery—born in Madrid, Spain, July 31, 1925; as an undergraduate, served for 3 years as Intern Student (by public competition) in the surgical ward of Professor M. Benzo at the Hospital Provincial de Madrid; Licenciado en Medicina y Cirugia (the standard medical degree in Spain), University of Madrid, 1952; postgraduate course at the Institute de Patologia Medica, Hospital Provincial de Madrid, under Professor G. Marañón, 1952-53; House Physician and House Surgeon, Accrington Victoria Hospital, Lancashire, England, 1953; 3 months in Paris, on a French Government Scholarship, as a foreign visitor to various clinics and medical institutions, 1954; Senior House Surgeon and Orthopaedic Registrar, Durham City Hospital (an accident hospital), England, August-November, 1956; Senior House Surgeon, Harlow Wood Orthopaedic Hospital, Nottinghamshire, England, 1956-57; Fellow in Orthopedics, Boston City Hospital, 1957-58.

Dr. Habibolah Davanloo, Assistant Resident in Psychiatry—born in Tehran, Iran, October 8, 1928; entered elementary school at the age of 7 and finished at the age of 14; attended Iranchahr High School for 5 years, studying general subjects; premedical course at Alborz College for 1 year; M.D., Medical School of Tehran University, 1955; private practice for a few months, working during the day as a Resident at Pahlavi Hospital, which is affiliated with Tehran Medical School; military service: served in the Medical Ward of Tehran Military College for 4 months, then was transferred to the hospital of the 8th Division, with which he was affiliated for 18 months, finishing military service in 1957; Intern, rotating, Memorial Hospital, Albany, N. Y., 1957-58.

Dr. Thomas E. Gaffney, Assistant Resident in Medicine—born in East St. Louis, Illinois, November 5, 1930; A.B., University of Missouri, Columbia, Missouri, 1950; M.A., University of Missouri, 1952; M.D., University of Cincinnati, Cincinnati, Ohio, 1957; Intern in Medicine, Harvard Medical Service, Boston City Hospital, 1957-58; married.

Dr. Alan H. Goldberg, Assistant Resident in Anesthesia—born in Boston, Massachusetts, November 29, 1931; A.B., Brown University, Providence, Rhode Island, 1953; M.D., Boston University School of Medicine, 1957; Intern in Surgery, Massachusetts Memorial Hospitals, Boston, 1957-58; married; temporary home: Boston.

Dr. Peter J. Gomatos, Resident in Medicine—born in Cambridge, Massachusetts, February 13, 1929; S.B., Massachusetts Institute of Technology, 1950; M.D., Johns Hopkins Medical School, Baltimore, Maryland, 1954; Intern in Medicine, Johns Hopkins Hospital, Baltimore, 1954-55; military service: Lieutenant (s/g), U.S. Navy, attached to the Marine Corps in Kaneohe, Hawaii, 1955-57; Assistant Resident in Medicine, 4th Medical Service, Boston City Hospital, 1957-58.

Dr. Mehran Goulian, Assistant Resident in Medicine—born in Weehawken, New Jersey, December 31, 1929; A.B., Columbia College, New York City, 1950; M.D., Columbia University College of Physicians and Surgeons, 1954; Intern in Medicine, Barnes Hospital, St. Louis, Missouri, 1954-55; National Institutes of Health, P.H.S., Bethesda, Maryland, 1955-57.

Dr. Herbert A. Haessler, Assistant Resident on the Children's Medical Service—born in Milwaukee, Wisconsin, March 20, 1926; B.S., University of Wisconsin, Madison, Wisconsin, 1950; made educational film strips for classroom teaching aids, 1950-53; M.D., Marquette University School of Medicine, Milwaukee, Wisconsin, 1957; Intern in Medicine, New England Center Hospital, Boston, Massachusetts, 1957-58.

Dr. Ken Hashimoto, Assistant Resident in Dermatology—born in Niigata, Japan, June 19, 1932; M.D., Niigata University Medical School, 1955; Intern in Dermatology, Tokyo Army Hospital, U.S. Army, 1955-56; Assistant Resident in Dermatology, University Hospital, University of Maryland, College Park, Maryland, 1956-58; a 3-year Fulbright Scholarship extended through 1958.

Dr. George A. Jacoby, Jr., Intern in Medicine—born in Bronxville, N. Y., September 20, 1932; B.A., Yale University, 1954; M.D., Harvard Medical School, 1958; married; one son.

Dr. Marvin M. Lipman, Resident in Medicine—born in New York City, November 6, 1928; B.A., Columbia College, New York City, 1949; M.D., Columbia University College of Physicians and Surgeons, 1954; Intern in Medicine, Columbia-Presbyterian Medical Center, 1954-55; Resident in Medicine, Columbia-Presbyterian Medical Center, 1955-56; military service: Captain, Medical Corps, U.S. Army, stationed in Ulm, Germany; married; two children.

Dr. Arthur S. Lurie, Assistant Resident in Dermatology—born in Boston, Massachusetts, April 30, 1928; attended Boston Latin High School; A.B., Tufts College, 1949; M.D., Tufts University School of Medicine, 1953; Intern, University of Chicago Clinics, 1953-54; Assistant Resident in Medicine, New England Center Hospital, Boston, 1954-55; military service: Captain, U.S. Air Force, Strategic Air Command, Schilling Air Force Base, Kansas, and on rotation in England in Internal and Preventive Medicine, 1955-57; Assistant Resident in Medicine, New England Center Hospital, March-June, 1957; Senior Assistant Resident in Medicine, 1st and 3d Tufts Medical Services, Boston City Hospital, 1957-58.

Dr. William T. McCoy, Assistant Resident in Radiology—born in Adelaide, South Australia, August 30, 1932; St. Peters College, Adelaide, 1940-49; M.B., B.S., Adelaide Medical School, 1955; Intern, Royal Adelaide Hospital, 1956; Intern, Adelaide Children's Hospital, 1957; Resident, Repatriation General Hospital, Adelaide, 1958; married.

Dr. John W. Madden, Intern in Surgery—born in Glendale, California, June 3, 1933; B.S., Yale University, 1955; M.D., Harvard Medical School, 1958; married.

Dr. Herbert A. Newman, Assistant Resident on the Children's Medical Service—born in Newark, New Jersey, May 24, 1933; University of Michigan, Ann Arbor, Michigan, 1950-53; M.D., Yale University School of Medicine, 1957; Intern, Hospital of the University of Pennsylvania, Philadelphia, 1957-58.

Dr. Joseph C. Oakley, Intern in Dentistry—born in Bardstown, Kentucky, October 28, 1932; A.B., Harvard College, 1954; D.M.D., Harvard School of Dental Medicine, 1958; married; one son.

Dr. John T. Porvaznik, Jr., Intern in Surgery—born in Duquesne, Pennsylvania, June 14, 1933; A.B., Dartmouth College, 1955; Dartmouth College Medical School, with transfer to Harvard Medical School; M.D., Harvard Medical School, 1958; married; home: Duquesne, Pennsylvania.

Dr. R. Wyman Sanders, Intern on the Children's Medical Service—born in Boston, Massachusetts, October 4, 1931; A.B., Williams College, 1954; M.D., University of Rochester Rochester, N. Y., 1958.

Dr. John W. Saville, Assistant Resident in Orthopedic Surgery—born in Cleveland, Ohio April 1, 1929; A.B., George Washington University, Washington, D.C., 1949; M.D., George Washington University, 1953; military service: Lieutenant, U.S. Navy, Intern, U.S. Naval Hospital, Bethesda, Maryland, Assistant Medical Officer, Navy Tissue Bank, Orthopedic Staff, U.S. Naval Hospital Medical School, Bethesda, and National Cancer Institute, Bethesda 1953-56; Assistant Resident in General Surgery, 3d Surgical Division, Bellevue Hospital, New York City, 1956-57; Assistant Resident in Orthopedic Surgery, Children's Medical Center Boston, Massachusetts, 1957-58; married; one son; home: Bethesda, Maryland.

Dr. N. Ty Smith, Assistant Resident in Anesthesia—born in Fort Madison, Iowa, May 5, 1932; Harvard College, 1950-53; M.D., Harvard Medical School, 1957; Intern, Children's Medical Center, Boston, Massachusetts, 1957-58; married; home: Fort Lauderdale, Florida.

Dr. Rodman D. Starke, Intern in Medicine—born in Dover, New Hampshire, February 3, 1933; A.B., Williams College, 1954; M.D. Harvard Medical School, 1958; married; home: Durham, New Hampshire.

New addresses:—

- Dr. Norman R. Bernstein (a.r.p. *Psychiat.* 1954), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
- Dr. William R. Blade (r.p. *R.* 1958), 545 Fern St., Fresno 4, Calif.
- Dr Harry A. Bliss (*M.* 1945), 840 S. Wood St., Chicago 12, Ill.
- Dr. John M. Carey (*W.S.* 1946), 2221 N.W. 54th St., Oklahoma City, Okla.
- Dr. R. Clement Darling, Jr. (*C.M.* 1954), 1180 Beacon St., Brookline, Mass.
- Dr. Gardner F. Fay (a.r.s. *Or.* 1957), 1180 Beacon St., Brookline, Mass.
- Dr. Edward L. Ferguson (*S.* 1954), 159 Essex St., Holyoke, Mass.
- Dr. James J. Ferguson, Jr. (*M.* 1951), 516 Westminster Ave., Swarthmore, Pa.
- Dr. Robert P. Fornshell (sr. r.s. *Or.* 1958), 85 Osborne St., Danbury, Conn.
- Dr. Craig S. Lichtenwalner (*M.* 1950), Division of International Health, U.S. Public Health Service, Washington 25, D.C.
- Dr. Robert S. Richards (r.p. *R.* 1958), Dept. of Radiology, Lankenau Hospital, Lankenau and City Line Ave., Philadelphia 31, Pa. (after July 1)
- Dr. Margaret S. Shipley (*E.M.* 1943), 1109 Sunset Blvd., North Canton 20, Ohio
- Dr. Porter H. Smith (a. an. 1959), 1005 Haywood Drive, Madison, Wis.
- Dr. Clifford J. Straehley, Jr. (*W.S.* 1947), 1200 E. Genesee St., Syracuse 10, N. Y.
- Dr. Arthur E. Strauss (*E.M.* 1916), Beaumont Bldg., 3720 Washington Ave., St. Louis 8, Mo.

Brief bits:—

- Dr. Joseph S. Barr has been promoted to the rank of Rear Admiral in the U.S. Naval Reserve, effective as of October 1958.
- Dr. Mary A. B. Brazier has returned from a 3-months' Visiting Professorship at the University of California in Los Angeles.
- Dr. Thornton Brown became Editor and Chairman of the Board of Editors of the *Journal of Bone and Joint Surgery* last January 1. He succeeded Dr. William A. Rogers, who is now Editor-in-Chief *Emeritus*.
- Dr. Benjamin Castleman was elected Vice-President of the International Academy of Pathology at the annual meeting of the Academy here in Boston last April.
- Dr. Lewis L. Engel has been awarded an American Cancer Society professorship to continue basic studies in hormone research. Dr. Engel is working on the role of hormones in the problem of normal and abnormal growth.
- Dr. John R. Huckell (a.r.s. *Or.* 1958) is now in practice with two other orthopedic surgeons, and has sent us an office address — 916 McLeod Bldg., Edmonton, Alberta, Canada. He will be affiliated with the University of Alberta Hospital.
- Dr. Erich Lindemann addressed the Psychotherapy Conference in Lindau, Germany, and also visited and spoke at the psychiatric centers in Freiburg and Heidelberg during the first weeks of May.
- As of January 1, Dr. John W. Raker became Surgical Consultant to the Advisory Committee on Civil Defense of the National Research Council — National Academy of Sciences, Washington, D.C.
- Dr. Milford D. Schulz concluded his term as President of the American Radium Society by presiding at its 41st annual meeting, held in Hot Springs, Va., last April. Dr. Schulz addressed the Society on the subject "The choice of modality in the treatment of cancer".
- Dr. Donald N. Wysham (*M.* 1954) has left America to begin practice in Ludhiana, India. Dr. Wysham is one of a new group of 59 United Presbyterian missionaries and fraternal workers who have left this country for overseas duty. The group, sponsored by the Commission on Ecumenical Mission and Relations, includes teachers, doctors, dentists, nurses, agriculturalists, and ministers.

* * *

This letter has come from Dr. Robert N. Buchanan, Jr. (r.p. *D.* 1941), 326 Doctors Building, Nashville 3, Tennessee:

> I cannot begin to tell you how much I enjoy receiving The News each month. The two years I spent at the Massachusetts General Hospital could not have been pleasanter at the time, nor more rewarding at that time and for the future. To be able to have a monthly reminder — not that one is necessary — is very pleasant.
>
> I see some of the people who were connected with the Department of Dermatology almost every year at the national meetings but, unfortunately, do not have the opportunity to see many of my friends who are in other fields.
>
> Within the next few years I hope to get back to Boston, and of course to The General. I am looking forward with great eagerness to Dr. Fitzpatrick's coming, and know he will have a very productive department. Walter Lever and others have certainly made outstanding contributions from your Department of Dermatology.

This note has come from Dr. Anthony A. Arzimanoglu (a.r.s. *Or.* 1952), written from 1 Neofytoy Vamva St., Colonaki Square, Athens, Greece:

> I recently received the last two issues of THE NEWS, which you had the kindness to mail me. It is really nice, when far away from the environment for which I have so many pleasant memories, to be able to follow the news of M.G.H. Believe me, the days I lived in the Hospital are unforgettable from the scientific point of view as well as for the friendly environment.
>
> The only reason I cannot keep up with my subscription is because of the red tape of my country which makes it practically impossible to send abroad even the two dollars. However, there are many possibilities that I may visit the Massachusetts General for a couple of months this summer and thus I will get the opportunity to subscribe again.

Dr. Clark has received this enthusiastic letter from a most grateful parent of a child who was admitted to Burnham Memorial for a tonsillectomy. The letter

No. 83 in a series of Staff photographs
Dr. George S. Richardson—Assistant in Surgery

reads:

The enclosed description of his recent stay in the Burnham wing of Massachusetts General Hospital was given me in three installments by my six-year-old son, Geoffrey. I had suggested that we write a little story of what happened in order that his older brother, Chris, would have an idea of what took place. Geoff thought this was a fine idea, and even asked me to write down the middle section at a time when I am certain he was not feeling his best.

My reason for sending this is to indicate, through his simple story, my feeling about being able to stay with Geoffrey throughout the entire experience. He is totally blind, and this first hospital visit might well have been a very frightening thing. As a result of patience and understanding on the part of everyone on the staff — the nurses, house doctors, technicians, anesthetists, and even the fine young man who wheeled Geoff up to the operating floor — added to the fact that I was able to be with him every step of the way, Geoff has only good impressions of the time he had his tonsils out.

There were so many moments when I knew my presence made the difference between complete panic and calmness:

1) During the visit of the technician who came for blood samples.
2) That first night, when we talked out the fact that he would go up to the operating floor in the morning.
3) The long wait on the morning of the operation, when my son realized he could not have any breakfast.
4) The trip on the rolling bed up to surgery.
5) While anesthesia was being administered, Dr. Lurie made it possible for me to put on a surgical dress and stay with my son until he was asleep.
6) The uncomfortable hours immediately following surgery, when I could devote my time exclusively to reassuring him and tending to his needs.
7) The second night, when sleep did not come so easily.
8) The third morning, to encourage him to take liquids and wait patiently for our doctor to come.

I cannot express, adequately, my gratitude to your hospital for making it possible for a mother to remain with her child. Your understanding and progressive attitude in this matter are to be commended, as I understand it is extremely difficult to make such arrangements in any other hospital in Boston.

Then follow Geoffrey's comments, as recorded at the time by his mother.

Sunday evening

Chrisie, I've had a nice time, so far. When we got here, I first walked around. Then we went upstairs to the sixth floor and found our room there. Then I looked around and I was very happy. Then we had my temperature and blood pressure and I liked that lady, and I said, "I hope you come another time." I wanted to go out to the playroom and I went out with Daddy and saw a little hobbyhorse. Then I went over to a table and stood there. And then Daddy showed me something very interesting — one of those blue Scotty dogs we had for Easter. And then I saw this dump truck and then I went over and saw this little kitty and another dog. Then I saw blocks and I looked at them, and I saw an engine. Then there was nothing I wanted to play with, so Mother came here and we went back to my room, and I liked to look around. I looked around and I found the two beds myself. Mother took my slippers off and I said I could get off the bed myself. And then, guess what I had for supper. I had meat, baked potatoes, beans, and bread and cake, and I had a nice big drink of milk I could pour myself. After supper we went and played records and then read a story about the trained circus seal, and it was the funniest story. We were playing with Peg Village and a nice doctor came in. He had to prick my finger, and you know what he said? If I sat still he'd only have to prick me once, so I did, only kind of shaked. And then I washed and had my chocolate milk with a straw in it, when a doctor came in. He was a nice, nice doctor. First, he took my blood pressure with a little machine. There's a little soft cuff that goes around your arm. He pumps and it gets tighter and tighter, but it doesn't hurt. He listened to my back and my tummy. His name was Dr. Hicks. Then we wrote this story.

Monday afternoon — postoperation

I was awake this morning at quarter of six when the nurse came in and took my temperature. Then we played with the Peg Village and Mother got her clothes on. I had to stay in bed and I wanted to get up very much, but I didn't. And then I played. The nurse came in and gave me a shot to make me sleep and dry my mouth. We had a story. Then I went into the operating table and had my tonsils out. And then my throat was very sore. Then I threw up and fell asleep, and all of a sudden I woke up and I talked to Mother. And then I listened to my orchestra record and in the afternoon I had nothing to do. I had my temperature taken and I just lay there, and I almost threw up. Later it was time to throw up only I couldn't. Then I took a rest and we talked together, and now it's late in the afternoon.

Tuesday morning

I played with that rabbit on skis and I played with the Jingle Train. I went to the bathroom and took a walk down the hall. They brought some jello but I didn't care for it. Then they brought me some apple juice and I drank it. We were waiting for Dr. Lurie but instead, guess who came? Daddy came! And then Dr. Lurie came and we asked whether I could go home and he said, "Yes." He said I couldn't have any bananas and bacon and I couldn't have any fruit juice except grape and apple, and no hot dogs. Then we got dressed and I went in a wheel chair and I went home in the car.

I liked the lady who took my temperature. I'll always think of her. Wasn't she a nice lady? I wish I could go to that General Hospital again.

* * *

IMPORTANT NOTICE

Will all members of the House Staff who are ending service at Massachusetts General Hospital on June 30 (or at any other time, for that matter) please make sure that the Office of The News and Archives receives your new temporary or permanent office address before you leave M.G.H. or as soon thereafter as is possible. One of the duties of this office is to prepare the Directory section of the *Annual Report*, and unless we are notified of new addresses and future changes in addresses the Directory cannot be kept up to date.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 188 Boston, Mass. October 1959

MEDICINE IN THE TEACHING HOSPITAL OF TODAY AND TOMORROW

Presidential Address, Association of American Physicians,
Atlantic City, New Jersey, May 5, 1959

To serve as President of the Association is both an honor and a privilege. My most awesome duty has been this Presidential Address. I found it an even more lonely task than I had expected. Not until I shared my thoughts and ideals with some of my colleagues did it become a rewarding experience. On reviewing the pace of human progress and the many resulting problems, one becomes increasingly aware that the potentiality for future progress has never been so great. There is, however, a wide disparity between achievement and potential. It is this theme that I wish to develop.

We are living in an exciting period of great change and transition. Contemporary political, cultural, economic, and scientific upheaval is affecting every facet of human existence — and in no sphere, I submit, are these forces more complexly interwoven than in the science, or art, or profession of medicine in the world of today. Yes, the circumstances of daily life are changing more rapidly than they have ever changed before in man's experience. We must reckon with these many forces if we are to supply stability of purpose to our teaching hospitals. We must also be promptly and delicately responsive to changes in our environment, as well as to changes in objectives.

I should like, this morning, to discuss certain aspects of this problem as they concern medicine, for I feel deeply that some of our difficulties may be unique to our times and the moment is at hand for forthright consideration of how best to meet them now and in the future. I will address myself to some of the problems now facing the university teaching hospital and its department of medicine.

We must keep in mind the special role of the teaching hospital in contemporary medicine. *Its function is a creative one.* Here, new physicians are trained and graduated. Here, the character and content of medical practice are continuously reshaped as new researches are conducted and new ideas are conceived and tested. And here, last but not least, the patient is cared for in a manner that not only gives him the best that medicine has to offer, but also displays a standard and style of care that students and house staff may strive to emulate in the years beyond their training. This should be patient care in medicine's grand tradition, embodying humanity, wisdom, dignity, and compassion. But it is something more: It is razor-edged scientific analysis, probing, observing, recording, doubting, alert to every aberration — from the patient's demeanor to the enzymes in his serum. The teaching hospital does indeed have a special creative role, placing upon it responsibilities, both grave and inescapable. What we do and think in our teaching hospitals will influence the thought and practice of our colleagues everywhere, and, in turn, the health and happiness of our generation.

The great problem we now face is: How can we provide and maintain a properly balanced program of patient care, teaching, and research in the face of the torrential outpouring of new knowledge? Much of this knowledge has clear relevance for medicine, and more could have relevance if the right person were on hand to perceive and exploit its latent importance. Problems never come earmarked as problems. How, then, can we investigate an unknown in medicine if it has to be approached in biochemical terms by men who must both recognize a clinical problem and conceive a biochemical solution? If we are to promote meaningful and competent research at the more fundamental levels of biological organization, how can we simultaneously imbue our students with the chief humanistic aim of medicine — which is, that the patient's interest comes first and the investigator's second? How can we best integrate the new movement in scientific medicine with the work and thought of our experienced clinicians, who may be alienated by its esoteric techniques and minute concern with the capers of carbon atoms?

These are the questions to be answered and the problems to be faced. Few would deny the major premise that a new scientific revolution is upon us. Starting soon after the second World War, there has occurred an incredible output of basic biological research in fields adjacent to or potentially adjacent to medicine. The factors inciting this revolution — the advent of radioactive isotopes, perfection of chromatographic procedures and methods of protein purification, increased financial support of research, etcetera — are beyond the scope of this discussion. Suffice it to say that many of our young physicians have participated in this development. Some of them have had a period of formal scientific training at our universities or similar institutions. Others have somehow managed to train themselves in scientific disciplines even while working in clinical areas. This is mirrored in our medical journals and the content of our

(*Continued on page 2*)

MEDICINE AS A CULTURAL AND POLITICAL FORCE IN LATIN AMERICA

Both the United States and Russia have recently intensified their efforts to win the support of the peoples as well as the governments of the so-called neutral nations. To this end many activities other than those of strictly military or economic importance have been inaugurated. One of these is the Cultural Program of the U.S. State Department, within which there is a branch known as the International Educational Exchange Service. This Service has as one of its subdivisions the American Specialists Program, about which the State Department has said: "The American Specialists category was established to make it possible for our posts abroad to have the services of certain Americans to assist them in developing good will, understanding, and respect for the United States and its policies and institutions. In making annual plans for its Educational Exchange Program, each post decides which of its objectives could best be reached by the services of an American Specialist. For example, an American editor may be desired to hold seminars with local journalists; the Ministry of Education in a country may want an American educator to study problems of curriculum revision; an American athletic coach may be needed to hold clinics and assist local coaches in preparing for international athletic events; local literary circles may wish an opportunity to discuss American literature with an American author. From this, it is seen that American Specialists go abroad for the purpose of rendering a specific service for the United States rather than to work on a project of their own choosing."

In 1958 slightly over one-half million dollars were made available for 168 Specialists to visit 65 countries. For 24 Specialists to visit South America, $92,000 was allocated. Of this latter sum, $23,000 was allotted to various athletic activities and $3,914.57 was divided among three medical projects!

About February 1, 1959, an official of the State Department invited me by telephone to serve as an American Specialist in South America for a period of seven weeks. The high point of my trip was to be attendance at the VIIIth Latin American Congress of Neurosurgery in Santiago, Chile. Before and after those dates I was to give lectures, attend conferences, and visit medical schools in other medical centers. At the last moment Haiti was added to my itinerary, but my experiences

(*Continued on page 4*)

(*Continued from page 1*)

research meetings — fully illustrated by yesterday's program, where we noted that "the Syndrome" is giving way to what might be called "the Gospel according to Saint Geiger".

We are standing in the middle of what might reasonably be called a blizzard of scientific progress. The rate at which progress is being made has led to increasing difficulty in keeping abreast of the published reports of that progress. The inevitable consequences have been an increase in specialization, a tendency toward separation of practice from research, and, as some would say, the invasion of one field by individuals whose backgrounds and training have been in other areas. In addition to this increase in specialization, there has arisen an increasing difficulty of communication not only between individuals in different scientific disciplines but also between individuals within a given field. How, in the face of these difficulties, can we achieve and maintain a high standard of patient care, teaching, and research — a *modus operandi* which will enable us to preserve the unity of the whole of internal medicine? How can we mount this whirlwind and make it take us where we want to go?

I am sure there are no *right* answers to these questions — that is, no answers that are right for each department of medicine or for each member of such a department.

The major purpose of our annual meeting is to consider together the results and implications of experimental medicine. It is because of this that I am encouraged to outline for you, in the form of a progress report, the results of an experiment in progress at the Massachusetts General Hospital — an experiment in how to accommodate ourselves most effectively to meet the challenges and opportunities of present-day academic medicine. The approach which I shall outline is neither new nor unique, and the validity of its results can never be unassailably fortified with the armor of standard deviations and chi squares. Nevertheless, I am convinced that this experiment or some parallel approach must be vigorously pursued in every teaching hospital.

This program has been based upon two general premises. The first is that specialization is necessary, and that it is here to stay. Himsworth has phrased this point very aptly:

> The present situation has arisen because medical knowledge has grown to such an extent that it is no longer, and never again will be, within the capacity of any individual man to master more than a small fraction of it. Specialization has become a necessity. To decry this not only ignores fact; it is to deny the very means that have made our recent progress possible. Specialization is a natural phenomenon. It is comparable in human affairs to differentiation of function in biology. . . . It is the same with human organizations. Specialization holds out to them — be they intellectual or social — the promise of vast extensions in power; but it does so only on condition that *integration keeps pace with specialization.*

According to Himsworth, then, the difficulties arise, not from specialization, but from failure of integration.

This leads to our second general premise — that integration must exist both among individuals and within individuals, particularly those key men who lead team efforts. Unless it does, the results may be disappointing.

Our Medical Service is composed of autonomous units, each covering one of the specialties of internal medicine. Thus, we have a Hematology Unit, a Gastroenterology Unit, a Cardiology Unit, and various others — twelve in all — covering most of the categories into which internal medicine has been divided.

In medicine, as in all of biology, we are primarily concerned with the details of structure and its relationship to function. Therefore, one may well ask: What is the composition of these specialty units, what responsibilities do they assume within the Department of Medicine, and how do their structures help them to attain their avowed goals?

Each unit is a group, of variable but workable size, made up of full- and part-time physicians, clinical investigators, and, in some instances, basic scientists.*

Each unit must serve as a miniature Department of Medicine, dedicated to total competence within its designated area of interest. The sweep of its activities must carry from basic laboratory research to the imaginative application of its discipline to the cure of the ill. This is no less than an injunction to these units to maintain a high standard of excellence in mastering the skills of their specialty areas, in applying these skills effectively, in the acquisition of new facts, and in the teaching of its discipline to other students of medicine.

Where can the harassed chief of a medical service find a physician to carry out all of these activities effectively within a specialty area? In American medicine — the answer comes back clearly — it is "nowhere". A specialty unit can no longer be the lengthening shadow of one gifted individual, miraculously adapted to the laboratory, the lecture hall, and the clinic. Basic laboratory research in all medical specialties obsessively demands the devoted attention of first-rate minds for maximal returns. Alternatively, seasoned clinical wisdom based on critical evaluation of experience, which is the hallmark of the excellent physician, cannot be acquired as a gratuitous by-product of laboratory research. Proficiency in clinical medicine is painfully acquired and must be constantly cultivated, or else it degenerates into the marketing of shopworn sophistries. Faced with this dilemma, we have accepted the fact that it is the unit, not the individual, which must responsibly insure the pursuit of medicine in its broadest sense as an area of both theoretical and applied biology.

How is this carried out in practice? One of our smallest units, for example, is composed of physicians who have had extensive training in organic or biological chemistry, physicians who have had experience in the physiological and metabolic techniques of classical clinical research, and clinicians in private practice who maintain an interest in this medical specialty. The weekly activities of this unit attempt to correlate these various approaches. There is a seminar at which the basic scientific foundations of the discipline are explored, led by either a member of the unit or by a guest speaker. The unit holds its own weekly "Grand Rounds" at which the clinical problems of one or two patients are explored in detail, attempting the most precise scientific analysis of the illness, its pathogenesis and treatment. Finally, there is a specialty clinic and a consultation Rounds at which a large number of specific clinical problems are met in the daily evaluation and care of patients. All of these functions are attended by students and all members of the unit, irrespective of their primary interests. Each makes his major contribution within the area of his greatest competency, but serves further to challenge the accuracy and significance of observations and traditional teaching of the other areas of the discipline.

One of the larger groups, the Connective Tissue Unit, is comprised of a group of individuals representing a wide variety of backgrounds and disciplines, who share a common interest in the connective tissue, its components and its diseases. Senior members include practicing physicians, four clinical investigators, a biologist, a protein chemist and an organic chemist interested primarily in the carbohydrates. Together with a number of clinical and research fellows and students, these individuals share the responsibilities previously mentioned, and, of course, conduct their own research.

The physician members of each unit also visit on the general medical wards and participate in the teaching of general internal medicine to second-, third-, and fourth-year students. Each of the senior investigators is responsible for determining the direction of, and conduct of, his own research work. Collaborative research problems are undertaken when they spring from common interest.

To present one's work and ideas, either formally in a conference or informally over a cup of coffee, before this group of individuals whose interest is keen and whose backgrounds are so varied, has proved to be a privilege which each member values above all others.

Is such a unit just another malignant example of the "togetherness" so increasingly evident on the contemporary American scene? Does any interreaction occur when the scientist and the clinician are brought together? Here lies the crux of the problem, to my way of thinking. For the successful functioning of this system, we have attempted to appoint a particular type of man to head each unit — a man who by some means has managed to plant a solid foot in a scientific discipline beyond the scope of clinical medicine, generally in biochemistry, biophysics, or physiology. I have the very strong conviction that in the careful selection of unit heads lies the key to the success of this plan. By combining clinical medicine and basic science in their training, and by displaying superior competence in both fields, they represent a new breed of physician. Just as the biochemist once was a strange breed, trained in both chemistry and biology, he managed, nevertheless, to survive and flourish. Likewise, this new breed of physician, born of necessity, the product of modern medicine's complexity, will also survive and flourish. They will flourish along with their conventionally-trained colleagues — in teaching hospitals where, we hope, their unique viewpoint will promote strong leadership and progress. They will respect the achievements of the clinicians and talk their language. Their scientific background and training should enable them to produce research of competence, comparable to that of the non-clinically-trained scientist.

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*In a personal communication received on May 19, 1959, Dr. Dana M. Atchley wrote as follows: "I think we should speak of the 'clinical scientist' and the 'basic scientist' because no clinician these days can be a good clinician if he is not a scientist in his attitudes and training."

It is true that such men are hard to find and a chief of medicine who wishes to develop a unit system of this sort must take the time and make the effort to find, to nurture, and to encourage this small but important group of young physicians who show promise of development in this direction. This may be one of his most important responsibilities. Equally important, he must also recruit the much-needed quota of able part-time physicians — clinicians who, because of previous training, wish to maintain an interest in a given medical specialty, as well as to participate in the teaching of students and house staff. He must also do everything in his power to attract top-flight scientists.

Through the efforts of such people, it should be possible to mount a team effort that will develop cohesion and direction. Each unit should be designed as a balanced one, with due attention paid to all levels of work. Each member should select and occupy his own position in the spectrum, from pure science to clinical medicine, and should command respect for his abilities and accomplishments. We would like to believe that in such units, the whole may be greater than the sum of its parts. There should be little room in such units for suspicions and condescending attitudes so often marring the relationships between scientists and clinicians.

In this way, viewpoints can be shared, horizons broadened, and opportunities increased for individuality and self-development. By cooperative effort, members of a unit may take time off in sabbatical leaves or other changes of pace, so necessary for the maintenance of a fresh point of view. In this way, a better appreciation of the many roads that lead to medical knowledge may be achieved. It is already becoming clear from our experience with this plan how exciting and fruitful the results of such team efforts can be when guided by the sort of men about whom I have been talking.

You may well ask how these units relate to one another and function as an integrated Department of Medicine. The Head of the Department meets with the Chiefs of Units at stated intervals. Here, problems are aired with candor and sometimes heat. This helps us not only in effecting unity of purpose in the care of patients and teaching, but also familiarizes each unit with the research interests and aims of the others. These and other regularly held exercises help to further our common objectives without encroaching upon individuality of expression or action.

Such a department of medicine has all the specialty subdivisions in medicine for purposes of investigation and teaching, yet the foundation of internal medicine is the general medical ward in which all of the various specialty members participate in the care of the sick, no matter whether or not the patients have the diseases in which they are well versed. It is the general medical ward that is the basic area of integration, both of the individual and of the discipline itself. I, personally, deplore the departments of medicine that have arthritis wards, gastroenterology wards, pulmonary disease wards, etcetera, and distribute their patients on admission to these specialized services. In my opinion, medicine can't be done that way in the last analysis. It can be and must be studied in the specialty areas, but the care of the patient in the final integration has to be done by an internist working in a general medical service. I emphasize this point because there is a trend in the other direction in this country and abroad.

We return, then, to our original question: How can a teaching hospital effectively carry out a program of medical care, teaching, and research? How does the integration achieved in the units help in the pursuit of these three goals? Let us consider them one by one.

As for teaching, the exposure to the unit teams provides superb opportunities for building into medical students and house staff a broad point of view. We have long since conceded that the undergraduate phase of medical education can no longer turn out physicians ready for the practice of medicine. It has to be satisfied with the building of general competence, leaving the acquisition of special knowledge and skills to the graduate training program — especially residency training. Much has been written in recent years about integrating the medical curriculum. Is it not reasonable to expect that this goal will be more closely approached if our teachers are better integrated? This must surely be a prerequisite for the success of an integrated curriculum, no matter how carefully it is planned.

Education is a simple process. It begins when two people of different life experiences meet and talk. It is this communication between those who are willing to learn from one another which is the essence of the educational experience. Obviously, we cannot teach our students all of medicine. What we can teach them, however, is the habit of being self-taught. As has recently been said, "It is our job as educators to see to it that our students, on graduation, be not rifle bullets, constantly decelerating, but self-propelled missiles."

What about research — such an essential component of the modern university medical center? As physicians dedicated to the prevention and treatment of disease, we are vitally interested in furthering this goal. This we can attain by a better understanding of our patients, their diseases, their disturbed physiology, the biology of the involved tissue, and the chemistry and/or biology of potential etiological agents. Having assumed responsibility for teaching, we must imbue our students with an intellectual curiosity at all these levels. Finally, what better antidote for the dangers of cant and dogmatism than research? The unfounded statement, the unsupported conviction, or the traditional belief are not likely to survive long in the questioning attitude engendered by research. To paraphrase an Elizabethan dramatist — research does make better doctors of us all.

I believe that most medical research can be carried out more effectively within a teaching hospital than in a research institute devoid of an association with medical care and teaching. This is obviously true for traditional clinical research, of whatever variety. It is becoming increasingly evident that this is also true for the more basic scientific disciplines. In recognition of this fact, research institutes such as the Rockefeller Institute and the National Institutes of Health have seen fit to provide themselves with hospital facilities to further their research programs. Within the hospital setting, the scientist is made constantly aware of the problems involved in medical care, while being stimulated by association with students and physicians concerned with the validity and application of medical knowledge. It is our hope that more scientists will do their research in hospitals. If they do, the unit system may be the means by which they will become aware of the unsolved problems of clinical medicine. We also hope that our units will attract scientists to them, for this would add as much to medicine as it would to science. We believe that fundamental research should be an integral part of the modern teaching hospital and can no longer be considered a luxury. The full-time scientist in the hospital must be regarded as the professional equal of the clinician and *not his handmaiden*. We trust that some of these important men will wish to remain permanently in the hospital research setting. Undoubtedly, some will return to other academic departments in medical schools and universities, carrying with them a new awareness of the applicability of their scientific disciplines to medicine.

Finally, last to be mentioned but surely not least, we come to patient care — the goal and purpose of the whole complicated enterprise. This remains our primary concern. There are many opportunities in this area for self-delusion and cant. We must impress upon our students and house staff the importance of thinking of each patient as a whole human being, a man or a woman of certain social and economic background, with hopes and fears and feelings of guilt and pride. Students so indoctrinated will be mindful of the fact that all the symptoms of a given patient are not necessarily due to a genetically determined enzyme deficiency, however crisply revealed before our eyes by the incontestable techniques of biochemistry. Unless our students are so trained, they will not bring to bear in future years the wisdom and vision needed in helping patients attain better health and more happiness.

I believe we must face this problem honestly. We must avoid the pitfalls of lip service and inconsistency. Here again is where I think the unit system can be of help. Beyond the scope of any single individual, it has the potential for demonstrating that no sharp boundaries can be drawn between the scientific analysis of disease and the compassionate care of the sick. We trust the unit chiefs will always keep clearly in mind that the primary concern of a teaching hospital is the care of the sick and that it is within this framework that the activities of the unit must be carried out. For the same reasons, they should be aware that the definition of good medical care is as elusive as good medical care itself. Whatever criteria we use must constantly be reviewed and rigorously judged from the standpoint of their effects on the patient rather than on the education or convenience of the physician. Good medical care, even in a scientific age, must still depend on the dedicated and well-trained physician. If we cultivate this attitude and create an environment in which it is commonplace, our medical students should learn that a good medical history is characterized as much by detailed knowledge of the personality of the patient as by an accurate analysis of the physical manifestations of his disease. With interest focused on the individual, our goals must still be health and happiness. Each member of our house staff must still keep one thought uppermost as he approaches each new patient: How can I help this individual, and as I do so, what can I learn?

Walter Bauer, M.D.,
Chief of Medical Services

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Miss Ruth Sleeper, R.N., Director of our School of Nursing and Nursing Service, was one of three American nurses who were awarded Florence Nightingale medals by the International Committee of the Red Cross last May.

The Nightingale medals, awarded biennially, are given in recognition of "exceptional devotion in the care of the wounded and sick during dangerous and difficult situations in time of war and public disasters."

The Hotel Lincolnshire, 20 Charles Street, was sold to the Massachusetts General Hospital last May. It will be used as a residence for our student nurses. Some of the larger rooms may be used for classrooms and library.

MEDICINE IN LATIN AMERICA

(*Continued from page 1*)

in that country will not be included in this report.

Although the State Department made it quite clear that the American Specialists were to render "a specific service to the United States rather than to work on a project of their own choosing", there seemed to be no bar to recording independent observations. I was greatly interested in trying to learn as much as possible about the general level of attainment in medicine in the countries which I was to visit. Also, I wished to discover whether medicine and the medical profession were or could be an important cultural and political force in Latin America.

Although my tour included visits to eight cities in the countries of Colombia, Peru, Chile, and Uruguay, the Neurosurgical Congress gave me an opportunity to speak also with physicians from Venezuela, Argentina, and Brazil. In all, about one thousand doctors were spoken to and of that number it was possible to informally and frankly exchange views with over one hundred. The opinions of this latter group, together with the remarks of citizens engaged in politics, law, teaching, and business and, finally, my own observations, form the basis for my conclusions. A typical "working day" was seventeen hours in length, including the time necessary to record my impressions on a Gray Audograph dictating machine.

The hospitality and kindness shown to me by every South American with whom I dealt is one of the very happy memories of this trip. This was equally true of the Indians and Mestizos in Central Peru and the well-born descendants of the original Spanish grandees in Chile. Although my friends would discuss frankly the presence of anti-American sentiment, it always seemed to be another group of people who were guilty of it! Of course, I did not visit Bolivia; and while I was in Lima, all of the women and children of the American Embassy in La Paz were evacuated to Lima because it was felt that their lives were in danger. There seemed to be incontrovertible evidence at the time that the anti-United States actions in La Paz, as well as the April riots in Buenos Aires, were the direct result of communist propaganda and finance.

It was, of course, possible to sample only a small proportion of the cultural aspects of a continent measuring six million eight hundred thousand square miles and having a diverse population of over one hundred twenty million people, but I did gain certain broad general impressions. First, it seemed that the social structure, in most if not all of these countries, is one of a small aristocracy dominating a large, mostly illiterate peasant class. Mining and farming are the most important economic pursuits, and an individual's social status is determined primarily by wealth and lineage, and, to a much lesser extent, by education. Attendance at the universities was until recently the prerogative of the well-to-do and for this reason had not tended to augment the numbers of the middle or upper classes. However, the present younger generation has recognized the advantages accruing to a higher education and is increasingly crowding the doors of the few universities in South America, even though many of the students must live on the verge of starvation.

That portion of the population which lacks economic advantages is becoming increasingly restless. The average South American, through his reading, his radio, and the many examples of material wealth which he sees on the street (most of which have been imported from North America), is awakening to the fact that a more abundant life is somehow possible. The desire for automobiles, radios, electric kitchens, etc. has led to dollar buying which, coupled with the economic shambles characteristic of the aftermath of dictatorships, has been a tremendous inflationary factor. Furthermore, in many South American countries the population is rising faster than economic productivity, leading to a still lower standard of living. The disparity in living standards and income, which is so apparent among the various social groups, is a prime factor in causing current political unrest, since from the desire for a better life comes the urge for immediate radical social changes and the attractiveness of the communist line of propaganda.

The Latin American physician apparently plays an important cultural role in this special situation. As in other societies old and new, he is held in some respect simply because he is a physician. He is essentially an upper middle-class citizen who, in many instances, has his origin from the lower middle-class and is thus a factor in broadening the base of the social structure. As an educated member of society he is often a leader in fields outside of medicine. His outlook (as seems to be the case with most physicians in all countries) is likely to be a conservative one. His medical contacts, if he is at all prominent in his field, are apt to broaden his understanding of problems of international significance.

Another important cultural consideration is the fact that the majority of the leaders in medicine have had some foreign education and in most instances they identify themselves with the medical and social cultures of the country in which they were trained. Furthermore, for many reasons they tend to deprecate the level of medical attainment and the cultural attributes of the countries other than their own and the one in which their training was received.

For example, an outstanding medical figure in South America was trained in Europe and since his return (about twenty years ago) has sent his own pupils to various South American cities. This man and his students have been not only pro-European but, unfortunately, anti-United States in their medical thinking; and this point of view has inevitably entered into their political thinking as well.

Again, at the university in Arequipa I met a young medical instructor who had been trained in Paris. He spoke good French but no English, and was going to school at night to learn German. It seems reasonable to deduce that this young doctor feels that English-speaking countries have little to offer him medically, culturally, or politically. It is probable that his viewpoints on all of these matters will in some measure be communicated to his students.

At this point we might consider the political implications of certain medical activities. If this aspect of the healing art seems strange, remember that our Congress is currently deciding how much of your tax dollar shall go for health purposes and that recently the Massachusetts Legislature carried out an investigation of the cost of private health insurance.

In all of the South American countries which I visited, the governments are deeply involved in education, health, and welfare. Most of the medical schools, virtually all of the hospitals, and all of the practicing physicians are dependent upon the State for all or part of their income.

When these governments face a financial crisis (which is a practically continuous situation), the health and teaching budgets are the first to suffer. The medical schools and the hospitals are then poorly financed and the physicians feel underpaid for their services. The populace, which looks to the State for good doctors and good hospitals, becomes unhappy when these are not provided. The medical students are unhappy because adequate teaching facilities are not available. The teachers feel insecure and the practicing physicians are apt to neglect the patient for whom the State pays the bill, in order to care for the individual who can afford to pay a private fee.

So — medical teaching and medical care become political issues; and medical research, which is thought by the State to be an expendable item, virtually disappears.

The physicians, whether teachers, investigators, or practitioners, have for these reasons a vital interest in politics. Many of them become influential in the political parties and a surprising number attain high government positions. In Brazil, for example, the President and two of his cabinet ministers, as well as the Mayor of São Paulo, are physicians. In Haiti, the President is a general practitioner and his foreign minister a psychiatrist. In all Latin American countries, the Minister of Health is usually a physician.

Whether this mixture of politics and medicine is a good thing is a matter of opinion but it is a fact of which we should be cognizant. Furthermore, if my thesis that the foreign-educated physician is loyal to the country that provided that education is valid, then this national problem of the physician as a politician takes on international significance.

The South American university, of which the medical school is a part, plays a very important role on the political scene. For this reason, I should like to comment briefly concerning this problem which is an inextricable combination of culture and politics.

With perhaps three exceptions, all South American universities look either to the State or the Church for their support. The faculties, such as medicine, law, engineering, and teaching are virtually independent one from the other. A student enters one of these faculties at about the age of seventeen and may in six years receive a degree. If, at the end of two years of instruction he decides that medicine is not really his field and that he would be happier as an engineer, he finds that he must repeat his first two years in the university, as there is no mechanism for crossing over from one school to the other. This leads to the production of men trained for special careers who, in many instances, are unfit and unhappy in their specialty and thus turn to other pursuits.

Since university education is virtually free, the universities are overcrowded, and in many of them there is no provision for forcing a student to leave if his work is unsatisfactory. There are a number of individuals who have been students for ten, twelve, and fourteen years. These "professionals" are usually more interested in politics than in education, are usually leftists and in many instances communist trained, with great influence within the students' unions which they use as forums. These students' unions are international in organization, and almost all university students are members.

The political activity within the universities is well illustrated by the situation in Peru, where the students, through their union, have demanded "co-gobierno" — that is, a voice in administrative affairs. They have demanded one-third representation on the university and faculty councils, which means that expenditures of funds, election of deans and professors, even the choice of courses offered to the students would be voted upon by their representatives.

According to one of my Peruvian colleagues, this agitation for co-gobierno grew out of the complaint of the students that the professors were in large measure neglecting their teaching duties. This situation is apparently due to the fact that professorships, particularly in the State-dominated universities, are prestige appointments, often given for political reasons and carrying no salary. Many professors are, therefore, forced to earn their living in ways other than teaching, and their responsibilities in that latter regard are indeed often neglected. Unfortunately, the students have attempted to remedy one bad situation by creating another.

This pedagogical problem has, however, a much deeper significance. The students' union in Peru is dominated by APRA, a national left-wing political group containing a strong pro-communist element. It seems to be the intention of this element to gain control through co-gobierno of San Marcos University in Lima — the oldest teaching institution in the Western Hemisphere. If this effort should succeed, then APRA would be in an excellent position to indoctrinate the population, from school age through the university level, with pro-communist anti-United States propaganda.

You will recall that it was at San Marcos that Mr. Nixon had the first of his unfortunate experiences during his visit to Latin America. My friends in Lima assured me that the "spontaneous demonstration" of students, to which Mr. Nixon was subjected, was organized and financed by the communists. Nevertheless, it was with some trepidation that I addressed 120 members of the third year class in medicine at San Marcos on the occasion of the opening of the course in surgery. Actually, the students received me most politely.

Co-gobierno is subject to ratification by the Peruvian legislature but, as of May 1, 1959, tacit consent had been given to this principle by all the teaching disciplines but one: the Faculty of Medicine. Here there is a strong, intelligent dean, who has the unanimous support of his teaching staff. They have given him permission to present their mass resignations to the Rector of the University should co-gobierno be forced upon the School of Medicine. In effect, the Dean can say, "Do you want co-gobierno or do you want a medical school?" This unyielding stand may be one of the most important recent contributions to the cause of democracy and freedom in Peru.

From my experiences with medicine and the medical profession in Latin America, only a portion of which I have recorded here, came the conclusion that the medical schools, the physicians, and the health programs were potent cultural and political forces in Latin America — more important there, perhaps, than in many other parts of the world. It seemed to me that we had already influenced the culture and politics of these countries by our medical activities. I was interested, however, to find out how other persons and certain of the organizations active in the international field felt about these conclusions.

It is possible that our State Department is not greatly impressed with the importance of medicine as a cultural and political force. A glance at the amounts of money allotted to various categories in the American Specialists program for South America may provide some factual evidence on this score.

Specialty	Persons	Money
Education, humanities, and journalism	7	$24,327.49
Athletics	4	$23,766.95
Social sciences	2	$17,961.86
Economics	3	$15,913.23
Law and political sciences	4	$ 4,030.42
Medicine	3	$ 3,914.57
Engineering and pure science	1	$ 2,009.89

Furthermore, our governmental efforts in the foreign medical field seemed somewhat disorganized, with no real fundamental concept behind the expenditure of funds and with little realization of the broad impact of our medical programs. Indeed, one State official admitted frankly to me upon my return that he had no idea that physicians, either North or South

American, were ever really interested in issues or events outside their specialty!

The great charitable foundations such as Rockefeller and Kellogg, on the other hand, appear to have been much more effective. In Colombia, the town of Cali has a modern, well-equipped teaching hospital supported by one of these foundations. Its young chief of medicine was trained at the Presbyterian Hospital in New York. Many of his staff are also graduates of teaching centers in the United States, thanks to fellowships from Rockefeller and Kellogg. The faculty of the medical school and the staff of the hospital are organized in the best tradition of American medicine. The teachers in the basic sciences devote themselves full time to instruction and research because their salary scale is adequate. Not only are the hospital and medical school an example of good medical practice to the community, but their students, interns, residents, and the graduates of its nursing school provide the means of bringing to all Colombians an ever-increasing amount of some of the best products of American culture. Furthermore, the medical faculty will inevitably strengthen the university because of its belief in academic independence and the dignity and value of a teaching career.

Our foundations and the government, through Fulbright scholars, have been most helpful in exporting for various periods of time medical teachers from the United States to Latin America. The importance of such a teacher, if he is wisely chosen, goes far beyond the technical aspects of his specialty. In his out-of-classroom conversations with students he can often correct misconceptions about the American way of life. With the faculty he is frequently helpful as an advisor on problems of curriculum and administration. In the community he is an example of the fact that the United States is not wholly oblivious of the importance of the scholar. At the same time he is never in economic or professional competition with his colleagues. It is unfortunate, however, that the foundations and the government not only have no coordinated program, but that there is not even an effective exchange of information about their current activities.

My visit to South America has convinced me that a vigorous extension of our efforts, governmental and otherwise, into the international field of medical teaching and research would be most helpful to the foreign policy objectives of the United States. These efforts should be equally a matter of export and import of students and teachers, but this must be done with the full realization that there is a cultural and political point of view to be considered. Senator Lister Hill has recently introduced into the Senate a resolution calling for the expenditure of fifty million dollars annually for an international medical research program. In presenting his bill Senator Hill said in part, "The interesting thing is how the doctors and scientists, themselves, emphasize not only the importance of this legislation to the cause of scientific advance against disease and disability but its importance to the cause of peace." I would fully agree with this but would add that, as a governmental activity, promotion of the cause of peace is a major responsibility of our State Department. It seems rather ironic, therefore, to read recently that the Health and Welfare Committee of Congress, when considering the Hill bill, had rejected the idea that this program be directly under the President. It preferred to assign the funds and authority to the National Institutes of Health in order to keep the effort from being "mixed up with cold war politics". If the International Medical Research Program does come into being, it will inevitably influence the cold war whether we wish it or not. In my opinion it is an obligation of our government to see that the activities of this program work efficiently for us in promoting peace, good will, and understanding on the international level.

Whether or not international medical activities become in large measure a function of the National Institutes of Health, it would seem advisable to have in the Department of State a high-ranking official, perhaps an Assistant Secretary of State, for medical affairs. He and his staff would have the task of directing, guiding, and advising on the cultural and political aspects of our efforts in the international medical field.

We should have North American medical investigators and teachers in every major teaching center in Latin America. The State Department should know who these men are and should perhaps have a voice in their selection, since they must be chosen as much for their understanding and sympathy for the country in which they work as for their professional competence. They should have a grasp of the political situation and the problems of the Latin American university, and whenever possible they should be chosen for their ability to speak Spanish. More young Latin Americans should be studying in our hospitals and medical research laboratories, and the State Department must be made aware that whether these students come on government grants, foundation grants, or on their own resources they will be an asset or a liability to our cultural and political program depending on our treatment of them.

In this respect we, as private citizens, can make a valuable contribution. Recall for a moment the actions of the Dean of Medicine at the University of San Marcos — the man who stands like a rock against the wave of co-gobierno and the domination of the University by the students. I am certain that his present stand is in part due to the fact that he was once at the Harvard Medical School. Yet he almost left Boston a homesick, lonely, and embittered young man. The understanding, sympathy, and financial assistance of one of his teachers kept this man here until he had finished his training and made of him a true friend of the United States. All of us can, if we make the effort, create an opportunity for a foreigner to feel a little more at home in the United States, a little more friendly toward us and our institutions. Furthermore, we should seek out and bring to the United States for "eye-opening" purposes those key Latin American students who seem anti-United States. Again it will be the function of the State Department to identify these individuals in order to be certain that they are worth-while material and then make it possible for them to visit here. Most of the time the prejudice that they have stems from the influence of communist propaganda, and a short tour in this country will do wonders to set the record straight. We should not concentrate exclusively upon individuals whose loyalty to the United States is unquestioned.

It should also be possible for the Latin American professor of medicine to come to the United States to see our work and our institutions. In 1961 a World Congress of Neurosurgery will be held in Washington. Our State Department should, even now, be offering its services in order to be certain that visitors from foreign lands gain the most favorable impression of the United States. It is not, to my knowledge, doing so; and it seems to lack the machinery to be effective, as well as the realization that medicine can be important as a cultural and political force. Finally, once the United States has trained a foreign physician, every effort should be made to keep in contact with him when he returns to his country of origin. Time and again I heard of young men who became discouraged and bitter when they found themselves unable for various reasons to practice medicine or carry on research as they were accustomed to do in the United States. Many of them were in competition with men trained in other countries whose teachers did maintain close contact with their pupils. Our trainees, feeling forgotten by their teachers and friends and unable to achieve professional satisfaction, became bitter toward this country, which had opened the golden door and then slammed it shut. Here again, the State Department can be of immeasurable assistance through its Cultural Affairs Officers. If we are to choose from a cultural and political point of view the right policies for gaining and maintaining the good will of the Latin American physician, we need the help of our State Department and it needs the staff and funds to give that help.

In conclusion, I would like to speak of the inescapable feeling which I had of being welcome and wanted in South America. The people in these countries seem to be searching for a culture — a way of life. As one of my Latin American friends phrased it, "The majority of the citizens of my country are just now emerging from the jungle." It seemed that we had an opportunity (although perhaps a fleeting one) to influence the peoples of this great continent to the south of us. Whether in the end they adopt the cult of the citizen enslaved by the State or turn to our philosophy of the State serving the citizen will greatly depend, I am sure, upon our efforts. In the medical field a unique opportunity exists. By increasing our aid, both public and private, to medical schools and teaching hospitals in Latin America, we can transplant a segment of our culture. An increased exchange of professors and students will continually strengthen that tie. Inevitably, then, will we reap the political benefits.

Such an effort as I have outlined has, however, another and in essence a greater reward. By pursuing this policy of enlightened self-interest, we will have contributed immeasurably to the health and happiness of mankind.

H. Thomas Ballantine, Jr., M.D.,
Associate Visiting Neurosurgeon

* * *

Dr. Churchill was awarded the honorary degree of Doctor of Science by the University of Alabama on May 31. The citation which accompanied the award reads:

EDWARD DELOS CHURCHILL — World-renowned surgeon. Born in Illinois. Bachelor of Arts and Master of Arts of Northwestern University and Doctor of Medicine, cum laude, of Harvard University. Now Professor of Surgery of the Harvard Medical School and Chief of Surgical Services at Massachusetts General Hospital. He has held many positions and has been highly honored by many personal and professional distinctions and decorations, in peace and in war — at home and abroad, for great professional knowledge and skill, and for large international service. A dedicated, patriotic, and eminent citizen who is truly an adornment to the medical profession of the world.

Dr. Varaztad H. Kazanjian was presented with a plaque on May 15, in recognition of his many contributions to plastic surgery and his many years of leadership in the field. The award was made by the American Association of Plastic Surgeons, during their three-day annual meeting.

Dr. Kazanjian was a pioneer in the development of plastic surgery in the United States. He was Chief Dental Officer of the Harvard Unit, which served with the British Expeditionary Unit in World War I. King George V awarded him high honors at that time for his treatment of facial wounds.

The Board of Trustees, at their meetings during May, June, and July, voted:

To accept with regret the resignation of Dr. John A. Benson, Jr. from the position of Assistant in Medicine, effective June 30;
To accept the resignation of Dr. Henry P. Pendergrass from the position of Assistant Radiologist, effective June 20;
To accept the resignation of Dr. Porter H. Smith from the position of Assistant Anesthetist, effective April 23;
To change the appointment of Dr. George Chalpin from Clinical Assistant in Psychiatry to Assistant Attending Psychiatrist at McLean Hospital, effective May 15;
To change the appointment of Dr. John G. Clark, Jr. from Clinical Assistant in Psychiatry to Assistant Psychiatrist at McLean Hospital, effective July 1;
To change the appointment of Dr. Jacqueline Gauthier from Assistant in Psychiatry to Clinical Fellow in Psychiatry at McLean Hospital, effective July 1;
That the appointment of Dr. Harold L. May as First Assistant Resident in Surgery be retroactive to October 1, 1958 rather than beginning April 1, 1959;
That the title of Dr. Renée Bennett O'Sullivan be changed from Intern to that of Second Assistant Resident on the Children's Medical Service for her year of service, July 1, 1956 through June 30, 1957;
To appoint Drs. Daniel S. Ellis and Howard Ulfelder as Members-at-Large on the General Executive Committee for one year, beginning July 1;
That the Children's Medical Service be granted one additional Assistant Resident, that is, a total of six Assistant Residents, with the understanding that one such Assistant Resident will always be on rotation at the Pediatric Unit of the Massachusetts Mental Health Center;
That the invitation extended to Professor Theodore Gilman to give a Richardson Lecture at the Hospital on April 28 be approved;
That Professor R. J. Turner Warwick, Hunterian Professor of the Royal College of Surgeons of England, be invited to give a Richardson Lecture at the Hospital on June 10.

To promote:

Dr. Myron Lotz to the position of Assistant Resident in Medicine for one year, beginning July 1;
Dr. William T. McCoy to the position of First Assistant Resident in Radiology, beginning July 1.

To reappoint:

Dr. Farrokh Saidi as First Assistant Resident in Surgery.

To appoint:

Miss Phyllis Ackman as Assistant Psychologist at McLean Hospital, beginning September 1;
Dr. Elroy E. Anderson as Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Homer L. Ash as Intern on the Dental Service for one year, beginning July 1;
Mr. William Caudill as Associate Social Anthropologist and Acting Chief of the Department of Social Sciences at McLean Hospital, beginning September 1;
Dr. Virginia L. Clower as Assistant Attending Psychiatrist at McLean Hospital, beginning August 1;
Dr. Pierre M. Dreyfus as Assistant Neuropathologist in the Research Department and Assistant Neurologist at McLean Hospital, beginning June 26;
Dr. Nathan H. Fearer as Assistant to the Children's Medical Service for one year, beginning July 1;
Dr. Edward L. Ferguson as Clinical Associate in Surgery, beginning May 1;
Dr. Thomas B. Fitzpatrick as Chief of the Dermatology Service, beginning July 1;
Dr. George A. Glines as Assistant to the Children's Medical Service, beginning July 1;
Dr. Henry U. Grunebaum as Resident in Psychiatry at McLean Hospital, beginning September 1;
Dr. Andrew D. Guthrie, Jr. as Assistant to the Children's Medical Service, beginning July 1;
Dr. Floy C. Helwig as Exchange Assistant Resident on the Children's Medical Service, for the period July 1 through August 10;
Dr. Kenneth E. Jones as Assistant in Medicine for one year, beginning June 1;
Dr. Martin Kantor as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Melvin M. Kayce as Assistant in Psychiatry, beginning July 1;
Dr. William Kornfeld as Assistant in Psychiatry, beginning May 1;
Dr. Padmakar P. Lele as Consultant in Neurophysiology in the Department of Neurosurgery, for a period of one year, beginning September 1;
Dr. Edward Lowenstein as Assistant Resident in Anesthesia, beginning July 1, 1960;
Dr. Alexander S. MacDonald, Jr. as Clinical Associate in Children's Medicine, beginning May 1;
Dr. Edward F. McGrath as Clinical Associate in Children's Medicine, beginning May 1;
Dr. Edwin J. Madden as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. Jack H. Mendelson as Assistant in Psychiatry, beginning July 1;
Dr. Eugene J. Morrissey as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. Barbara Gurd Mueller as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 17;
Dr. Charles W. Neville, Jr. as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 17;
Dr. George M. Perrin as Clinical and Research Fellow in Psychiatry, to act as Resident, for one year, beginning July 1;
Dr. Jalna A. Perry as Clinical Fellow in Psychiatry at McLean Hospital, beginning August 1;
Dr. John T. Pollard, Jr. as Assistant in Radiology, beginning January 1, 1960;
Dr. Robert N. Rapoport as Consultant in Social Science at McLean Hospital, beginning September 1;
Dr. Earle H. Rosenberg as Resident on the Dental Service for one year, beginning July 1;
Dr. Mahmoud Sadrieh, Chief of Surgery at Saadi Hospital, Shiraz, Iran, as Consultant in Surgery pro tempore for one year, beginning July 1;
Dr. Richard E. Senghas as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. William R. Shelton as Assistant in Psychiatry, beginning July 1;
Dr. John H. Sisson as Assistant in Medicine for one year, beginning June 1;
Dr. Robert T. Spalding as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;
Dr. James H. Stempien as Intern on the Dental Service for one year, beginning July 1;
Richard A. Sternbach, Ph.D. as Assistant Psychologist in the Department of Psychiatry, beginning July 15;
Dr. Suzanne T. van Amerongen as Assistant Attending Psychiatrist at McLean Hospital, beginning August 1;
Dr. Herbert C. Wimberger as Clinical Fellow in Psychiatry at McLean Hospital, beginning August 1;
Dr. Morey Wosnitzer as Assistant Resident in Urology for one year, beginning July 1.

At their meetings on April 29, during May, June, and July, and on August 5 and 19, the General Executive Committee voted:

To reinstate Dr. Geza F. P. Kaplany de Kaplanyhaza as Clinical Fellow in Anesthesia, effective as of June 7;
To change the title of Dr. Arthur D. McGugan to that of Clinical and Research Fellow in Dermatology, effective as of July 1;
To rescind the appointment of James W. Mayer, Ph.D. as Research Fellow in Physics (Medicine), as Dr. Mayer decided not to accept the appointment;
To accept the resignation of Dr. Claus W. Reichle from the position of Clinical Fellow in Anesthesia, effective June 30;
To rescind the appointment of Dr. Victor J. Rosen as Clinical Fellow in Pathology, as of July 1;
To change the title of Dr. Giles D. Toll from that of Assistant Resident in Pathology to that of Clinical Fellow in Pathology and Acting Assistant Resident in Pathology for one year, beginning July 1.

To promote:

Dr. Luis L. de Mola to the position of First Assistant Resident in Pathology for one year, beginning July 1;
Dr. James H. Duxbury to the position of Resident in Urology for one year, beginning July 1;
Dr. Charles S. Keevil, Jr. to the position of Clinical Assistant in Medicine for one year, beginning July 1;
Dr. Bernard F. Mach to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Stuart E. Price, Jr. to the position of Senior Assistant Resident in Urology, beginning July 1;

Dr. Stefan C. Schatzki to the position of Resident in Radiology, beginning July 1;

Mary L. Stephenson, Ph.D. to the position of Assistant Biochemist (Medicine), beginning July 1;

Dr. Donald W. Sutherland to the position of Resident in Medicine for one year, beginning January 1, 1960.

To extend the appointments of:

Dr. Fernando A. Cardenal as Clinical Fellow in Orthopedic Surgery, from September 1 through December 31;

Dr. Jacques E. Dumont as Clinical and Research Fellow in Medicine to November 30;

Dr. Ira A. Ferguson, Jr. for one month, through July 31;

Dr. William H. Harris as Senior Resident on the Orthopedic Service from April 1 through May 15: during the period May 1 through May 15 he will be granted the privilege of assisting in the care of Dr. Otto E. Aufranc's private patients;

Thomas Nussbaumer, Ph.D. as Research Fellow in Medicine to September 30;

Dr. Harilaos T. Sakellarides as Clinical Fellow in Orthopedic Surgery for an additional six months, through December 31;

Dr. Beatrice E. Sleigh as Clinical Fellow in Anesthesia, from June 1 through August 31;

Kathleen Stratton, Ph.D. as Research Fellow in Physics (Medicine) through September 30.

To reappoint:

Dr. Khalil Abi-Torbey as Clinical and Research Fellow in Urology for one year, beginning July 1;

James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;

Bronius Baskys, Ph.D. as Research Fellow in Dermatology for one year, beginning July 1;

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. John F. Bertles as Clinical Assistant in Medicine, beginning July 1;

Dr. Paul H. Black as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robert L. Bragg as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Willi Burgi as Research Fellow in Medicine for one year, beginning September 1;

Dr. James J. A. Cavanaugh as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Alan S. Cohen as Clinical and Research Fellow in Medicine for one year, beginning July 1:

Dr. Frederick J. Duhl as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Edwin H. Eylar, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Daniel D. Federman as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Howard S. Frazier as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Lamont W. Gaston as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Alan H. Goldberg as Assistant Resident in Anesthesia for one year, beginning July 1;

Dr. Richard M. Hays as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Dale G. Johnson as Second Assistant Resident in Surgery for one year, beginning July 1;

Marvin R. Lamborg, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Myron B. Laver as Clinical Fellow in Anesthesia for one year, beginning July 1;

Dr. Melvin Lederman as Clinical and Research Fellow in Surgery for one year, beginning July 1:

Dr. Federico G. Lopez, with a change of title from Fellow in Neuropathology to that of Clinical and Research Fellow in Neurology, for one year, beginning September 1;

Dr. Jesus S. Manlapaz as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Pierre A. Maurice as Clinical and Research Fellow in Medicine, beginning September 1;

Dr. Hans Nevinny-Stickel as Clinical Fellow in Medicine for one year, beginning July 1;

Mr. Emery Nyilas as Assistant Physicist (Medicine) for one year, beginning August 5;

Dr. Richard C. Packert as Clinical Fellow in Radiology, beginning July 1;

Charles J. Parker, Jr., Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Hugues Ryser as Clinical and Research Fellow in Medicine for one year, beginning September 15;

Dr. Alberto Salama as Clinical and Research Fellow in Neurology, for a period of six months, beginning September 1;

Dr. Charles A. Sanders as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Elihu M. Schimmel as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Nathan T. Sidley as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;

Dr. Norman T. Smith as Assistant Resident in Anesthesia for one year, beginning July 1;

Leonard B. Spector, Ph.D. as Assistant Biochemist (Medicine), beginning July 1;

Dr. Robert G. Spiro as Research Fellow in Medicine for one year, beginning July 1;

Anne M. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning May 13;

Pierre J. J. Stoffyn, Ph.D., as Research Fellow in Medicine for one year, beginning September 1;

Zofia Tarasiejska, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Lloyd B. Tepper as Clinical Fellow in Medicine, assigned to Occupational Medicine, for one year, beginning July 1;

Dr. Robert G. Willocx as Clinical Fellow in Medicine for one year, beginning July 1.

To appoint:

Dr. Sudhawit Anekamaya as Clinical and Research Fellow in Surgery, beginning July 1;

Dr. Harold B. Anstall as Clinical and Research Fellow in the Blood Bank, beginning October 1;

Dr. Jason A. Aronson as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Anthony A. Arzimanoglu as Clinical and Research Fellow in Orthopedic Surgery, for the period July 1 through September 30;

Dr. John A. Baldwin as Clinical and Research Fellow in Psychiatry for one year, beginning October 1;

Dr. Marcel Bellemare as Graduate Student Assistant in Surgery for one year, beginning July 1;

Dr. Bernard Bihari as Clinical Fellow in Neurology, to act as Assistant Resident in Neurology, for one year, beginning July 1;

Dr. John A. Bolzan as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Laurids K. Christensen as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. George H. Collins as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Adolfo C. Coussirat as Clinical Fellow in Anesthesia, beginning June 25;

Dr. William L. Curwen as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. Alvin Essig as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. William J. Foley as Clinical Fellow in Pathology, beginning July 1;

Dr. Dorothy E. Ford as Clinical Fellow in Physical Medicine for one year, beginning July 1, 1960;

Dr. Joseph E. Geary as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. Giovanni Giuliano as Clinical and Research Fellow in Medicine, beginning December 1;

Dr. John Hedley Whyte as Clinical Fellow in Anesthesia, acting as Resident, beginning July 1, 1960;

Dr. Rauno J. Heikinheimo as Research Fellow in Anesthesia, for the period May 1 through August 31;

Dr. Manuel Hernandez as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Thomas F. Hewes as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Peter R. Holt as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Tai S. Hwang as Graduate Student Assistant in Surgery, for the periods July 1 through October 1 and from December 1, 1959 through June 30, 1960;

Dr. Sophus H. Johansen as Clinical Fellow in Anesthesia for one year, beginning August 10;

Dr. Earl F. Jordan as Clinical and Research Fellow in Neurosurgery, for the period July 1, 1959 through August 31, 1960;

Dr. Bogdan Kamiński as Clinical Fellow in Anesthesia, beginning December 1;

Dr. Edmund Klein as Clinical and Research Fellow in Dermatology, beginning September 1;

E. M. Christine Kris, Ph.D. as Research Fellow in Physics (Medicine), for a period of four months, beginning August 1;

Dr. Susanne J. Lamdin as Clinical Fellow in Anesthesia, beginning September 1;

Dr. William H. Langhorne as Clinical and Research Fellow in Surgery for one year, beginning August 1;

Robert S. McCarger, M.A. as Research Fellow in Sociology in the Department of Psychiatry, beginning August 1;

Koscak Maruyama, D.Sc. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Oscar E. Masetto as Graduate Student Assistant in Surgery, for a period of nine months, beginning August 4;

Dr. Marion C. More as Clinical Fellow in Anesthesia for one year, beginning August 24;

Dr. Jose M. Mullen as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Ian P. C. Murray as Clinical and Research Fellow in Medicine, beginning September 1;

Dr. Teruyuki Nakashima as Research Fellow in Pathology for one year, beginning July 20;

B. S. Narasinga Rao, Ph.D. as Research Fellow in Physics (Medicine) for one year, beginning November 1;

Dr. Paul F. J. New as Clinical Fellow in Radiology, beginning June 15;

Dr. Fioravante N. Nora as Clinical Fellow on the Children's Medical Service, to work in the Out-Patient Department, for a period of six months, beginning July 1;

Dr. Teruo Okuma as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Juan L. Pimentel as Graduate Student Assistant in Orthopedic Surgery, for a period of three months, beginning July 22;

Dr. A. David Roth as Clinical and Research Fellow in Neurosurgery, for the period July 1, 1959 through August 31, 1960;

Dr. Henry I. Schweppe, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Makoto Seiji as Research Fellow in Dermatology, beginning August 1;

Dr. John R. Senior as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Dagoberto Sosa as Clinical Assistant in Neurosurgery, for a period of eight months, beginning May 1, this appointment to run concurrently with his Residency in Neurosurgery;

Harish C. Srivastava, Ph.D. as Research Fellow in Medicine for one year, beginning

January 1, 1960;

Dr. Oscar E. Starobin as Clinical Fellow in Medicine, assigned to Cardiology, beginning July 1;

Dr. Willem Storm van Leeuwen as Research Fellow in Neurology, assigned to Neurophysiology, for a period of three months, beginning May 1;

John B. K. Sur, M.S. as Research Fellow in Biomechanics on the Orthopedic Service, for the period June 15 through August 14;

Dr. Alfonso Z. Tohen as Graduate Student Assistant on the Orthopedic Service, for the period June 8 through August 31;

Dr. Barbara E. Waud as Clinical Fellow in Anesthesia, beginning July 1;

Dr. Alfred L. Weber as Clinical Fellow in Radiology, beginning July 1;

Dr. Alfred D. Weiss as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Louis Wener as Clinical Fellow in Radiology, beginning January 1, 1961;

Dr. George F. Wilgram as Research Associate in Dermatology, beginning June 1;

Dr. Ralph C. Williams, Jr. as Clinical and Research Fellow in Medicine, for the period October 1 through December 31;

Dr. Raleigh L. Wright as Clinical and Research Fellow in Neurosurgery, for the period August 1 through December 31.

* * *

A new workshop for directors of hospital volunteers, sponsored by the Committee of Directors of Hospital Volunteers of Metropolitan Boston, will be conducted at Boston University. The course will be given on Tuesdays, from 4 to 6 P.M., October 6 through December 8.

This, the first workshop of its kind in the New England area, has been developed after considerable research and study by a committee, under the direction of Miss Mary Ruth Wolf, Director of our Volunteer Service, and Professor Carol Hills of Boston University, Coordinator for the course.

The workshop is designed to provide the professional director of hospital volunteers, the chairmen of volunteers, and other participants in hospital services with specialized training. The workshop will emphasize the organization and administration of a hospital volunteer department and its role in community and public relations.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Allergy & Immunology

Waksman, B. H.
Allergic encephalomyelitis in rats and rabbits pretreated with nervous tissue.
J. Neuropath. & Exper. Neurol. 18:397.

Anesthesia

Beecher, H. K.
Measurement of subjective states.
In Quantitative methods in human pharmacology and therapeutics, New York, Pergamon Press, p. 98.

Smith, G. M., and Beecher, H. K.
Amphetamine sulfate and athletic performance. I. Objective effects.
J.A.M.A. 170:542.

Smith, G. M., and Beecher, H. K.
Effect of morphine on the subjective response of hunger in normal subjects.
J. Pharmacol. & Exper. Therap. 126:63.

Smith, G. M., and Beecher, H. K.
Measurement of "mental clouding" and other subjective effects of morphine.
J. Pharmacol. & Exper. Therap. 126:50.

Biochemistry

Briggs, F. N., Kaldor, G., and Gergely, J.
Participation of a dialyzable cofactor in the relaxing factor system of muscle. I. Studies with single glycerinated fibres.
Biochim. et Biophys. Acta 34:211.

Gergely, J., Kaldor, G., and Briggs, F. N.
Participation of a dialyzable cofactor in the relaxing factor system of muscle. II. Studies with myofibrillar ATP-ase.
Biochim. et Biophys. Acta 34:218.

Gergely, J., Martonosi, A., and Gouvea, M. A.
The role of SH groups in the interaction of myocin with phosphate compound and with actin.
In Sulfur in proteins: Proceedings of a Symposium held at Falmouth, Massachusetts, May 1958, Reinhold Benesch and others, Editors, New York, Academic Press, p. 297.

Kaldor, G., and Gergely, J.
The effect of pyridoxal phosphate and its inhibition by carnos ATPase activity and syneresis of myofibrils.
Arch. Biochem. & Biophys. 80:393.

Kaldor, G., Gergely, J., and Briggs, F. N.
Participation of a dialyzable cofactor in the relaxing factor system of muscle. III. Substitution of pyrophosphate for the cofactor.
Biochim. et Biophys. Acta 34:224.

Biological Chemistry

Fekete, L. L., Lever, W. F., and Klein, E.
Characteristics of cobalt-induced hyperlipemia in rabbits.
Federation Proc. 18:388.

Klein, E., Lever, W. F., and Fekete, L. L.
Inhibition of pancreatic lipase by serum of hyperlipemic & hypercholesteremic patients & by extracts of human tissues.
Federation Proc. 18:82.

Cardiology

Graybiel, A., Malt, R. A., Colehour, J. K., Barlow, G., and Spurr, G.
Comparison of the cardiovascular dynamics and the size and fat content of the heart in lean and fat dogs.
Am. J. Cardiol. 3:647.

Morgan, W. L., and Bland, E. F.
Bacterial endocarditis in the antibiotic era, with special reference to the later complications.
Circulation 19:753.

Thurlbeck, W. M., and Currens, J. H.
The aortic arch syndrome (pulseless disease): A report of ten cases with three autopsies.
Circulation 19:499.

Dermatology

Matz, M. H., and Blank, I. H.
Contact dermatitis from 4-tertiary butyl catechol in Thermo-Fax paper: Report of a case.
New England J. Med. 260:1076.

Tolman, M. M., Moschella, S. L., and Schneiderman, R. N.
Dermatitis herpetiformis — specific entity or clinical complex?
J. Invest. Dermat. 32:557.

Endoscopy

Benedict, E. B.
Diagnosis of diseases of the stomach by gastroscopy and gastroscopic biopsy.
G. P. 19:84.

Benedict, E. B.
Gastritis — a plea for rational nomenclature based on pathologic findings. (Editorial)
Gastroenterology 37:215.

Benedict, E. B.
Gastroscopic diagnosis.
Klin. Wchnschr. 37:473.

Benedict, E. B.
The value of bronchoscopy in determining the inoperability of carcinoma of the lung.
J. Thoracic Surg. 37:646.

Joske, R. A., and Benedict, E. B.
The role of benign esophageal obstruction in the development of carcinoma of the esophagus.
Gastroenterology 36:749.

General Medicine

Bauer, W., and Bartter, F. C.
Diseases of the bones.
In Diseases of metabolism, ed. 4, Garfield G. Duncan, Editor, Philadelphia, W. B. Saunders Company, p. 1388.

Isselbacher, K. J.
Galactose metabolism and galactosemia.
Am. J. Med. 26:715.

General Surgery

Garcelon, G. G.
Salivary gland tumors: Management and results.
A.M.A. Arch. Surg. 78:12.

Hospital Hygiene

Allen, H. F.
Air hygiene for hospitals. I. Arrestment of airborne and dustborne staphylococci by a hospital vacuum cleaner.
J.A.M.A. 169:553.

Allen, H. F.
Air hygiene for hospitals. II. Efficiency of fibrous filters against staphylococcic droplet nuclei and bacteria-bearing dust.
J.A.M.A. 170:261.

Laboratory Science

Waksman, B. H.
A histologic study of the auto-allergic testis lesion in the guinea pig.
J. Exper. Med. 109:311.

Neurophysiology

Brazier, M. A. B.
The historical development of neurophysiology.
In Handbook of Physiology — Neurophysiology, Washington, D. C., American Physiological Society, John Field, H. W. Magoun, and Victor E. Hall, Editors, chap. 1.

Sweet, W. H.
Pain.
In Handbook of Physiology — Neurophysiology, Washington, D. C., American Physiological Society, John Field, H. W. Magoun, and Victor E. Hall, Editors, chap. 19.

Neurosurgery

Hirsch, O., in cooperation with Hannibal Hamlin.
Symptomatology and treatment of the hypophyseal duct tumors (craniopharyngiomas).
Confinia neurol. 19:153.

Orthopedic Surgery

Aufranc, O. E., and Sweet, E. B.
Study of patients with hip arthroplasty at Massachusetts General Hospital.
J.A.M.A. 170:507.

Wang, C. C., Lowrey, C. W., and Severance, R. L.

Fatigue fracture of the pelvis and the lower extremity.
New England J. Med. 260:958.

Otolaryngology

Kelemen, G., and Gotlib, B. N.
Pathohistology of fetal ears after maternal rubella.
Laryngoscope 69:385.

Pediatrics

McGovern, J. J., Jr., Russell, P. S., Atkins, L., and Webster, E. W.
Treatment of terminal leukemic relapse by total-body irradiation and intravenous infusion of stored autologous bone marrow obtained during remission.
New England J. Med. 260:675.

Psychiatry

Talland, G. A.
Psychological studies of Korsakoff's psychosis: III. Concept formation.
J. Nerv. & Ment. Dis. 128:214.

Radiology

Millard, D. G., and Wyman, S. M.
Periureteric fibrosis: Radiographic diagnosis.
Radiology 72:191.

Potsaid, M. S., and Robbins, L. L.
Diprotrizoate sodium.
Ann. New York Acad. Sciences 78:993.

Robbins, L. L.
George Winslow Holmes, 1876-1959.
Am. J. Roentgenol. 82:321.

Robbins, L. L., and Schulz, M. D.
In memoriam — George Winslow Holmes, M.D., 1876-1959.
Radiology 73:112.

Schulz, M. D.
Radiotherapy of lesions of the orbit and ocular adnexa.
Tr. Am. Acad. Ophth. 63:449.

Webster, E. W.
Hazards of diagnostic radiology: A physicist's point of view.
Radiology 72:493.

Wyman, S. M., and Schulz, M. D.
Laurence L. Robbins, M.D., President of the Radiological Society of North America. (Editorial)
Radiology 72:271.

Surgical Research

Grillo, H. C., and Gross, J.
Studies in wound healing. III. Contraction in Vit. C deficiency.
Proc. Soc. Exper. Biol. & Med. 101:268.

Russell, P. S., and Gittes, R. F.
Parathyroid transplants in rats: A comparison of their survival time with that of skin grafts.
J. Exper. Med. 109:571.

Miscellaneous

Beecher, H. K.
Experimentation in man.
J.A.M.A. 169:461.

Books

Knowles, J. H.
Respiratory physiology and its clinical application.
Cambridge, Mass., Harvard University Press.

Waksman, B. H.
Experimental allergic encephalomyelitis and the "auto-allergic" diseases.
Basel, Switzerland, S. Karger.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

The American Association of Clinical Chemists.
Standard methods of clinical chemistry, vol. 2.
New York, Academic Press, Inc., 1958.
(7H)

Angel, J. L.
National register of scholarships and fellowships, vol. 1. Scholarships and loans.
New York, World Trade Academy Press, Inc., 1959.
(1Af)

Bates, R. S.
Scientific societies in the United States, ed. 2.
New York, Columbia University Press, 1958.
(1R)

Brazier, M. A. B. (Editor)
Transactions of the first conference on the central nervous system and behavior.
New York, Josiah Macy, Jr. Foundation, 1959.
(19L)

Burlingame, C. C.
A psychiatrist speaks.
Hartford, Conn., Connecticut Printers, Inc., 1959.
(19S)

Bykov, K. M.
The cerebral cortex and the internal organs.
New York, Chemical Publishing Company, 1957.
(19B)

Carruth, G., and others. (Editors)
The encyclopedia of American facts and dates, ed. 2.
New York, Thomas Y. Crowell Company, 1959.
(1A)

Ciba Foundation
Ciba Foundation Symposium on carcinogenesis.
Boston, Little, Brown and Company, 1959.
(13V)

Ciba Foundation
Ciba Foundation Symposium on the regulation of cell metabolism.
Boston, Little, Brown and Company, 1959.
(5M)

Crook, E. M. (Editor)
Biochemical Society Symposium No. 16.
The structure and function of subcellular components.
Cambridge, England, At the University Press, 1959.
(5A)

Daland, G. A.
A color atlas of morphologic hematology, rev. ed.
Cambridge, Mass., Harvard University Press, 1959.
(14B)

DePalma, A. F.
Management of fractures and dislocations, 2 vols.
Philadelphia, W. B. Saunders Company, 1959.
(18J)

Duncan, G. G. (Editor)
Diseases of metabolism, ed. 4.
Philadelphia, W. B. Saunders Company, 1959.
(13A)

Engel, S.
The child's lung.
London, Edward Arnold & Co., 1947.
(20A)

English, H. B., and English, A. C.
A comprehensive dictionary of psychological and psychoanalytical terms.
New York, Longmans, Green and Company, Inc., 1958.
(1Dm)

Field, J., and others. (Editors)
Handbook of physiology, sec. 1.
Neurophysiology, vol. 1.
Washington, D.C., American Physiological Society, 1959.
(19C)

Fieser, L. F., and Fieser, M.
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Respiratory physiology and its clinical application.
Cambridge, Mass., Harvard University Press, 1959.
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Luck, J. M. (Editor)
Annual review of biochemistry, vol. 28.
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Textbook of pediatrics, ed. 7.
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Nord, F. F. (Editor)
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Pitt-Rivers, R., and Tata, J. R.
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New York, Pergamon Press, 1959.
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Potter, V. B.
Fellowships in the arts and sciences, 1959-60, ed. 2.
Washington, D.C., The Association of American Colleges, 1958.
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Poynter, F. N. L. (Editor)
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Rodd, E. H. (Editor)
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Skoog, T. (Editor)
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Utilization of nitrogen and its compounds by plants.
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New York, Macmillan Company, 1959.
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Austin, Tex., University of Texas, 1959.
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London, The Staples Press, 1958.
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Tocantins, L. M. (Editor)
Progress in hematology, vol. 2.
New York, Grune & Stratton, 1959.
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Vander Eecken, H. M.
The anastomoses between the leptomeningeal arteries of the brain.
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Vickery, B. C.
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New York, Academic Press, Inc., 1958.
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Vygodchikov, G. V. (Editor)
Pathogenesis and immunology of tumours.
New York, Pergamon Press, 1959.
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Wallerstein, R. S.
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New York, McGraw-Hill Book Co., Inc., 1959.
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World Health Organization.
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Geneva, World Health Organization, 1958.
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* * *

VOLUNTEER GROUPS

DISTAFF CLUB

The first official meeting of the Club was held on September 9 in the Penthouse, with Dr. Clark as the guest speaker. He welcomed the old and new members to the MGH family, gave a brief history of the Hospital, and answered questions from the wives about M.G.H. and its routines.

Before Dr. Clark spoke, Mrs. Soma Weiss took us on a tour of the Hospital.

Officers for the coming year are: Mrs. George M. Williams, President; Mrs. Robert G. Ojemann, Vice-President; Mrs. Willard M. Daggett, Jr., Secretary; Mrs. Milton S. Grossman, Treasurer.

Brief bits:—

Dr. Henry F. Allen was elected Secretary of the Section on Ophthalmology of the American Medical Association, for a three-year term, at their June meeting in Atlantic City.

Dr. Mark D. Altschule, Director of Internal Medicine and Research in Clinical Physiology at McLean Hospital, has been appointed Editor of *Medical science*.

Irwin H. Blank, Ph.D. was given the Special Award for 1958 last May, by the Society of Cosmetic Chemists, "in recognition of his fundamental research and writing on factors controlling suppleness and flexibility of skin".

Dr. Bradford Cannon acted as Chairman of the Committee on Local Arrangements, which was host to the American Association of Plastic Surgeons, at their meetings in Boston, May 13-15.

Dr. Edwin F. Cave was elected President of the American Orthopaedic Association, at their meeting held in Lake Placid, N. Y., June 14-18.

Dr. Jack R. Dreyfuss presented a paper on "Infrapulmonary pleural effusion", at the Hammersmith Hospital in London on May 20.

Dr. John W. Irwin, Director of the Microcirculatory Laboratory, has been made Chairman-elect for the 1960 Microcirculatory Conference.

Dr. Fred G. Johnson (*Dn.* 1943) is now teaching in the Biology Department at the University of Bridgeport, Conn. He completed his graduate studies in the Public Health Department, Yale Medical School, and received his M.P.H. in June 1958.

Dr. Benson B. Roe (*W.S.* 1943) was appointed Chief of Cardiac Surgery at the University of California Medical Center in May 1958. His full-time University appointment became effective Dec. 1, 1958, with the temporary rank of Assistant Professor. His Associate Professorship became effective on July 1.

Dr. Paul M. St. Aubin has rejoined the staff of the Department of Radiology. Dr. St. Aubin has spent the past two years as Radiologist-in-Chief of the Atomic Bomb Casualty Commission in Hiroshima and Nagasaki.

Dr. Milton S. Thompson (*Or.* 1934) has been appointed Professor of Forensic Orthopedics at the University of Texas.

Dr. W. Taliaferro Thompson (a.r.p. 1941) has been appointed Professor and Chairman of the Department of Medicine at the Medical College of Virginia, Richmond, Va.

New addresses:—

Dr. H. Clarke Anderson (*Path.* 1959), Dept. of Pathology, University of Louisville School of Medicine, 101 N. Chestnut St., Louisville, Ky.

Dr. Richard H. Aster (*M.* 1958), National Institute of Arthritis and Metabolic Diseases, Bethesda, Md.

Dr. Frank K. Austen (*M.* 1955), c/o Dr. John Humphrey, Div. of Immunology, National Institute for Medical Research, The Ridgeway, Mill Hill, London N.W. 7, England

Dr. George P. Baker, Jr. (*M.* 1958), Metabolic Unit, Grace-New Haven Community Hospital, New Haven, Conn.

Dr. Ruth B. Beuscher (a. attend. psychiat. (*McL.*)), 1419 Beacon St., Brookline, Mass.

Dr. Harold Bowditch (*W.M.* 1911), 12 Pine St., Peterborough, N. H.

Dr. Niels E. Brandstrup (a.r.p. *C.M.* 1959). Hospital for Sick Children, 555 University Ave., Toronto, Ontario, Canada

Dr. Robert D. Breer (a.r.p. *C.M.* 1957), Farm Drive, Manchester, Conn.

Dr. Alexander Breslow (a.r.p. *Path.* 1959), Dept. of Pathology, University of Washington, Seattle, Wash.

Capt. Robert W. Chamberlin, Jr., MC, USAR (a.r.p. *C.M.* 1959), Womack Army Hospital, Fort Bragg, N. C.

Dr. Amoz I. Chernoff (*M.* 1948), Memorial Research Center, University of Tennessee, Knoxville, Tenn.

Dr. Stewart Clapp (*N.S.* 1939), 3921 Ingomar St., N.W., Washington 15, D.C.

Lt. Cecil H. Coggins, MC, USNR (*M.* 1959), Nav Fac Am Con Gen, Cyprus, FPO 539, New York, N. Y.

Dr. John D. Constable (*S.* 1953), Donner Laboratory, University of California, Berkeley, Calif.

Dr. Willard Dalrymple (*M.* 1947), Glass Hall, Harvard Graduate School of Business Administration, Boston, Mass.

Dr. R. Clement Darling, Jr. (*C.M.* 1954), Veterans Administration Hospital, 2002 Holcombe Blvd., Houston 31, Tex.

Dr. Habibolah Davanloo (a.r.p. *Psychiat.* 1959), Metropolitan State Hospital, Waltham, Mass.

Dr. Harry A. Derow (*Path.* 1928), 1136 Beacon St., Brookline 46, Mass.

Dr. Harold T. Dillon, Jr. (*Path.* 1958), Dept. of Legal Medicine, Harvard Medical School, Boston 15, Mass.

Capt. Harry B. Ditmore, Jr., MC, USAR (*S.* 1954), 11th Evacuation Hospital, APO 59, San Francisco, Calif.

Dr. Louis H. Edmunds, Jr. (*S.* 1957), Naval Medical Research Institute, Bethesda, Md.

Dr. Albert G. Engelbach (past a. dir.), c/o Joseph R. Phillips, 18 Browne St., Brookline 46, Mass.

Dr. Nathan H. Fearer (*C.M.* 1957), 25 Conant St., Danvers, Mass.

Dr. Ira A. Ferguson, Jr. (*S.* 1953), Emory University Clinic, Atlanta, Ga.

Dr. Robert P. Fornshell (sr. r.s. *Or.* 1958), 85 Osborne St., Danbury, Conn.

Dr. John G. Freymann (*M.* 1947), Memorial Hospital, 119 Belmont St., Worcester 5, Mass.

Dr. Clarence F. Friedman (*C.M.* 1923), 770 Ocean Ave., Brooklyn 26, N. Y.

Dr. Leonard J. Friedman (*M.* 1956), Massachusetts Mental Health Center, 74 Fenwood Rd., Boston, Mass.

Dr. Thomas E. Gaffney (a.r.p. 1959), Dept. of Pharmacology, University of Cincinnati College of Medicine, Cincinnati, Ohio

Dr. Robert N. Ganz (*C.M.* 1925), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.

Dr. George C. Gibson (*W.S.* 1944), 536 W. Commonwealth Ave., Fullerton, Calif.

Dr. Benjamin F. Gill (a. psychiat.), 168 Homer St., Newton Centre 59, Mass.

Dr. Peter J. Gomatos (r.p. 1959), Students' Residence Hall, Rockefeller Institute, New York 21, N. Y.

Dr. Mehran Goulian (a.r.p. 1959), Yale University School of Medicine, 333 Cedar St., New Haven, Conn.

Dr. John W. Grover (*S.* 1957), Strangeways Laboratory, Wort's Causeway, Cambridge, England

Dr. H. David Hall (*Dn.* 1958), Dept. of Oral Surgery, University of Alabama Medical Center, Birmingham 3, Ala.

Dr. William H. Harris (sr. r.s. *Or.* 1959), Royal National Orthopaedic Hospital, Great Portland St., London, England

Dr. Ken Hashimoto (a.r.p. *D.* 1959), 2-808 Suidocho, Niigata City, Japan

Dr. Stephen E. Hedberg (*S.* 1956), 10302 Brunswick Ave., Silver Spring, Md.

Dr. Joan Kazanjian Hiett (r.p. *C.M.* 1959), 1904 Hudson Drive, Altus, Okla.

Dr. Lee Jackson (r.p. *Psychiat.* (*McL.*) 1959), Judge Baker Guidance Clinic, 295 Longwood Ave., Boston, Mass.

Dr. Wallace A. Jones (a.r.p. *Path.* 1959), Dept. of Pathology, Cincinnati General Hospital, Cincinnati, Ohio

Dr. John W. Josse (*M.* 1957), 841 Sycamore Drive, Palo Alto, Calif.

Dr. Charles S. Keevil, Jr. (*M.* 1956), Concord Medical Center, Concord, Mass.

Dr. George Kelemen (res. assoc. *Otolar.*), Massachusetts Eye and Ear Infirmary, 243 Charles St., Boston 14, Mass.

Dr. Kazuo K. Kimura (*C.M.* 1955), 9 Stuart Terrace, Worthington Heights, Bel Air, Md.

Capt. Howard S. King, MC, USAFR (a.r.p. *C.M.* 1959), USAF Hospital, APO 633, New York, N. Y.

Dr. Richard N. Kleaveland (*S.* 1952), 207 Medical Center, Spokane, Wash.

Dr. Robert G. Knapp, Jr. (*Dn.* 1950), 258 Genesee St., Utica, N. Y.

Dr. John T. Lambert (*W.M.* 1942), 768 Park Ave., New York, N. Y.

House Staff — July 1959

Dr. Bernhard Laukenmann (clin. fel. *An.* 1958), Chir. Klinik, Heilbronn, West Germany

Dr. Robert B. Layzer (*M.* 1958), Neurologic Institute, Columbia-Presbyterian Medical Center, 622 W. 168th St., New York, N. Y.

Dr. Charles A. Leach, Jr. (a.r.p. *C.M.* 1951), 525 Southfield Rd., Birmingham, Mich.

Dr. Marie-Louise Levy (clin. & res. fel. *An.* 1959), George Washington University Hospital, Washington, D. C.

Dr. Kenneth E. Liffmann (*Dn.* 1956), 168 Lloyd Ave., Providence 6, R. I.

Dr. Z. Jerzy Lipowski (a.r.p. *Psychiat.* 1959), Allan Memorial Institute, Royal Victoria Hospital, Montreal, Canada

Dr. J. Drennan Lowell (a.r.s. *Or.* 1953), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.

Dr. Arthur S. Lurie (a.r.p. *D.* 1959), 150 Bradlee Ave., Swampscott, Mass.

Dr. Robert B. McFarland (a.r.p. *Path.* 1959), Denver General Hospital, Denver, Colo.

Dr. Stephen L. Madey (*C.M.* 1944), 1401 N. Foster St., Baton Rouge 6, La.

Dr. John A. Malcolm (*S.* 1953), Presbyterian Hospital, 622 W. 168th St., New York 32, N. Y.

Dr. Richard F. Mayer (a.r.p. *N.* 1957), U.S. Naval Hospital, Chelsea 50, Mass.

Dr. John E. Mazuzan, Jr. (c.r.p. *An.* 1959), University of Vermont College of Medicine, Burlington, Vt.

Dr. Neuman S. Mittel (r.p. *Psychiat.* (*McL.*) 1959), Dept. of Psychiatry, Massachusetts Memorial Hospital, 750 Harrison Ave., Boston, Mass.

Dr. Walid A. Mnaymneh (a.r.s. *Or.* 1959), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Barbara Gurd Mueller (r.p. *Psychiat.* (*McL.*) 1959), Dept. of Psychiatry, Beth Israel Hospital, 330 Brookline Ave., Boston, Mass.

Dr. Gustave C. E. Mueller (*S.* 1958), Aero-Medical Research Laboratory, Wright-Patterson A.F.B., Dayton, Ohio

Dr. Gerhard Nellhaus (*C.M.* 1957), Neurologic Institute, Columbia-Presbyterian Medical Center, 622 W. 168th St., New York, N. Y.

Dr. Charles W. Neville, Jr. (r.p. *Psychiat.* (*McL.*) 1959), Dept. of Psychiatry, Beth Israel Hospital, 330 Brookline Ave., Boston, Mass.

Dr. Joseph C. Oakley (*Dn.* 1959), 64 Sagamore Rd., Worcester, Mass.

Dr. Edward Parnall (*Or.* 1932), 1 Medical Arts Sq., Albuquerque, N. M.

Dr. Donald P. Pederson (c.r.p. *An.* 1957), 650 S. Central Ave., Marshfield, Wis.

Dr. Jalna A. Perry (r.p. *Psychiat.* (*McL.*) 1959), Dept. of Psychiatry, Massachusetts Memorial Hospital, 750 Harrison Ave., Boston, Mass.

Dr. Joseph R. Petranek (*M.* 1954), 2 Poplar St., Ipswich, Mass.

Dr. David C. Poskanzer (r.p. *N.* 1959), 90 Parliament Hill Mansions, Lissenden Gardens, London N.W. 5, England

Dr. Désiré J. A. Rebello (a.r.p. *D.* 1954), "Kalleanpur", 130 Hill Rd., Bandra, Bombay, India

Dr. Claus W. Reichle (clin. & res. fel. *An.* 1959), Farbwerke Hoechst, Pharm.-Wissensch. Abt. 1, Frankfurt-Hoechst, Germany

Dr. John P. Remensnyder, Jr. (*S.* 1958), 4812 Edgefield Rd., Bethesda, Md.

Dr. Jack O. Rice (r.p. *Psychiat.* (*McL.*) 1959), Vanderbilt University Hospital, Nashville, Tenn.

Dr. Flaviu C. A. Romanul (fel. *N.P.* 1959), Johns Hopkins Hospital, Baltimore 5, Md.

Dr. Logan H. Roots (*W.S.* 1933), 475 Riverside Drive, New York 27, N. Y.

Dr. Patrick F. Rose (a.r.p. *C.M.* 1959), Southwestern Medical School, University of Texas, Dallas, Tex.

Dr. Victor J. Rosen, Jr. (a.r.p. *Path.* 1959) U.S. Naval Radiological Defense Laboratory, San Francisco 24, Calif.

Dr. E. William Rosenberg (r.p. *D.* 1959), Jackson Memorial Hospital, Miami, Fla.

Dr. Jens G. Rosenkrantz (*S.* 1954), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Bal Makund Sahay (a.r.p. *Psychiat.* 1959), Beth Israel Hospital, 330 Brookline Ave., Boston, Mass.

Dr. Morris B. Sanders (*E.S.* 1920), 8 Marmion Way, Rockport, Mass.

Dr. Stanley J. Sarnoff (a.r.s. 1947), Room 6-D-20, Bldg. 10, National Institutes of Health, Bethesda 14, Md.

Dr. John W. Saville (a.r.s. *Or.* 1959), Dist. of Columbia General Hospital, Washington, D. C.

Dr. Robert A. Schmidt (a.r.p. *An.* 1959), Minneapolis General Hospital, Minneapolis, Minn.

Dr. John W. Singleton (*M.* 1958), NIAMD, Room 8N-240, Bldg. 10, National Institutes of Health, Bethesda, Md.

Dr. Porter H. Smith (a. an. 1959), 1005 Haywood Drive, Madison, Wis.

Dr. Oscar E. Starobin (*M.* 1955), Massachusetts General Hospital, Boston 14, Mass.

Dr. Charles P. Summerall, III (*M.* 1956), University Health Service, Tulane University of Louisiana, New Orleans 14, La.

Dr. John B. Tallon (a.r.p. *R.* 1953 & sr.r.s. *Or.* 1959), 617 McConnell Ave., Cornwall, Ontario, Canada

Dr. Milton S. Thompson (*Or.* 1934), 1605 Nix Professional Bldg., San Antonio 5, Tex.

Dr. William H. Tingey, Jr. (*Dn.* 1959), 115 E. 4600 South St., Murray, Utah

Dr. David Van Buskirk (*M.* 1958), Massachusetts Mental Health Center, Boston, Mass.

Dr. James L. Vanderveen (c.r.p. *An.* 1955), Massachusetts Memorial Hospital, 750 Harrison Ave., Boston, Mass.

Dr. Arie C. van Ravenswaay (*Path.* 1934), 708 N. Country Club, Tucson, Ariz.

Dr. Frederick H. Verhoeff (cons. c. *Oph.*), 61 Monmouth St., Brookline 46, Mass.

Dr. Ludo von Meysenbug (*C.M.* 1917 & *W.M.* 1918), 123 New Haven Ave., Melbourne, Fla.

Dr. Jerome K. Walker (*Dn.* 1954), 42 W. Brook St., Manchester, N. H.

Dr. Ralph C. Williams, Jr. (*M.* 1955), Massachusetts General Hospital, Boston 14, Mass.

Dr. Herbert C. Wimberger (r.p. *Psychiat.* (*McL.*) 1959), Massachusetts General Hospital, Boston 14, Mass.

Dr. Herbert Wohl (a.r.p. 1959), Columbia-Presbyterian Medical Center, 622 W. 168th St., New York, N. Y.

Dr. Stanley M. Wyman (j.r.p. *R.* 1942), Cambridge Medical Bldg., 575 Mount Auburn St., Cambridge 38, Mass.

Dr. Alfred Yankauer (*C.M.* 1941), New York State Department of Health, 39 Columbia St., Albany, N. Y. (after Jan. 1, 1960).

Capt. Peter M. Yurchak, MC, USAFR (*M.* 1958), 7505th USAF Hospital, APO 232, New York, N. Y.

* * *

Mrs. Helen H. Cushing, for many years the courteous and genial hostess at Baker Memorial and more recently hostess in the Warren Building Lobby, was honored by a tea-and-coffee party on June 12. The occasion was Mrs. Cushing's retirement from active duty at the Hospital, and her many friends came to express to her their appreciation of her long years of service at M.G.H. and to wish her well for the future.

* * *

Dr. and Mrs. Dean A. Clark and the Distaff Club gave a party for members of the House Staff and their wives in the Warren Building Lobby on the afternoon of August 6. The party provided a very pleasant opportunity for the many invited guests to meet the new members of the House Staff.

Delicious and attractive refreshments were served.

* * *

Dr. Arnold M. Katz, Assistant Resident in Medicine on our House Staff, has contributed a unique and most valuable item for our Archives collection.

During his recent travels in the Near East, Dr. Katz visited Cos, one of the islands in the archipelago off the coast of Asia Minor, where Hippocrates was born and practised medicine round 300 B.C. From the plane tree, under which Hippocrates is said to have carried on his teaching, Dr. Katz carefully selected and removed a very small dead twig. This, along with a piece of pure white marble which he picked up near by, he had enclosed within a little plastic box.

We have all seen, in the Warren Building Lobby, the results of the seedlings from this same tree which Dr. Wilder G. Penfield of Canada sent to the Hospital. But *do* come in to the Archives Room and see this little gem-like gift from Dr. Katz. It would be well worth your while.

THE NEWS

No. 189 Boston, Mass. November 1959

ACTIVITIES OF THE DIABETES UNIT

Patient-care and research in the field of diabetes are well-established traditions at Massachusetts General Hospital. To verify this, one needs only to recall that one of the first reports of the successful management of severe diabetic acidosis with the then new and untried pancreatic factor, insulin, came from our Hospital in 1922 from the pen of Dr. Arlie V. Bock. It is also likely that Dr. Elliott P. Joslin received the initial spark of inspiration to devote his life's energy and efforts to the study of this disease while he was a House Pupil on our Medical Service in 1894 and 1895. In more recent years, the works of Drs. Allan Butler, Reed Harwood, Fuller Albright, Janet McArthur, and Nathan Talbot give testimony that research in this area of metabolism continued to advance under our roofs. On the surgical side, the management of gangrene of the toes and feet, seen all too frequently in the diabetic population, occupied the attention of Dr. Leland McKittrick and his associates, and many a patient owes his continued ability to walk to their contributions. The retinal and ocular complications of diabetes have been of enduring interest to Dr. William Beetham of our neighbor institution, the Massachusetts Eye and Ear Infirmary.

The physicians of this Hospital early recognized that the care of patients with diabetes required prolonged and concerted therapeutic attention, and a special clinic for their care was established as a unit of the old Out-Patient Department in 1916. Though a great many of our physicians participated in this primary function of a teaching hospital, the leadership of Drs. F. Gorham Brigham, Roy Wheeler, James H. Townsend, and Reed Harwood in this regard has been well established. In recent years, due to the increasing incidence and earlier recognition of diabetes in the ageing population we serve, the numbers of patients in our Diabetes Clinic has steadily increased and, at the present time, better than 3600 patient-visits per year are serviced by a devoted and energetic staff.

In the past, research and patient-care in diabetes were largely separated. The metabolic defect in diabetes is basic to the energy metabolism of the whole organism and the clinical manifestations involve every system of the body; therefore, it is not surprising that research contributions at the M.G.H. concerning the various facets of the disease came from study groups whose interest in diabetes was tangential to their main concerns. In order to concentrate research effort in this area and to enhance the possibility of gaining fundamental information from the copious clinical material, a Diabetes Research Unit, tied to the Diabetes Clinic, was formed in 1957 through the efforts of Dr. Walter Bauer. It has been the writer's privilege to serve as Program Director of this unit since its inception and to herewith present a report on some of our progress to date.

We became interested in the action of insulin on peripheral nerve metabolism because of two patients with mild diabetes which had been well controlled for many years by diet alone, who had the rather sudden onset of severe, primarily motor neuropathy. After several months had passed without clinical improvement in the neurological deficit, both patients were started on 10 to 15 unit doses of insulin and the carbohydrate content of their diets was increased appropriately. To our satisfaction, there was a prompt improvement in both objective and subjective manifestations. At about the same time, we had the opportunity to see another patient who had not been suspected of being diabetic and had rapidly developed so profound a motor radiculopathy of the lower extremities as to have become bedridden. A glucose tolerance test and careful examination of her eye grounds proved the presence of mild diabetes and she, also, experienced rapid reversal of symptoms and physical signs with the institution of insulin therapy.

Despite the fact that a direct action of insulin on the glucose metabolism of brain has been consistently denied by all who had investigated the problem, we undertook experiments with isolated, excised rabbit sciatic nerves on the hunch that peripheral nerve metabolism might be quite different from that of the brain. This proved to be the case and we were able to demonstrate, subsequently, a positive insulin effect *in vitro*, on glucose uptake from the incubation medium, on penetration of non-utilizable sugar into the intracellular water, on radio-CO_2 production from radio-glucose supplied in the incubation medium, and on lactic acid accumulation. Our experiments were controlled by incubating the sciatic from one leg with insulin in the medium and its opposite number in an insulin-free medium. We suspected that the Schwann cells were the site of the observed response to insulin and that the axons and myelin sheaths were indifferent to the presence of insulin. To test this hypothesis, we surgically divided both sciatic nerves of rabbits and ten days later excised the distal portions as experimental objects. To our surprise, the positive insulin effect could no longer be evoked despite the fact that our neuropathologist colleagues found Schwann cell hyperplasia and axon and myelin degeneration in specimens of the nerves used. Our tentative conclusion that the insulin response in a peripheral nerve is dependent on intact axons and myelin sheaths requires further verification and we are still working on this point.

On the basis of our clinical observations and the laboratory demonstration that insulin can influence the glucose metabolism of peripheral nerves, we suspect that patients with mild diabetes and a primarily motor affection of the nerve roots should be given insulin therapy. Our experience in the Diabetes Clinic leads us to agree with the widely-held concept that neuropathy in diabetes is of several distinct varieties, each of which may have an entirely different pathogenesis. At the moment we entertain the hypothesis that this type of motor, peripheral neuropathy is the result of insufficient glucose utilization by the nerves involved, due to an absolute or relative lack of insulin at its metabolic site.

Atherosclerosis has also caught our research interest. Sclerotic disease of the blood vessels seems to be an intrinsic part of the ageing process in all of us, but it is a well-established fact that the diabetic gets atherosclerotic changes earlier than the normal person and that the extent, progress, and severity of vascular degeneration are all increased by diabetes. Dr. William Waddell of the Surgical Service has had a keen interest in the fat and carbohydrate metabolism of relatively young patients who have experienced a disastrous vessel closure due to precocious atherosclerosis. His work suggested that many of these patients had an abnormal type of carbohydrate metabolism, not unlike that seen in diabetes. Working together with him on this problem, we have tested the responses of a group of ten precocious atherosclerotics and ten non-atherosclerotics as controls in regard to changes in the serum levels of non-esterified fatty acids. This relatively small fraction of the plasma lipids has been shown by Vincent Dole (*E.M.* 1941) and other investigators to be the main channel for the flux of material being mobilized from storage in the adipose depots of the body. The initiation and cessation of release of these acids into the blood by fat tissue are very sensitive to changes in the glucose utilization of fat cells, and presumably the brisk changes one can detect in levels of serum NEFA under the influence of insulin, glucagon, and glucose infusions reflect the changes in glucose utilization of adipose tissue. In diabetics, the NEFA responses to these various provocations are distinctly different from those seen in non-diabetics under similar conditions. The results of our NEFA response experiments with precocious atherosclerotics indicated that this group behaved in this respect in a manner one observes in diabetics. As a matter of fact, although they did not have glycosuria or elevated fasting sugars, most of them, in the atherosclerotic group, had a "diabetic type" of glucose tolerance curve. If weight reduction and a low fat diet were instituted, many of the atherosclerotics had changes in their NEFA responses away from the diabetic pattern, back to or toward a normal pattern. Although it is not possible to attach etiological significance to the NEFA peculiarities in this group of precocious atherosclerotics or in diabetics, we reason that measures which re-establish the usual pattern of response may impede the progress of the sclerotic degeneration. On this and other grounds, we recommend to our atherosclerotic and diabetic patients the curbing of dietary fat intake and the reduction of excessive body fat stores to normal.

The introduction of oral agents capable of controlling the hyperglycemia and glycosuria of a large number of patients with diabetes opened a new era in the clinical management of diabetes. During the last three years, we have evaluated carefully four of these agents and have gained much useful and practical information regarding their use. The three sulfonylurea compounds — tolbutamide (Orinase), chlorpropamide (Diabinese), and metahexamide (Euglycin) — are thought to act by stimulation of the release of insulin from the patients' own islets as well as by decreasing the liver's glucose output. They are ineffective in the severe diabetes most commonly seen in children and young adults where the capacity for endogenous insulin production seems to have been lost entirely. Our experience with this group of compounds agrees with those reported from other clinics. Tolbutamide appears to have the greatest margin of safety and the least possibility of toxicity, but it is relatively expensive and does not have the pharmacology for cumulative action. Chlorpropamide is more potent in equivalent doses than tolbutamide, and response, if evoked, is unequivocal. Although the literature reports a greater capacity for toxicity for this agent, we have not as yet seen a serious untoward effect in our group of 25 study patients on this drug. Metahexamide was abandoned because of its hepatotoxic properties, and a recent issue of the *New England Journal of Medicine* carries our report concerning the findings on liver biopsy in a non-fatal case of metahexamide jaundice which we observed.

The remaining agent under study belongs to an entirely different class of chemical compounds — the biguanides, and its mode of action has not been determined with any certainty. DBI (N^1-β-phenethyl formamidinylimino urea), is thought to lower blood sugar by increasing the utilization of glucose in the peripheral tissues and to suppress hepatic glucose release. In contrast to the sulfonylureas, it can act in the so-called labile or "juvenile" type of diabetes. Unfortunately, it causes gastrointestinal disturbances in many patients when given in large enough doses to be effective without insulin. We are currently trying it as a stabilizing agent in conjunction with the usual insulin therapy in a group of patients whose diabetes is very erratic, with frequent bounces of the blood sugar to high levels and interspersed insulin reactions. From the few cases we have had the opportunity to observe, this may prove to be a good use for this interesting agent.

It will take many years of observation before the merits, or lack of them, of the oral agents can be fully evaluated. We all are still a little apprehensive that perhaps in five, ten, or more years from now, a subtle toxicity of these agents, which we do not recognize now, will become apparent. Nevertheless, the chances of such an occurrence seem smaller as time passes and we are becoming more confident and appreciative of these agents. We still wonder if the agents merely lower the blood sugar or whether they really correct the faulty underlying metabolism in the same manner that administered insulin does.

The difficulties of one of our Clinic patients has led us into another project which promises to be very rewarding as well as informative. The patient was a young man, not yet 30, whom Dr. Harwood and others had followed in the Diabetes Clinic since he had acquired the disease some 18 years previously. His diabetes had been difficult to regulate, partly because of his inability to follow his therapeutic program in the early years, but primarily because of the erratic behavior of the disease process itself, which is so often the case in the so-called "juvenile" or labile type of diabetes. In the 13th year of his condition, retinal microaneurysms were noted for the first time, and the progression of this hemorrhagic degeneration continued relentlessly until the cumulative loss of vision threatened to make it impossible for him to continue his employment as a clerical worker and to support his wife and infant child.

We had been following the reports from Scandinavia concerning the employment of surgical and radiation-implantation hypophysectomy for the arrest of diabetic retinopathy. This approach followed the observation of Poulsen, in Denmark, that a woman with severe diabetic retinopathy had remission and healing of the retinal disease after the occurrence of post-partum pan-hypopituitarism (Sheehan's syndrome). Unfortunately, no general agreement as to the benefits or lack of them concerning this procedure had been reached by the handful of observers who had had some, albeit small, experience with this form of treatment. Not only had assessment of retinal changes proved difficult, but the ablative type of surgical hypophysectomy carried considerable operative morbidity. In a few cases, operative damage to the optic chiasm, which lies in close proximity to the pituitary, occurred, and what was being attempted as a sight-saving procedure turned out to be a sight-destroying maneuver.

It seemed to us that we could make a contribution toward the resolution of this problem and perhaps offer our patient some hope for his eyesight by exploiting the specialized skills of several groups who had a contingent interest in the problem.

Dr. Joel Contreras of the Retina Service proceeded to make maps of the patient's eye grounds at 2- to 4-week intervals. This painstaking and demanding technique of indirect ophthalmoscopy detailed every hemorrhage, every exudate, and every change which took place over a 6-month period. During this time, we obtained the patient's complete cooperation and kept him on the strictest medical regimen possible. It was quickly apparent that, in this patient, diabetic retinopathy was a highly dynamic process, with new hemorrhages constantly appearing, old ones resolving and being replaced by exudate along with a gradual increase of proliferative change. At this point in the series of observations, one could predict that complete loss of useful vision would occur unless the advance of the disease were interrupted within 6 months to a year, as early invasion of the macular region and the formation of traction rings around the maculae had begun.

We studied the patient on the metabolic ward and characterized his hormonal status, the severity of diabetes, and proved to our satisfaction that his renal lesion of Kimmelstiel-Wilson disease, which almost invariably exists in diabetics with severe retinopathy, was not too far advanced. After obtaining the advice of Dr. William H. Baker, who has had extensive experience with hypophysectomy in the treatment of metastatic breast cancer, the patient had his hypophyseal-stalk divided by Dr. William Sweet. Dr. Sweet, after sectioning the stalk, placed a gold cap on top of the sella so as to preclude the re-establishment of connections to the pituitary from the proximal stalk and to eliminate the hazard of radiation damage to the overlying optic chiasm should transnasal radiation-source implantation become desirable at some time in the future.

Six months have now passed since the procedure was performed and the results have, in this case, been very striking: A complete cessation of pituitary tropic activity has been shown in regard to thyroid, adrenal, and gonadal function; the diabetes has been much ameliorated, with a 50% drop in insulin requirement and about 75% curtailment of daily urinary sugar losses; the advance of the hemorrhagic retinal process appears to have ceased entirely and not one new hemorrhage has been noted as healing of the older lesions has taken place. Of interest has been the observed thrombosis of veins feeding clusters of microaneurysms, with eventual disappearance of these lesions. The proliferative changes appear to have regressed slightly and have not advanced. There has been some improvement in the patient's visual acuity, though pre-existent, permanent damage precludes complete restoration of vision. However, it is important to emphasize that there has been no further loss of acuity as had been the case prior to the operation.

We are much encouraged by the results obtained in this case and have under study several patients whom we are considering as candidates for the procedure. From our experience with the patient described, it has been possible to define criteria for the choice of suitable candidates. At the moment, we feel we are in a position to clarify the situation in regard to this radical approach to an otherwise insoluble problem in diabetes. This is possible since we have the trained experts and methodology for documenting the retinal changes with certainty; we have the skilled surgeons and a relatively innocuous, effective surgical procedure; and we have the facilities to study and document the metabolic changes which the operation produces. It is not too much to hope that from this type of clinical experience a lead will appear that will reveal, under laboratory study, valid information as to the fundamental chemical pathogenesis of diabetic ocular vascular disease.

In addition to these more clinically oriented projects, we have under way in our laboratory on the Fourth Floor of the Bulfinch, biochemical studies in the fundamental problems of carbohydrate and lipid metabolism. We hope to make contributions on this level of investigation as well, for without such basic information we shall never have a good understanding of diabetes and its complications. It is sad, but true, that despite the 37 years which have passed since Banting and Best discovered insulin and despite the prodigious efforts on the part of a multitude of talented investigators, the essential nature of diabetes remains obscure, and even more mysterious are the mechanisms by which its presence produces the dreaded complications. The answers to these pivotal questions will almost certainly come from fundamental laboratory research, but our diabetic patients can furnish us with the key clues as to how and where to attack the problems in the laboratories. The concept of a coordinated program of patient-care, clinical research, and basic investigation by a closely-knit but diversified group of individuals interested in a particular phase of Medicine was clearly enunciated by Dr. Bauer in his Presidential Address before the Association of American Physicians last May, the text of which appeared in the October issue of THE NEWS. We hope the Diabetes Unit will develop along these lines and be able to fulfill its assigned mission in this context.

Richard A. Field, M.D.,
Assistant Physician and *Program Director,*
Diabetes Clinic

THE KENNEDY FOUNDATION GIFT

A generous gift of $1,000,000 has been made by the Joseph P. Kennedy, Jr. Memorial Foundation to the 150th Anniversary Program of the Massachusetts General Hospital, to establish the Joseph P. Kennedy, Jr. Laboratories for Research on Mental Retardation. The gift was made on the occasion of the birthday, last September, of Joseph P. Kennedy, Sr. by Robert F. Kennedy and Mrs. Robert Sargent Shriver, President and Vice-President, respectively, of the Kennedy Foundation.

The million-dollar donation will be equally divided between construction and endowment. The laboratories will consist of two new floors to be built atop the Vincent-Burnham Building. Finished plans for the unit are being prepared by the architects, with construction scheduled to begin early in 1960.

* * *

Dr. Albert H. Coons (*E.M.* 1939) was one of seven scientists and laymen who received Albert Lasker Awards at the annual meeting of the American Public Health Association in Atlantic City on October 22. Dr. Coons was so honored "for his outstanding contributions in immunology and medicine and especially for his development of the fluorescent method of labeling proteins — a significant new tool for the study of infection in human beings."

An article describing Dr. Coons's work appeared in the October 3 issue of *Saturday Review.*

Dr. Joe Vincent Meigs was awarded an honorary degree of Doctor of Science by the Northwestern University Medical School, at a special Convocation on September 29. This date is Founder's Day at Northwestern Medical School, and this year marked the 100th anniversary of its founding.

Dr. Fresenius Van Nüys (*E.M.* 1907) has been named the Massachusetts "General Practitioner of the Year" by his colleagues in the Massachusetts Medical Society.

Dr. Van Nüys practised medicine in Weston, Massachusetts, from 1907 until 1951, when he retired to serve as Medical Officer at the Watertown Arsenal dispensary. He was Chief of Medicine at the Chelsea Naval Hospital during World War I, and was Chief of Medicine at Waltham Hospital for many years. Dr. Van Nüys has been active in civic affairs in his community and is a member of many medical associations.

The Board of Trustees, at their meetings on August 21, and September 11 and 25, voted:

That J. Gordon Millichap, at present Clinical and Research Fellow in Neuropathology, be given the title of Clinical Fellow in Neurology, to act as Assistant Resident in Pediatric Neurology for one year, beginning July 1;

To accept the resignation of Dr. Donald P. Pederson from the position of Assistant Anesthetist, effective August 15;

To change the status of Charles E. Rounds D.M.D. from Dental Surgeon to Clinical Associate in Dentistry.

To appoint:

Dr. Jose Barzelatto as Clinical and Research Fellow in Medicine, beginning October 1;

Dr. Abraham B. Bergman as Exchange Assistant Resident on the Children's Medical Service, for the period September 21 through October 31;

Dr. Robert B. Brendze as Assistant in Orthopedic Surgery, beginning September 1;

Dr. Thomas A. Carey as Second Assistant Resident in Radiology, beginning July 1, 1960;

Dr. William L. Curwen as Assistant in Dermatology, beginning September 25;

Dr. James H. Eldredge as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Dr. Arnold Gilbert as Exchange Assistant Resident on the Children's Medical Service, for the period August 11 through September 20;

Dr. Frederick T. Hatch as Assistant Physician, beginning July 1;

Dr. Clement A. Hiebert as Assistant in Surgery, beginning September 14;

Dr. Lee Jackson as Clinical Fellow in Psychiatry at McLean Hospital, beginning September 1;

Dr. Robert H. Jones as Assistant in Medicine for one year, beginning August 1;

Dr. Thomas J. Keenan as Assistant in Anesthesia, beginning September 1;

Dr. Beatriz G. Requena as Clinical Fellow in Medicine for one year, beginning September 15;

Dr. Dwight R. Robinson as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. William F. Soskin as Research Associate in Psychology at McLean Hospital, beginning September 1;

Dr. Janice R. Stevens as Clinical and Research Fellow in Neurology, for a term of nine months, beginning September 15;

Dr. Alfred D. Surtees as Assistant in Anesthesia, beginning July 25;

George Szabo, Ph.D. as Associate Biologist (Medicine), beginning August 1;

Dr. Rajendra Tandon as Assistant Resident in Medicine, for a period of four months, beginning September 1, 1959, and that on January 1, 1960, Dr. Tandon be appointed Resident in Medicine for one year;

Dr. Erik Vinnars as Clinical Fellow in Anesthesia, for a period of six months, beginning March 1, 1960;

Dr. Ralph C. Williams, Jr. as Chief Resident in Medicine, beginning January 1, 1960;

Dr. William E. Wilson as Assistant Resident in Orthopedic Surgery for one year, beginning October 1.

The Trustees also voted:

That Professor Eduardo C. Palma of the University of Montevideo Medical School be invited to give a Richardson Lecture at the Hospital on October 14;

That Dr. Meryl Rose of the University of Illinois be invited to give a Richardson Lecture at the Hospital on November 27.

At their meetings during September, the General Executive Committee voted:

That Dr. Myron B. Laver's title be that of Clinical Fellow and Acting Chief Resident in Anesthesia, beginning August 15;

To extend the appointment of Dr. Augusto D. Litonjua as Clinical and Research Fellow in Medicine, from November 17, 1959 through August 31, 1960;

That the promotion of Dr. Edwin T. Wyman, Jr. to the position of Senior Resident in Orthopedic Surgery become effective as of January 1, 1960 rather than April 1, 1960.

To accept the resignations of:

Dr. John K. Leach from the position of Clinical Fellow in Medicine, assigned to Cardiology, effective as of June 30;

Zofia Tarasiejska (Glaser), Ph.D. from the position of Research Fellow in Medicine, effective as of September 5.

To promote:

- Dr. W. Gerald Austen to the position of Resident in Surgery for one year, beginning January 1, 1960;
- Dr. Elwin W. Donnelly to the position of First Assistant Resident in Radiology, beginning October 1;
- Dr. Clinton B. Seeley to the position of Resident in Radiology, beginning October 1.

To reappoint:

- Dr. Ann B. Barnet as Clinical Fellow on the Children's Medical Service for one year, beginning September 26;
- Dr. Edgar S. Cathcart as Clinical and Research Fellow in Medicine for one year, beginning July 1;
- Dr. Oscar S. DePriest, III, as Second Assistant Resident in Surgery, beginning October 1;
- Dr. Ingrid Gamstorp as Clinical and Research Fellow in Neurology and Pediatrics for one year, beginning October 1;
- Dr. Maurice M. Pechet as Clinical and Research Fellow in Medicine for one year, beginning October 1;
- Dr. Gilberto Rebouças as Clinical Fellow in Medicine, for the period December 1, 1959 through May 31, 1960;
- Ascanio M. Rossi, Ph.D. as Research Fellow in Psychology for one year, beginning August 25;
- Dr. Juan F. Sotos as Clinical and Research Fellow in Pediatrics and in Pediatric Neurology, beginning October 1;
- Mary J. Spiro, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
- Dr. Alejandro H. Villegas as Clinical and Research Fellow in Surgery, for the period September 1, 1959 through February 28, 1960;
- Irving Weliky, Ph.D. as Research Fellow in Medicine for one year, beginning October 1.

To appoint:

- Dr. Ulf Å. Friberg as Research Fellow in Orthopedic Surgery, beginning November 1;
- Dr. Latifeh Ghandur-Mneimneh as Research Fellow in Pathology for one year, beginning July 1, 1960;
- Herbert Lange, Ph.D. as Research Fellow in Psychology for one year, beginning September 1;
- Dr. Rodolfo R. Llinás as Research Fellow in Psychiatry for one year, beginning October 1;
- Than Myint, Ph.D. as Research Fellow in Radiology, beginning September 17;
- John R. Newbrough, Ph.D. as Research Fellow in Psychology, beginning September 1;
- Mr. James L. Pinter as Research Fellow in Physics (Medicine), beginning September 1;
- Dr. Edwin T. Wyman, Jr. as Clinical Assistant in Orthopedic Surgery, from September 1 through December 31, with the privilege of assisting Drs. Barr and Aufranc.

The Coordinated Program conducted by Radcliffe College and the Massachusetts General Hospital School of Nursing since 1946 was studied in 1958 by Dr. Everett Hughes, Professor of Sociology, University of Chicago, at the request of and with the support of Radcliffe College and the School of Nursing.

In accord with the recommendations from the study and plans of the faculty of the program, certain changes have been initiated in anticipation of future developments.

Graduates of liberal arts colleges, in addition to those from Radcliffe, were admitted in July 1959. Undergraduates at Radcliffe will continue to enter the program this fall for their preclinical studies. As in the past, the requirements for entering the clinical phase of the program will have been met on graduation from Radcliffe College by carrying one course each term at the School of Nursing. The clinical phase of the program extends over two calendar years, and prepares the student for public health nursing as well as institutional nursing.

Committees have been working on plans for a new program which will make it possible for graduates of liberal arts colleges, who meet the admission requirements, to complete both the preclinical and the clinical phases of the program in two calendar years.

At present, four students, in addition to graduates of Radcliffe College, are enrolled in this new plan. A program for each is devised in terms of her undergraduate studies, therefore learnings are utilized on the level appropriate to the student, and needless repetition is avoided.

Since the need has become evident to identify these students as members of a program for college graduates, a committee of students and faculty has designed a uniform and cap which began to be worn this last September. The uniform consists of a one-piece blue dress, with white collar and vest. The blue is not as deep a shade as the MGH blue, nor are the dress and cap replicas of the MGH student uniform, but derivation from these has not been overlooked. White shoes and stockings are worn.

Classes will be admitted annually. The admissions and curriculum committees continue their work of refining requirements and program. The committee at Radcliffe resumed its planning functions this fall.

Sylvia Perkins, R.N.,
Assistant Director, School of Nursing

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

General Surgery

McDermott, W. V., Jr.
Hepatic coma and ammonia intoxication.
Quart. Rev. Surg., Obst. & Gynec. 16:139.

Nardi, G. L.
Liver blood flow in man; studies utilizing radioactive colloid. I. Normal values.
Gastroenterology 37:295.

Nardi, G. L.
Specific polypeptide substrates in enzymatic determination of pancreatic disease.
Surgery 46:30.

Waddell, W. R., and Williams, H. W., Jr.
The effect of antrectomy on gastric blood flow.
Ann. Surg. 150:529.

Neurophysiology

Barlow, J. S., Brazier, M. A. B., and Rosenblith, W. A.
The application of autocorrelation analysis to electroencephalography.
In Proceedings of the First National Biophysics Conference, New Haven, Conn., Yale University Press, p. 622.

Miscellaneous

Binger, C.
A child of enlightenment.
In Walter Lippmann and his times, Marquis Childs and James Reston, Editors, New York, Harcourt, Brace and Company, chap. 2.

Wolf, M. R., and Hamm, D.
Pilot studies on evening volunteers.
Hosp. Topics 37:34.

As a complete surprise on his birthday last August, Dr. Binger's family presented him with a volume of some of his poems, selected by his children and privately printed. The book is titled *Post meridian.*

MASSACHUSETTS EYE & EAR INFIRMARY

The Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, at their meetings during April, May, June, and August, voted:

To accept the resignation of Dr. John J. Sullivan from the position of Assistant in Ophthalmology.

To appoint:

- Dr. D. Robert Alpert — Assistant Surgeon in Ophthalmology;
- Dr. Hugo D. Angelini — Assistant Surgeon in Otolaryngology;
- Dr. Thomas Cavanaugh — Associate Surgeon in Ophthalmology;
- Dr. Peggy Clark-Roberts — reappointed Fellow in Anesthesiology, retroactive to July 1;
- Jean Dumas — Fellow in Ophthalmology, assigned to the Retina Service, for one year, beginning July 1;
- Dr. Alfred L. Hurst — Assistant in Otolaryngology;
- Dr. Rodney T. Irving — Resident in Otolaryngology, beginning July 1, 1961;
- Dr. Carl C. Johnson — Associate Surgeon in Ophthalmology;
- Dr. Charles Kent — Associate Surgeon in Otolaryngology;
- Dr. Robert E. Klotz — Assistant Surgeon in Otolaryngology;

Dr. Joseph Lentine — Surgeon in Otolaryngology;
Dr. Arthur M. Morrissey — Assistant Surgeon in Ophthalmology;
Dr. John H. Neame — Fellow in Otolaryngology for one year;
Herbert Novak, Ph.D. — Post-Doctoral Research Fellow in Chemistry, beginning approximately February 1960;
Mr. Donald F. O'Brien — Electrical Engineer in Otology, to work in the Eaton Peabody Laboratory;
Dr. Ichiro D. Okamura — Assistant Surgeon in Ophthalmology;
Dr. George M. Olive, Jr. — Assistant in Ophthalmology;
Dr. Uthai Rutnin — Fellow in Ophthalmology, attached to the Retina Service, for one year, beginning May 15;
Dr. Earl S. Seale — Associate Surgeon in Ophthalmology;
Dr. Robert R. Trotter — Assistant Surgeon in Ophthalmology;
Dr. J. B. Walter — Fellow in Otolaryngology for one year.

At their meeting held on September 21, the Executive Committee of the Board of Managers voted to appoint:

Dr. Norman E. Byer — Fellow in Ophthalmology, assigned to the Eye Pathology Laboratory, for six months, beginning September 1;
Dr. Raymond Harrison — Fellow in Ophthalmology, assigned to the Glaucoma Consultation Clinic, for one year, beginning September 1;
Dr. Sotiria A. Mourkidou — Fellow in Anesthesiology for one year, beginning October 1;
Dr. John G. Sebestyen — Fellow in Ophthalmology, assigned to the Ophthalmic Plastics Laboratory, for one year, beginning September 1;
Dr. Jorge Silva — Fellow in Ophthalmology for one year, beginning September 1.

Among the recipients of honor awards at the annual meeting of the American Academy of Ophthalmology and Otolaryngology, held in Chicago from October 12 to 16, were Dr. Henry F. Allen, Assistant Surgeon in Ophthalmology, and Dr. Edgar M. Holmes, Surgeon for Plastic Operations.

Dr. Philip E. Meltzer was appointed as Acting Chief of Otolaryngology at the Infirmary and Acting Head of the Department of Otology and Laryngology at the Harvard Medical School upon the retirement of Dr. LeRoy A. Schall last August 31.

BIOGLETS

Dr. Elroy E. Anderson, Assistant Resident on the Children's Medical Service — born in Brockton, Massachusetts, February 14, 1930; A.B., Harvard College, 1951; military service: U.S. Medical Service Corps, U.S.A. and Korea, 1951-54; M.D., University of Buffalo Medical School, 1958; Intern in Pediatrics, Boston City Hospital, 1958-59; married; two children.

Dr. Howard P. Baden, Assistant Resident in Dermatology — born in Boston, Massachusetts, February 23, 1931; A.B., Harvard College, 1952; M.D., Harvard Medical School, 1956; Intern in Medicine, Peter Bent Brigham Hospital, Boston, 1957; military service: Captain, U.S. Army, stationed in the U.S.A., 1957-59; married; two children; home: Boston.

Dr. Paul F. Griner, Intern in Medicine — born in Philadelphia, Pennsylvania, January 1, 1933; B.A., Harvard College, 1954; M.D., University of Rochester, Rochester, N.Y., 1959; Fellowship in Pathology, University of Rochester, 1956-57; married; one child.

* * *

VOLUNTEER GROUPS

DISTAFF CLUB

During October the Distaff Club held two meetings. A get-acquainted evening, with bridge, canasta, and scrabble, was held on October 13, and a square dance on October 31.

A child psychologist from one of Boston's stores will discuss the world of toys with us at our November 18 meeting.

A time will be set, closer to Christmas, for our annual wrapping of gifts for children in the Hospital.

New addresses:

Dr. Irving P. Ackerman (*M.* 1951), 226 Marlborough St., Boston 16, Mass.
Dr. John A. Benson, Jr. (a. *M.* 1959), 3935 S.W. 52nd Place, Portland 1, Oreg.
Dr. Horace K. Boutwell (*E.M.* 1905), 201 St. Paul St., Brookline 46, Mass.
Dr. Robert D. Breer (a.r.p. *C.M.* 1957), 17 Haynes St., Manchester, Conn.
Dr. Addison G. Brenizer, Jr. (*W.S.* 1942), 1012 Kings Drive, Charlotte 7, N.C.
Dr. Benjamin L. Brock (*C.M.* 1923), P. O. Box 1411, Southeast Florida Tuberculosis Hospital, Lantana, Fla.
Dr. Franklin L. DeBusk (*C.M.* 1947), Dept. of Pediatrics, Medical Center Clinic, 1750 N. Palafox St., Pensacola, Fla.
Dr. Lawrence J. Essember (a.r.p. *C.M.* 1953), 25 Conant St., Danvers, Mass.
Dr. Robert H. Jones (r.p. 1959), Massachusetts General Hospital, Boston 14, Mass.
Dr. Charles A. McDonald (hon. p.), 97 Huxley Ave., Providence 8, R.I.
Capt. Donald M. McKee, MC, USAR (*S.* 1957), Headquarters Detachment, U.S. Army Hospital, Fort Sill, Okla.
Dr. Saul M. Marcus (a.u. 1958), 270 Commonwealth Ave., Boston, Mass.
Dr. Irving L. Pavlo (a. *Oph.*), 330 Dartmouth St., Boston 16, Mass.
Dr. Bruce J. Sams, Jr. (r.p. 1958), 304 E. Huntingdon St., Savannah, Ga.
Dr. Yang Wang (*M.* 1953), University of Minnesota Hospitals, Minneapolis 14, Minn.

Brief bits:

Dr. William R. Brewster, Jr. (a.r.p. *An.* 1950) has accepted the position of Assistant Professor in Surgery (Anesthesia) at the J. Hillis Miller Health Center, University of Florida, Gainesville, Florida.

Dr. Benjamin Castleman conducted the annual Slide Seminar of the American Society of Clinical Pathologists at their annual meeting in Chicago on September 11. The subject of the Seminar was "Diseases of the mediastinum and lung".

Dr. Lamar Soutter (a.r.s. 1941), Clinical Associate in Surgery on our staff and Associate Dean and Professor of Surgery at Boston University School of Medicine, has been appointed Acting Dean of the School.

Dr. William P. Boger (a.r.p. 1942), Director of Research at Norristown State Hospital, Norristown, Pennsylvania, spent a month in Europe last spring, where he participated in several international medical meetings.

In Milan, Italy, Dr. Boger presented a paper entitled "A critique of long-acting sulfonamide drugs" before the Second International Congress for Infectious and Parasitic Disease. In Prague, Czechoslovakia, Dr. Boger was a guest of honor of the Czechoslovakian Medical Society and of the Ministry of Health, and was invited to participate in the Antibiotics Symposium with International Participation that was held from May 18 to May 23. He served as moderator of one of the sessions, and presented two papers: "An evaluation of tetracycline preparations" and "Diffusion of antibiotics into the cerebrospinal fluid". Acting for Dr. Henry Welch, Director of the Division of Antibiotics of the Food and Drug Administration of the United States, who was unable to attend the meeting, Dr. Boger read the concluding paper at this Symposium.

Dr. Boger also visited the First and Second Medical Services of the University of Vienna School of Medicine, and attended the sessions of the Austrian Medical Association of Internal Medicine and the meetings of the Swiss Medical Society of Internal Medicine held at the Burgenstock, Switzerland, May 29 to 31.

Dr. Boger also spoke at the University of Freiburg in Germany, and at the University of Basle and the University of Berne in Switzerland. At these last three universities, the topics discussed were antibiotics in the treatment of staphylococcal infections and the new, long-acting sulfonamide drugs.

In a letter to Dr. Means, Dr. Boger gives the following appraisal of his trip:

> I have recently had the privilege of visiting behind the Iron Curtain and also at a number of the leading medical centers of Europe. Such visits are totally inadequate, by definition, for getting anything like a complete understanding of what is going on, but at least they are a help in establishing some bonds of understanding. Any face-to-face meeting, even for a matter of minutes, is helpful in discovering some of the essentials of our fellow creatures. This was certainly true in the brief meetings I had with medical men and scientists in Czechoslovakia. At this symposium there were representatives of 23 countries, but the ones of greatest interest to me were those from Russia, Hungary, Rumania, and Czechoslovakia.
>
> The Czechoslovakians are doing high quality work and at least by my understandings are more averagely attacking fundamental problems than is the case in many of our own institutions. They are obviously working "under the handicap" of restricted contact with fellow workers round the world, but they are certainly in full measure reviewing our literature and getting to know us at long distance, better than some of us know each other right here in close geographical proximity to each other.
>
> It was good on this short trip to discover members of the MGH family. When I made the rounds in Rossi's clinic in Berne, I was much impressed by his Oberarzt, Gautier, and I was constrained to inquire where he had received his training. It was a real pleasure to discover that he had had some of it at M.G.H. Interestingly enough, one of the Russian academicians, Juan Planelles, was a close friend of Fritz Lipmann. You might have occasion to tell him I met this gentleman.
>
> Peculiar circumstances have favored my getting abroad much more than I ever had reason to expect, and I am hopeful that, in some small way, I can profit from the opportunities and pay back in appropriate areas as chances present themselves.

We have conferred the title of "singleton" upon each alumnus of M.G.H. who

No. 84 in a series of Staff photographs
Dr. Richard A. Field, Assistant Physician — Program Director, Diabetes Clinic

is the only practising physician in his particular city or town. Dr. Walter M. Bartlett (*C.M.* 1927) of 125 Michigan Avenue, Decatur, Georgia, is now eligible for the title. In response to a letter from us, telling him of that distinction and asking him for news of his activities, this very interesting reply has been received:

It was a great surprise and pleasure to receive your letter of 4 September. If I have any claim for distinction among MGH-ers, it would be (1) that I was the next University of Michigan graduate to come to M.G.H. after Walter Bauer (I believe), and (2) that I took my assistant residency at the Boston City Hospital's Thorndike Memorial Laboratory under Dr. Francis W. Peabody (*E.M.* 1908) prior to taking my internship in Children's Medicine, and (3) that my roommate at the City Hospital was Dr. William Castle (*E.M.* 1923). I applied for the MGH appointment because of my interest in metabolic diseases and research, and I desired to work under the famous Dr. Fritz B. Talbot (*E.M.* 1907), who was then using the ketogenic diet to control epilepsy in children. He also had an abiding interest in many vague affairs (at least in 1927) such as Mongolism.

After leaving Boston I served as Resident Physician at the Physiatric Institute under Dr. Frederick M. Allen, working almost exclusively in the field of diabetes and hypertension. (In fact, all the bread in the hospital, as well as the butter, was strictly salt-free, and we had to salt our own.) Later I served for two years as Resident Physician in Internal Medicine at the Blythewood Sanitarium in Greenwich, Connecticut. In 1934 I practised Internal Medicine in Benton Harbor, Michigan, was certified by the American Board of Internal Medicine, and became a member of the American College of Physicians in 1939, after several years of research in Cardiology and Electrocardiography at the University of Illinois under the late Dr. Jay Bailey Carter, co-discoverer of ethylene anesthesia (although I shouldn't mention that in writing to anyone in the shadow of the great Ether Dome, underneath which I lectured on Pediatrics to the nurses — our wards were then immediately beneath the Ether Amphitheatre in the Bulfinch Building).

Holding an Army Reserve commission as a 1st lieutenant, I was called to active duty in the Army in April and again in June of 1941 for what we thought would last one year! I received orders to report to the great new 2,000-bed Lawson General Hospital in Chamblee, Georgia, where a Regular Army colonel was named Chief of the Medical Service. When he saw my lieutenant's bars he said, "If you had a little more rank I would make you my assistant." So I completed all my required paper work and was made a captain in six months and a major six months later. In October 1942 I was sent to Camp Bowie, Texas, was assigned as executive officer of the 16th Hospital Center, and soon received my lieutenant colonel's silver leaves.

Things began to happen soon, then. The Hospital Center was suddenly made into the 315th Station Hospital, the Regular Army colonel in charge (who did not want to go overseas) asked for a transfer and was sent to Alaska (!), and I found myself in charge of a 750-bed Station Hospital with 75 officers, 125 nurses, and more than 500 enlisted men. We were put through very rigorous training and sent to the ETO. After operating the hospital in cantonment style buildings for a year, Dr. (then Colonel) William S. Middleton, Consultant in Medicine for ETO Headquarters, visited us in Axminster (in beautiful Devonshire, home of original Axminster rugs), thought that my time was being wasted as a CO of a hospital, and sent me to the 216th General Hospital in Warminster, where we handled enormous numbers of ill and wounded. We were sent to Germany after V-E Day, and I was sent to Bremen as Assistant to the Surgeon of the Bremen Port Command. This was a nice assignment, since I had an opportunity to visit all of our hospitals throughout Germany, Belgium, and France, and see quite a bit of the country, as well as study many interesting cases. Of interest was the fact that I went to the ETO on my birthday, September 20, 1943 and had an opportunity to fly home exactly two years later, also on my birthday.

I was discharged from active duty on November 9, 1946 and received an appointment (by General Hawley, who had been the surgeon in the ETO Headquarters and was then employed by the Veterans Administration as Medical Director) as Consultant in Internal Medicine for the Southeastern States. I had a busy schedule with the VA, covering 23 hospitals and 8 regional offices in the 7 Southeastern States, traveling most of the time by airline.

I was called back to active duty with the Army in October 1950, and was sent to Korea, where I served as Consultant in Internal Medicine to the 8th United States Army. Nearing the end of my 18 months there, I suffered a heart attack and then fell down a ladder on a landing craft in Inchon Harbor, which produced a slipped disc, but I still stuck to my job. When I got home I was operated on, but it was too late to do any good. So, with a bad electrocardiogram and painful sciatica bilaterally, I was finally retired on total and permanent disability at Walter Reed Army Hospital, with the rank of Colonel MC.

I have written quite a good many research papers, particularly on diabetes (while I was in Boston I belonged to the Joslin "inner circle"), and I have many medals and campaign ribbons, including the Bronze Star; but I was quite amazed a couple of years ago to receive the award of Honorary Commander of the Order of the British Empire from Queen Elizabeth for my work in the prophylaxis against "hemorrhagic fever", because we were able to reduce the death rate from this strange disease from an over-all 4% to 2% and eliminate the disease entirely in well-disciplined troops such as the 1st British Commonwealth Division.

It was always a pleasure to tour Korea with prominent Consultants from the United States — many from Boston (Drs. Francis D. Moore, Joe Hayman, Laurence B. Ellis, Donald S. King, F. A. Simeone, Richard Warren, Phil McCarthy). But it was an unexpected pleasure to be assigned to accompany Betty Hutton and her troupe during a two-week jaunt to entertain the troops. Among other things, she did an imitation of Blossom Seeley in "Way down yonder in New Orleans" (circa 1924).

I'm sure this is too expansive, but "you asked for it".

* * *

Contributions to The News in the amount of $720.60, over and above the subscription fees, were received during the fiscal year 1958-1959. This figure is the largest in the life of The News, and tops last year's total contributions by $136.00.

A note of appreciation is always sent to each contributor, but The News takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

THE NEWS

No. 190 Boston, Mass. December 1959

THE ROLE AND FUNCTION OF PSYCHOLOGICAL RESEARCH IN A GENERAL HOSPITAL

Not every psychiatrist or neurologist thinks of psychology as a basic science of his clinical specialty, in the sense that anatomy and physiology are basic to general medicine and surgery. Fortunately, however, this view is strongly enough held in our Hospital to have made possible the establishment and recent growth of an experimental psychology laboratory in the Department of Psychiatry. The orientation and program of this laboratory are clearly indicated by its placement on Warren 6 alongside the new laboratories for human and animal physiology, and for biochemistry on the Psychiatric Research floor.

The position of psychology as a basic science is frequently disputed, and the counterargument usually follows either or both of two lines: First, the laws of psychology, even of behavioristic psychology, are unlike those of the physical sciences in their probabilistic character, in their lack of generality, in the tentativeness of their applicability. They are more reminiscent of the laws of classical economics — their validity depending on "other things being equal", and in situations which really matter it is absurd to expect that other things will be equal. The nesting behavior of wasps can be predicted with machine-like accuracy at each stage and without information concerning the individual insect; but to predict man's behavior in any one situation, one can only make a good guess and needs more information about the person than is commonly available. The other argument against regarding psychology as a basic science is that most psychologists whom the average citizen meets are manifestly engaged on some service duty and, if confronted with the question whether they are basic scientists, would almost certainly deny that they are.

Of course, the greater number of psychologists are applied scientists, and many may not even wish to be known as scientists. But this is not evidence against a basic science of psychology. The business ventures of manufacturers of detergents or soft drinks do not demolish the position of chemistry as a basic science. While it should be easy enough to refute the second counterargument given above, it nevertheless deserves some consideration, especially in a hospital setting where tradition and practice often conspire to place the psychologists in the ranks of technicians. In some places psychologists may acquiesce in this role assignment, in others they may fight it in vain, in yet others their position is strongly established, thanks to the backing of an academic department. Since neither the Massachusetts General Hospital nor the Harvard Medical School has an autonomous department in psychology, the function of psychology in our Hospital depends chiefly on what it can offer, and the trend of late has been markedly away from routine testing and toward independent research — basic research. Testing and research do not represent a dichotomy of incompatible activities. Most psychological tests, if administered in a scientific frame of mind, can contribute to research. It is true, though, that many clinical psychologists are content with counseling or with reporting on diagnostic testing procedures, and do not question the assumptions which underlie their work nor aspire to a systematic development of their techniques. Yet, there is nothing in clinical psychology which excludes the questioning, hypothesizing, verifying, and experimental methods of science. The true division in psychology occurs not along such lines as clinical versus experimental, but according to temperament and value orientation. Among psychologists, the tender-minded and tough-minded have often drifted into activities so diverse that the unity of the profession sometimes appears as a legal fiction contrived to puzzle the outsider and to exasperate those it binds in uneasy comradeship. A case could be made and has been made for creating two professional bodies, e.g., psychologists engaged in research and psychotechnicians active in the various applied fields. It is unlikely that this solution would be acceptable to both groups, and would probably lead to further subdivisions and pose yet other dilemmas to the general public which has difficulty enough in learning the difference between psychiatrist and psychologist. While the profession embraces all whose training or proclivities are within one or another area of psychology, it is well to bear in mind the divisions within it. At the one extreme, psychologists in advertising, personnel management, or child guidance, to take a few examples, apply their skills principally in an intuitive manner, and may achieve success without reference to any theoretical system or by adhering to one which, at best, only partially satisfies the criteria of a scientific test. At the other extreme are those who pay little attention to immediate results in practical application, and are concerned with the more remote, more fundamental, laws of behavior and experience. They, too, have a place in a general hospital.

Now we must briefly consider the argument against psychology as a basic science, founded on a comparison with the physical sciences. To him who regards physics as the only model of science, psychology appears either as a rudimentary science or not at all as a science. One need not question or belittle the very considerable achievements of psychological research while admitting that it has furnished no laws as universal as those which pertain to falling bodies or even to bones and muscles subjected to strain. Though one frequently hears about a person losing his mind or breaking down under severe strain, nobody would venture to define, even within wide limits, the magnitude of strain which necessarily results in a breakdown. But science is an ongoing process; it is an attitude and discipline rather than an accomplishment. It is often said that psychology as a science, at any rate, is very young, and that this is the reason it lags behind physics or chemistry in the precision, universality, and systematic coherence of its laws. The reason given, if eyebrows are raised, is that all that had passed as psychology until about a hundred years ago was idle armchair speculation and not science. This does not seem to be a very convincing argument. Armchairs do not inevitably stifle the scientific mood — in fact, science probably thrives best with a judicious mixture of speculation and experimentation. Now, men and women have certainly thought seriously and systematically about the problems of behavior and experience for at least as long as they have thought about motion and matter, and they certainly dissected minds long before they dissected bodies. Also, in the last few decades there has been such a spate of psychological experimentation as to make up for the omission for centuries. It is in experimentally-anchored theory that psychology lags behind — not because all the brightest men go into physics, but because the problems of psychology are so much more complex. Behavior and experience in man involves the action of the nervous system, and the brain alone consists of some 10,000 million cells which are in communication with one another. "As a result the number of ways in which they can interact is vastly more than the number of electrons in the whole universe."(1)

Psychological theory has also labored under a second handicap — not its youth, but its hoary antiquity. Its problems always were of general interest to men and women, and most of these problems are still not regarded as the preserve of specialists. Moreover, many of them are invested with emotional or value loadings. Few people think of mental retardation, insanity, or even of perceptual illusions with the detachment with which they view the orbits of the stars or the patterns of magnetic fields. Pressing questions call for immediate answers, and if no really good answer is at hand almost any answer will do. Complex problems must be simplified to satisfy the anxious or the curious, and simplification often results in distortion. Someone observed, at some time, that most juvenile delinquents he had encountered came from a domestic background which fits into the vague category of "broken home". There is, of course, reason and almost justice in attributing the evils of juvenile delinquency to moral depravity or, in more up-to-date language, the behavior disorder to the unhealthy climate of the home. So this and many other esthetically or ethically appealing laws about the effects of interpersonal relations on antisocial behavior, or even on symptoms of illness, have gained wide currency. Probably most of them are not untrue, but neither are they simply true, for the problems are not simple. This statement is not made because psychologists have decided that the laws of their science are always complex, and therefore they turn up their noses at simple explanations. Initial observations provide valuable hunches or hypotheses, but in psychology few, if any, have as yet stood the test of time without some refinement, qualification, or indeed modification. Having made an observation, one must state it in such a form that it either fits or contradicts subsequent observations. "Heads I win, tails you lose" is not only an unsporting proposition — it is unscientific, and psychology must rid itself of its likes, for they have neither explanatory or predictive value. Having stated a proposition in the proper — i.e., hypothetical — form, the psychologist must then count incidents or otherwise check whether his initial observation is tenable, whether it is representative of the population under consideration, and he must introduce controls to eliminate other reasonable explanations. If, for example, a survey at one college should find that classical students attend school far less regularly than science students, it would be tempting but rash to draw conclusions about such personality traits or general habits of either group as conscientiousness or studiousness.

It might be advisable to look into the matter at some other colleges, and even if much the same distinction should be observed everywhere, some other situations ought to be investigated. Then it might transpire that in attending other college functions classical students are just as regular or more so than students of science, and that their differential habits at school are merely due to the fact that physicists and chemists cannot easily make up for what they miss at the laboratory, while classicists can find in books almost anything they are taught in class. Now, if this is the case, any initial hypothesis about the character or habits of the two groups of students would be reformulated, probably into this form: "In situations which are important to them, students of classics and students of science do not differ in regularity of attendance." This proposition, of course, involves more complex problems. Sorting out scientists from classicists is as easy as dividing children into boys or girls, or adults into those who have a record of criminal conviction and those who have none. To decide what is a "situation of importance to a person" one has to make rational or arbitrary decisions, weigh and balance considerations, and altogether impose on oneself certain rules adopted for the occasion. Problems of self-disciplining of this kind very often occur in psychological research, and are not always observed. It seems particularly tempting to evade them if they involve some retrospective judgment, like deciding about a happy or unhappy childhood, about the quality of some defunct personal relationship.

Psychologists must contend not only with the over-simplified, over-generalized, or over-popularized tentative laws, but with the half-truth or less-than-half-truth (if that has any meaning) of common notions and the stumbling blocks of metaphysical or vitalist concepts. So many of the proverbs, famous quotations or maxims, and not so famous clichés fall within the province of psychology, from "Still waters run deep", "Yond Cassius has a lean and hungry look; He thinks too much: such men are dangerous"(2), or "Dans l'adversité de nos meilleurs amis, nous trouvons quelque chose qui nous ne deplaît pas"(3), to "dumb blonds". The sayings are not so hard to deal with, for people do not model or direct their actions according to these patterns as much as they quote them in justification of decisions reached for quite different reasons. The trouble with the vitalist concepts or even with mentalist terms is more difficult. It is almost impossible to talk sensibly without resort to such mentalist terms as "will" or "consciousness" or "purpose". The attempt to do away with them altogether has resulted only in shirking the issue and not in any widely acceptable solution. True enough, "mind" is far too wide a term to be definable by any operation or set of operations, or to provide a precise description, let alone an explanation, of an example of behavior or experience; yet, there is no satisfactory substitute for denoting a general area of function in the human organism. The use of such terms as "mind" and "consciousness" or "will" sets traps for the unwary, but the traps can be avoided. The trouble starts when "mind" is used in contrast with "body", when people suggest — often shamefacedly — that they have acted in a manner contrary to the dictates of their brain, or contrast the "reasons of the heart" or of other anatomical areas with the supposedly more rational or more "spiritual" attributes of the higher nervous centers.

It is hard to give up "the ghost" as an explanatory concept, for it seems to fit the job so much better than the machine. The task of psychology is precisely to design a machine which will fit the job better still. Just as physics has depended for its spectacular recent advances on a rejection of the traditional image of matter, psychology can progress only by discarding some confusing ancient concepts and terms. The dualist distinction between mind and body is slow to disappear, not least because of its ethical implications. Yet it must be recognized that the brain is just as much involved in the "reasons of the heart" as in those for which it receives direct credit; the lowest instincts remain pretty ineffective without action coordinated at the highest levels; the most spiritual person ceases to be so without a more or less intact central nervous system. Anyone who has observed the disintegration of the behavior, of the "moral personality", of a patient with severe brain injury will find it difficult ever again to trace that fine division between body and mind.

The study of brain-injured patients shakes our confidence in other, seemingly much less disputed, concepts as well — memory, for example. Work in our own laboratory on the cognitive defects in the Korsakoff syndrome has shown that patients who appear to have little else the matter with them than an inability to remember names, events, or even personal experiences and to have lost count of time, if examined more closely will show various other defects which cannot be attributed to their inefficient memory. Moreover, their memory often functions tolerably well if it is tested after very short intervals. Now, this suggests that in some instances, at least, we ought to call short-term memory and longer-term memory by different names. If a specific damage in the brain can be discovered in these patients with a memory disturbance, as is the usual case, then some mechanism or neural system must be involved in longer-term remembering but is not concerned, or not so much concerned, with immediate memory. Furthermore, if other defects systematically accompany severe memory derangements, then the neural system which appears to be involved with long-term memory is also involved in other processes, in other aspects of behavior. For example, patients with severe memory defects are invariably more or less devoid of spontaneity; they react, but rarely initiate action. Following the lead of this particular disease, we ought not only to distinguish immediate- from longer-term memory, but think of the latter as also implying initiative and spontaneity in behavior. The problem is yet further complicated by the fact that very old memories — for events, names, or other information dating back beyond the patients' illness — are usually available for recall, and such old skills as dressing, eating, even engaging in polite conversation and expressing rational judgment are barely affected.

The study of a disease like severe memory disturbance has, of course, little immediate bearing on the psychology of normal everyday life, and it would be rash to advocate a radical revision of our linguistic habits because they do not conveniently fit its symptoms. However, if it confirms theories about normal functioning based, e.g., on evidence obtained from the animal laboratory, it deserves more serious consideration. Physiological or psychological studies of animals are extremely valuable in suggesting theories about the laws of human behavior, but they can neither explore the full complexity of problems which the human organism is capable of handling, nor its experiential laws. In any case, they can only suggest laws; their applicability to the human organism must be tested by human evidence. Obviously enough, most of the experiments which form the brilliant contribution of animal psychologists cannot be duplicated on human subjects. The misfortunes of accident and disease, however, provide every so often an example or even a group of examples which match closely enough the preparation experimented upon in the animal laboratory. It is by studying these patients that the clinical research psychologist can make his unique, and possibly crucial, contribution to the science of psychology. His attitude, though always ruled by the primary consideration of furnishing what help he can to the patient, is nevertheless process oriented. He does not study the patient only as a total person in a particular social setting, but also as a very complex organism in which one or more, possibly distinct, systems have been deranged. If he succeeds in isolating such a system, he may find that it coincides with a function known from everyday language, like blindness or intelligence. He may also circumscribe some system which is damaged and which cuts across several common concepts, like the memory disorder sketchily described above. Then he will look for other evidence to test the accuracy of his formulation — perhaps a behavior disturbance in some other disease, or anatomical or physiological hints. He may experiment with drugs which might influence the same, possibly as yet unnamed, processes he has found damaged in a patient or group of patients, and if he is fortunate enough to have hit on an accurate formulation, he has enriched psychological theory with a new concept. After that, it is only a matter of time before this concept enters our everyday language, either as a newly coined term or under the cloak of some old word destined to lose its previous connotation. More often, a first formulation or guess fails to gain sufficient support by subsequent research, and is modified or completely rejected by the evidence of later tests.

This has been a long and roundabout way to illustrate psychological research in a general hospital. Moreover, the example from our laboratory is not widely representative. It illustrates our policy and program on Warren 6 and exemplifies what we here regard to be the most important task in psychological research. It reflects a point of view which is both experimentally and neurophysiologically oriented. Not all psychology, and certainly not all clinical psychology, is committed or even receptive to these points of view. We believe that only experimental techniques can adequately test certain formulations about the processes involved in normal and disturbed human behavior; we also believe that psychology and neurophysiology are mutually dependent for formulating theoretical models and for testing the accuracy of these formulations. Furthermore, a hospital offers exceptionally favorable opportunities for joint ventures in psychology and physiology. Let it be noted, though, that extensive research which proceeds along different lines is in progress in various hospitals. Neither does our laboratory exhaust all of the psychological research in this Hospital; important experimental work is being done in the psychology laboratory of the Anesthesia Department, and some pioneer studies in social psychology have been sponsored by the Department of Psychiatry apart from the work in our experimental laboratory. The general hospital presents possibilities for and places demands on psychologists with various interests and methodological equipments, and their attempts to meet this challenge will help to establish a science which spans the gap between the other biological and the other social sciences. Psychology has by tradition been in, and probably will continue to belong to, both camps.

George A. Talland, Ph.D.,
Associate Psychologist

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(1) Walter, W. Grey. The human brain, *The listener, 62*, 521-522, 1959.

(2) Shakespeare. Julius Caesar, Act 1, scene 2.

(3) Rochefoucauld. Maximes supprimées.

* * *

EDITH MORTIMER TERRY

(1879 - 1959)

Miss Edith M. Terry died in her eightieth year on September 17 at the Massachusetts General Hospital — the institution she had served in a unique capacity for twenty-seven years. Poor health had forced her retirement in 1952. Born in New Bedford, she studied at the Museum of Fine Arts, Boston, and at the Rhode Island School of Design.

In 1925 Miss Terry joined our Social Service Department as head of the Children's Cardiac Program. The problems of those confined to bed for many months, especially the children and adolescents with rheumatic fever, presented to her a special challenge and led to a series of notable contributions. Her home care program was outstanding, with such ingenious devices as the "In-Bed Club", the *In-Bed Club News* with articles and illustrations by the patients themselves, a comprehensive craft and educational program including summer camps, and, important for the parents, a "Mothers' Club" which met once a month at the Hospital for tea, instructions, and encouragement. In many subtle ways she extended hospital social service in its full implication into the homes and lives of both patients and parents. Throughout this long period of service she received loyal support and aid from our Committee for the Home Care of Children with Heart Disease.

In later years it must have been a great satisfaction for her to see the methods she devised at the M.G.H. acclaimed and adopted at home and abroad. She will be remembered by those who knew her as a devoted and enthusiastic worker, and because of her unique contributions in a special field she will be honored in the annals of the Social Service Department, along with Isabel Pelton, Ida Cannon, and Richard Cabot. Hers was a full life dedicated to the hearts and the happiness of children.

E. F. B.
[Edward F. Bland, M.D.]

* * *

DR. ROBERT F. LOEB

First James Howard Means Visiting Physician Pro Tempore

The Massachusetts General Hospital was privileged to have Dr. Robert F. Loeb (*W.M.* 1920) as the first James Howard Means Visiting Physician Pro Tempore during the week of November 2. It was most fitting that this distinction was conferred upon Dr. Loeb, who also received the first Treadwell Award at the M.G.H. House Pupils Association Reunion on Ether Day, 1958. The citation on that occasion read in part, "Your life has shown that a passionate love of truth can bridge generations in family and in profession, without pretense or compromise and that no conflict exists between the humanitarian, the scientific and the educational undertakings of a great physician."

On November 3, Dr. Loeb, Dr. Means, and Dr. Bauer conducted Ward Rounds on Bulfinch 6. It is to be regretted that all MGH medical alumni could not have had a glimpse, at least, of this memorable event by some unobtrusive type of television.

The James Howard Means Fund was also established in 1958, honoring Dr. Means — physician, teacher, author, artist, and friend, who for three decades influenced the lives of many people.

Through the generosity of more than three hundred of Dr. Means's friends, the endowment is now $30,000 and is increasing by new additions from time to time. This Fund will make it possible for one or two distinguished physicians to visit the Hospital each year, spending time with the Staff, "discoursing on whatever matters may be uppermost in their minds on the never-ending problem of alleviating human suffering." It also may make it possible occasionally for gifted members of the MGH Staff to visit abroad.

Dr. Loeb came from the University of Chicago to the Harvard Medical School, where he received the degree of Doctor of Medicine in 1919. This was followed by a one-year internship at the Massachusetts General Hospital and a residency at Johns Hopkins Hospital. He has been associated with the faculty of Columbia University and the Staff of the Presbyterian Hospital since 1921. At present he is the Bard Professor of Medicine on leave of absence, Columbia University College of Physicians and Surgeons, and is Attending Physician and Director of the Medical Service, Presbyterian Hospital, New York, on sabbatical leave.

From 1950 to 1954, Dr. Loeb was a member of the Massachusetts General Hospital Scientific Advisory Committee. As an active member of numerous important professional societies and committees, his many achievements in the field of medicine have been recognized by universities in this country and abroad.

Dana L. Farnsworth, M.D.,
Physician

* * *

Dr. Severo Ochoa of New York University College of Medicine and Dr. Arthur Kornberg of Washington University School of Medicine, St. Louis, who delivered the Warren Triennial Prize Lectures of the Massachusetts General Hospital in 1956, have been awarded the Nobel Prize in Medicine for 1959. Dr. Ochoa is a member of our Scientific Advisory Committee.

* * *

Dr. Ernest M. Daland was honored by a citation from his alma mater, Brown University, during its recent three-day convocation on "Man's contracting world in an expanding universe". Only 19 citees were chosen from more than 500 alumni and alumnae of Brown who were nominated for the honor. Dr. Daland's citation reads:

> Surgeon and pioneer in cancer research, as Chief of Staff at the Pondville State Cancer Hospital and in your private practice, you have a long list of grateful patients and, as a teacher at Harvard Medical School, a long list of grateful students. Your balanced career of practice, teaching, and research has been an inspiration to many who have followed you. For your manifold accomplishments, Brown salutes you.

* * *

Dr. Jerome Gross of the Lovett Memorial Unit here at the Hospital received the Ciba Award last August for his paper entitled "Research related to problems in aging".

* * *

Dr. David D. Rutstein was one of two Boston doctors to receive Gold Heart Awards for 1959, for outstanding contributions to cardiovascular medicine. This highest award of the American Heart Association was presented to Dr. Rutstein at the annual dinner of the Association last October.

The Board of Trustees, at their meetings on October 9 and 23, voted:

To accept the resignation of Dr. James F. Patterson as Assistant in Dermatology, effective August 31;
To change the title of Dr. Erik Vinnars to Visiting Consultant in Anesthesia for six months, beginning February 1, 1960;
To appoint Dr. Robert F. Loeb as the first James Howard Means Visiting Physician pro tempore, to come to the Hospital round the first of November;
To continue the appointment of Dr. Franco R. Dinale as Clinical Fellow in Anesthesia, effective as of September 30.

To appoint:

Dr. Ivor W. Browne as Clinical and Research Fellow in Psychiatry, effective March 1, 1960;
Dr. Paul J. Catinella as Assistant Dermatologist, effective as of September 1;
Dr. Thomas R. Hackett as Clinical Fellow in Anesthesia for one year, beginning December 1;
Dr. Wallace A. Jones as First Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. Alberto F. Mondet as Clinical and Research Fellow in Surgery, effective as of August 1;
Dr. Samuel L. Moschella as Assistant in Dermatology, effective as of September 1;
Dr. Hart deC. Peterson as Assistant Resident on the Children's Medical Service, effective July 1, 1960;
Dr. Murray K. Rosenthal as Junior Assistant Resident on the Children's Medical Service, effective July 1, 1960;
Marianne L. Simmel, Ph.D. as Assistant Psychologist in Neurosurgery, effective November 1.

The Trustees also voted to invite Dr. Hermann Knaus of Vienna to give a Richardson Lecture round the end of November.

At their meetings on October 7, 14, and 21, the General Executive Committee voted:

To accept the resignation of Dr. Roger E. Monier as Research Fellow in Medicine, effective as of October 24.

To promote:

Dr. John F. Barlow to the position of Second Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. Alan M. Bornstein to the position of Second Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. Norris B. Finlayson to the position of First Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. Lewis P. James, Jr. to the position of Second Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. Herbert I. Krickstein to the position of Second Assistant Resident in Pathology for one year, beginning July 1, 1960;
Dr. David J. Lang to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. Donald M. Muirhead, Jr. to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. John B. Robbins to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. R. Wyman Sanders to the position of Chief Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. Joseph F. Stocks to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. Karl H. Wegner to the position of Third Assistant Resident in Pathology for one year, beginning July 1, 1960.

To reappoint:

Dr. Geza F. P. Kaplany as Clinical Fellow in Anesthesia for one year, beginning October 31.

To appoint:

Dr. Elroy E. Anderson as Out-Patient Resident on the Children's Medical Service for one year, beginning July 1, 1960;
Dr. James P. Bell as Clinical Assistant in Orthopedic Surgery, for the period November 1, 1959 through April 30, 1960, with the privilege of assisting Dr. Barr in the care of his private patients;
Selma Rappaport, Ph.D. as Research Fellow in Psychology, in the Department of Psychiatry, beginning September 1.

To appoint the following doctors as Graduate Student Assistants in Medicine, assigned to Cardiology, for the period October 1, 1959 through September 30, 1960:

Dr. Joseph Fisher — New York City
Dr. Jean-Marcel Gagnon — Granby, Quebec, Canada
Dr. Hubert Hofmann — Heidelberg, Germany
Dr. Ernesto R. Lima — San Salvador, Central America
Dr. John H.-J. Ludwig — Canada
Dr. Donald McCaughan — Ireland
Dr. Soekaman Soemarjono — Kjakarta, Indonesia
Dr. Robert C. Tarazi — Cairo, Egypt

Two votes passed by the General Executive Committee at their meeting on July 1 failed to reach the office of THE NEWS until October 23. At that meeting the Committee voted to promote:

Dr. Joseph Albert to the position of Resident in Dermatology, effective July 1, rather than have him begin his service as Assistant Resident;
Dr. D. Glyn Millard to the position of Resident in Radiology, effective June 1.

* * *

90th ANNIVERSARY
OF THE LADIES' VISITING COMMITTEE

The Ladies' Visiting Committee celebrated its 90th birthday with a luncheon in Bartlett Hall, on October 16. On this occasion, the Committee presented $10,000 to the Hospital Trustees — the accumulated profits from the General Store, which is operated by the Committee for the benefit of the Hospital.

Dr. Nathaniel W. Faxon, Director *Emeritus* of the Hospital, spoke on the origin and history of the Ladies' Visiting Committee. Here are some of the informative and entertaining facts that Dr. Faxon reviewed for us:

Probably many of you have heard the interesting story of how the Ladies' Visiting Committee came into being, but it is such a good story it will bear repetition.

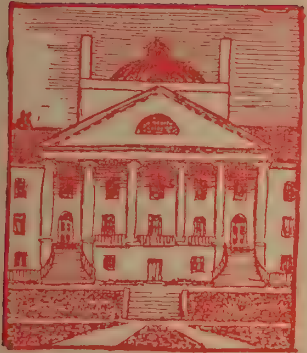
On March 19, 1869, the Trustees appointed a committee to consider and report on the subject of appointing female visitors to the female wards. The Committee reported "that they are in favor of the appointment of such visitors. They agree that the measure must be regarded as an experiment . . . which is likely to prove a benefit to the Hospital, and that it ought to be tried.

"We are able to think of no objections to the plan except that the Hospital is very well managed as it is, and that it is unwise to disturb what is satisfactory. But it seems to us that, although the Hospital is probably just about as well managed as men can manage it, it may be found that with the help of judicious women it may be managed better. Difficulties arising from a possible want of tact or judgement among lady visitors seem to us no more likely to occur than among the Trustees themselves; and to be obviated in the same manner, by care in the selection of individuals. . . .

"The Committee therefore recommend the appointment of not less than six, nor more than twelve, ladies to act as visitors in the female wards of the Hospital.

"Their duty shall be to visit those wards not less than once a week (perhaps they will do so every day) to inspect their condition, and to afford such sympathy & aid to the patients as they may deem proper.

"In case they find subject of complaint or



Harvard University Press announces a book of equal interest to physicians and historians, by Nathaniel W. Faxon, Director Emeritus of

HE MASSACHUSETTS GENERAL HOSPITAL

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James Howard Means, M.D.

"Ward 4 is a ten-bed unit in that wonderful and historically famous Bulfinch Building at Massachusetts General Hospital. It is a place for patients with incompletely understood illnesses which may be studied in a very favorable medium. For many years James Howard Means . . . directed the activities of this ward. . . . Those who have struggled, and are continuing to struggle with hospital research budgets will be most appreciative of the well-stated and substantiated plea for freedom in research. . . . In this book can be found the excellent results of following such a policy for over a quarter-century."—*Hospital Administration.* Dr. Means is Jackson Professor Emeritus of Clinical Medicine at Harvard. 187 pages. Illustrated. $4.50

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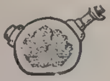
remark it shall be their duty to communicate the same either to the Resident Physician or to the Trustees."

In June of that year the Board appointed four lady visitors. In 1935 the Ladies' Visiting Committee numbered forty-two members; in 1959, seventy-one.

For ninety years the Ladies' Visiting Committee has more than fulfilled the hopes of those early Trustees that their experiment might prove a benefit to the Hospital and that because they have been "judicious women" it has been managed better.

One could go on indefinitely and still not exhaust the list of their good works, which can be summed up in Dr. Washburn's words: "The Hospital has reason to bless the day the Trustees favorably considered the radical suggestion of appointing 'female visitors to the female wards'."



The 113th anniversary of Ether Day was observed this year, as usual, on October 16. There was the customary awarding of service pins for 5, 10, 20, and 30 years of continuous service at the Hospital, with Dr. Clark presiding and awarding the pins. Mr. Francis C. Gray, Chairman of our Board of Trustees, brought greetings from the Board and expressed appreciation for the years of faithful service on the part of so many who are associated with the Hospital. Nearly 200 pins were awarded, including 10 for 30 years of service.

The Reverend William B. Spofford, Jr., Supervisory Chaplain at the Hospital, addressed the group. His subject was "The heart of the matter". Mr. Spofford did not read from a prepared copy, but what he said held the entire assembly in such wrapt attention from the beginning to the end of his talk that we urged him to reconstruct his address from memory, so that all who heard it might have it in printed form and all who missed it might avail themselves of it through THE NEWS. In substance, this is what he said:

It is a challenge to talk with you today because, I am confident, most of the persons whom we are honoring in these ceremonies could deliver this speech more adequately. Most professions have their occupational hazards and that, at least, protects you. The occupational hazard of ministers is that they talk too much and I have strict orders to keep this brief. And brief it shall be.

One of the great *"faux pas"* of history was enunciated by that American social philosopher, Lawrence "Yogi" Berra. The fans of New York City were gathered in the Yankee Stadium to give their favorite catcher a "Day". Following the presentation of gifts, Yogi stepped up to the microphone to deliver his carefully rehearsed speech. It came out simply — and backward. His words were: "I wish to thank all you people who made this day necessary."

Although those words didn't fit then, they do today. We are to here to say to those who have established marks of tenure in the MGH family: "Thanks to all you people who made this day necessary."

Any good hospital has several functions. Basic to the existence of such an institution are the following three: 1) the administration of sound, skilled, serious medical care to persons who have been broken by life — physically, emotionally, or spiritually; 2) the education of the "helping professions" who will, in the future, do such administering; and 3) the carrying on of research, whereby the realities of existence are explored by the scientific method so that the previous two functions may be undergirded with wisdom and knowledge.

I have discovered that not all of the research carried on at M.G.H. is done formally in the laboratories of the Warren or Research Buildings. About two months ago, I met a lady in the hall between the Phillips House and the White Building who seemed lost. I paused and asked if I could give her any help and she replied that she was looking for the store. I explained where it was. And then she said: "Well, really, I'm not looking for the store; I'm doing research." Being interested, I took her into the Chapel and asked what kind of research this was. Her reply was interesting. She said that her husband, from another large city, was a patient here but, at home, he was a trustee of a hospital. While here, they had been struck by the friendly spirit of M.G.H. which seemed to be missing in their home-town hospital. Hence, her research. She was pretending to be lost and confused, to see who might speak to her. She reported that during the fifteen minutes prior to our conversation. she had been offered friendly help by a doctor, the boy who delivers papers, two nurses, a member of the Dispatch Service, an occupational therapist, a social worker, and, now, a chaplain.

Such research, I think, tells us something important about ourselves. We are a community — and this has meaning in the "healing process". I once ruminated on the thought that, if anyone were silly enough to want to do so, he could come into Massachusetts General Hospital on any day and lead the rest of his life within these confines and have all of the resources that make for community. We have beds; we have dining rooms; we have a store; we have a baseball team which, while not of the quality of the Yankees may be worthy of the Red Sox; we have a drama group which hasn't tackled "My fair lady" yet, but is willing to do so; we have libraries; we have a Chapel. A community is people working together and having customs and traditions that are held to be important. Those whom we honor today are well aware of this, because they have been round here long enough to appreciate it. In fact, it is these people who work at their vocations for long periods of time, who transmit the traditions and customs of Massachusetts General.

At the center is the fact that we are a "healing community". And healing is not something which is done just at the bedside or in the laboratory. It is also done through the community — through the way we pass food over the cafeteria counter, the way we say "Good morning", the way we clean floors, stick in needles, make beds, walk through the halls. It was this dimension which my "researching" lady seemed to be talking about. It's hard to describe, but it is something that seems to be a part of Massachusetts General Hospital. I am fortunate in my function round here to be free to wander all over the Hospital and I can attest to that lady's findings.

The word compassion, I am told, comes from *com-patoir* — "to suffer with". And, in essence, this is what our community is dedicated to as a "healing family" — to work with *persons* who happen to have a bad kidney or a faulty heart or bad circulation and not to work with a kidney, heart, or circulatory system which happens to be attached to a person. As we keep this "person-orientation" at M.G.H. (and the Archives Room at my right contains many mementos and curios which attest that this has always been a part of our community). we seem to administer, educate, and research more wisely and thoroughly.

That seems to be the heart of the matter.

Following these ceremonies in the Rotunda of the Moseley Building, refreshments were served in the Brick Corridor.

But the observances of the day were by no means terminated at this point. Invitations had been sent out to all who had served at M.G.H. in any capacity whatever for 20 years or more, to attend an Old Timers' Dinner. Husbands or wives of the group were included. The invitation itself, written by Mr. Francis W. Hatch, a member of our Board of Trustees and now dubbed "Official MGH Lyricist and Balladeer", read:

On October 16th at six-thirty p.m.,
Dr. Clark is inviting all of them
Who have worked at the M.G.H. of yore
For twenty years (a score or more)
To dinner at The Nurses' Cafeteria
Giving up all dates inferior
Old Timers' Night is what it's called
It's hoped you'll come and be enthralled.
So remember the date, get on your hoss
The entire treat is on the boss.

Two hundred eighty-five guests who gathered for the dinner were greeted by Dr. and Mrs. Clark, Mr. and Mrs. Francis C. Gray, and Dr. and Mrs. Nathaniel W. Faxon. The dinner was delicious — from sea food newburg to the chocolate cakes topped with circles of lighted birthday candles.

Following the dinner, the guests were invited by Dr. Perry Culver, Master of Ceremonies, to listen in on a "meeting of the Board of Trustees" which took place many years ago. (As a matter of fact, these deliberations of the "early trustees" had been tape-recorded during the preceding week!) Many in the audience who "remembered when" amplified with clarity and wit the deliberations of the "early trustees". Among those who added to the merriment with their pictures, lantern slides, and anecdotes of bygone days were Dr. Francis M. Rackemann (Chairman of the Program Committee), Dr. Faxon, Dr. J. Howard Means, Dr. Paul D. White, Miss Josephine C. Barbour, Dr. Edward D. Churchill, Dr. Chester M. Jones, Mrs. Edith Harrison Jones, and Dr. F. Dennette Adams.

Mr. Hatch not only led the singing during the evening (lyrics by "F. W. H.", sung to such tunes as "I've been working on the railroad", "My old Kentucky home", "East Side, West Side", "Take me out to the ball game", and—at this point —the inevitable "Sweet Adeline"), but captured the spirit of the celebration admirably in his "Ballad for a birthday", written and rendered in his inimitable style.

To attempt to mention by name everybody who helped to make this a gala affair would be to risk oversight, for there were so many who participated. It was a delightful evening for all who were there.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Aprahamian, H. A., Vanderveen, J. L., Bunker, J. P., Murphy, A. J., and Crawford, J. D.
The influence of general anesthetics on water and solute excretion in man.
Ann. Surg. 150:122.

Biochemistry

Earle, D. P., Hutt, M. P., Schmid, K., and Gitlin, D.
Observations on double albumin: A genetically transmitted serum protein anomaly.
J. Clin. Investigation 38:1412.

Gergely, J.
The relaxing factor of muscle.
Ann. New York Acad. Sciences 81:490.

Dermatology

Klein, E., Lever, W. F., and Fekete, L. L.
Defective lipemia clearing response to heparin in idiopathic hyperlipemia.
J. Invest. Dermat. 33:91.

Lever, W. F., and Klein, E.
Hemmung des Klärungsfaktors und der Pankreaslipase durch das Serum von Patienten mit idiopathischer Hyperlipämie.
Hautarzt 10:352.

Saunders, T. S., Fitzpatrick, T. B., Seiji, M., Brunet, P., and Rosenbaum, E. E.
Decrease in human hair color and feather pigment of fowl following chloroquine diphosphate.
J. Invest. Dermat. 33:87.

Endoscopy

Benedict, E. B.
Gastroscopic biopsy.
Gastroenterology 37:445.

General Medicine

Isselbacher, K. J., and McCarthy, E. A.
The influence of pyridine nucleotides on galactose-1-C^{14} oxidation to $C^{14}O_2$ *in vitro.*
Biochem. & Biophys. Research Communications 1:49.

Medical Science

Leaf, A., Page, L. B., and Anderson, J.
Respiration and active sodium transport of isolated toad bladder.
J. Biol. Chem. 234:1625.

Maffly, R. H., and Leaf, A.
The potential of water in mammalian tissues.
J. Gen. Physiol. 42:1257.

Neurophysiology

Dondey, M., and Brazier, M. A. B.
Remarques á propos de l'enregistrement dans les différentes couches corticales de la réponse primaire a l'éclair lumineux chez le chat légèrement anesthésié.
Rev. neurol. 100:366.

Otolaryngology

Kelemen, G.
Aural embryopathies.
Ann. Otol., Rhin. & Laryng. 68:798.

Physical Medicine

Banks, O. M., and Watkins, A. L.
The Bay State Medical Rehabilitation Center.
J. Rehabil. 25:12.

Watkins, A. L.
Prevocational evaluation and rehabilitation in a general hospital.
J.A.M.A. 171:385.

Books

Nevinny-Stickel, H. B.
Störungen des Wasser- und Elektrolythaushaltes: Diagnostik und Therapie — translation into German of *Clinical recognition of disturbances of body fluids,* 2nd edition, by John H. Bland, M.D.
Stuttgart, West Germany, Georg Thieme Verlag.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Burnet, F. M., and Stanley, W. M. (Editors)
The viruses, vols. 2 and 3.
New York, Academic Press, Inc., 1959.
(8G)

Clifton, C. (Editor)
Annual review of microbiology, vol. 13.
Palo Alto, Annual Reviews, Inc., 1959.
(9A)

Eyring, H. (Editor)
Annual review of physical chemistry, vol. 10.
Palo Alto, Annual Reviews, Inc., 1959.
(5A)

Grenell, R., and Mullins, L. (Editors)
Molecular structure and functional activity of the nerve cells.
Washington, D.C., American Institute of Biological Sciences, 1956.
(19B)

Lamm, S. S.
Pediatric neurology.
New York, Landsberger Medical Books, Inc., 1959.
(19Ap)

Mellors, R. C.
Analytical cytology, ed. 2.
New York, McGraw-Hill Book Co., Inc., 1959.
(2Am)

Montagna, W.
The structure and function of the skin.
New York, Academic Press, Inc., 1956.
(27B)

Page, I. H.
Connective tissue, thrombosis and atherosclerosis.
New York, Academic Press, Inc., 1959.
(18D)

Pfeiffer, C. C., and Smythies, J. R. (Editors)
International review of neurobiology, vol. 1.
New York, Academic Press, Inc., 1959.
(19Ab)

Slobody, L. B.
Survey of clinical pediatrics, ed. 3.
New York, McGraw-Hill Book Co., Inc., 1959.
(26A)

Umbreit, W. W.
Advances in applied microbiology, vol. 1.
New York, Academic Press, Inc., 1959.
(19A)

Zimmerman, H. A. (Editor)
Intra vascular catheterization.
Springfield, Ill., Charles C. Thomas, 1959.
(15F)

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VOLUNTEER GROUPS
MGH Staff Wives Association

Fall activities commenced for the Staff Wives Association with a series of Community Coffees, directed by the following Community Chairmen:

Belmont, Watertown — Mrs. J. Gordon Scannell
Boston — Mrs. Louis Bakay
Brookline — Mrs. Leo B. Burgin
Cambridge — Mrs. John F. Bertles
Chestnut Hill — Mrs. Robert J. Joplin
Concord, Lexington, Lincoln, Waltham, Wayland, Weston — Mrs. Albert C. England, Jr
Dedham, Milton, Needham, Braintree, Quincy — Mrs. Farahe Maloof
Newtons, Auburndale, Waban — Mrs. Vernon H. Mark
North Shore — Mrs. James M. Shannon
Wellesley, Natick — Mrs. Bartlett H. Stone
Winchester, Arlington, Malden, Melrose, Stoneham, Wakefield, Woburn — Mrs. Alexander Leaf

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Mrs. Alfred Kranes, President of the Staff Wives Association, recently sent out her annual letter and a questionnaire which will aid in organizing activity within the Association and at the Reception Center.

The Staff Wives Association wishes to emphasize that its membership is open to all interested women. Anyone wishing to become a member should contact the Reception Center at the Hospital. We especially hope that the wives of Clinical and Research Fellows will join us.

BIOGLETS

Dr. John F. Barlow, Assistant Resident in Pathology — born in Glen Ridge, New Jersey, March 12, 1933; A.B., Dartmouth College, 1955; 2-year diploma in Medicine, Dartmouth Medical School, 1956; M.D., Harvard Medical School, 1958; Intern, rotating, Mary Imogene Bassett Hospital, Cooperstown, N. Y., 1959; married; one child.

Dr. Theodore C. Barton, Assistant Resident in Surgery — born in Dearborn, Michigan, February 2, 1929; B.S. in Chemistry, University of Michigan, Ann Arbor, Michigan, 1949; M.D., University of Michigan, 1953; Intern, Rochester General Hospital, Rochester, N.Y., 1953-54; military service: U.S. Navy Submarine Force, New London, Connecticut, atmosphere control studies on the nuclear submarines, 1954-57; Research Fellow in Obstetrics, Biophysical Laboratory, Harvard Medical School, 1957-59; Teaching Fellow in Anatomy, Harvard Medical School, 1958-59; present address: Needham, Massachusetts.

Dr. Alan M. Bornstein, Assistant Resident in Pathology — born in Louisville, Kentucky, March 28, 1934; A.B., Indiana University, Bloomington, Indiana, 1954; M.D., University of Louisville, 1958; Intern, Hospital of the University of Pennsylvania, Philadelphia, 1958-59; married.

Dr. James R. Callison, Assistant Resident in Surgery — born in Columbia, Kentucky, January 9, 1933; B.S., Western Kentucky State College, Bowling Green, Kentucky, 1955; M.D., Vanderbilt University School of Medicine, Nashville, Tennessee, 1958; Intern in Surgery, Gynecology, and Obstetrics, Vanderbilt University Hospital, 1958-59; married.

Dr. Robert W. Carey, Intern in Medicine — born in Harrisburg, Pennsylvania, June 17, 1935; B.A., Williams College, 1955; M.D., Harvard Medical School, 1959.

Dr. Monroe Cole, Assistant Resident in Neurology — born in New York City, March 21, 1933; B.A., Amherst College, Amherst, Massachusetts, 1953; M.D., Georgetown University, Washington, D.C., 1957; elected to Alpha Omega Alpha, 1957; Intern and Assistant Resident in Medicine, Seton Hall College of Medicine, Jersey City, New Jersey, 1957-59; identical twin brother, Malvin, serving as Resident in Neurology at Boston City Hospital; married; one daughter; home: Needham, Massachusetts.

Dr. Frank F. Davidoff, Intern in Medicine — born in New York City, August 9, 1934; B.A., Harvard College, 1955; M.D., Columbia University, 1959; married; two children; home: New Canaan, Connecticut.

Dr. Karl Engelman, Intern in Medicine — born in New York City, June 23, 1933; B.S., Men's Colleges, Rutgers University, New Brunswick, New Jersey, 1955; M.D., Harvard Medical School, 1959; married.

Dr. Norris B. Finlayson, Assistant Resident in Pathology — born in Philadelphia, Pennsylvania, March 8, 1932; lived in Price, Utah, and Seattle, Washington; B.A., Yale University, New Haven, Connecticut, 1953; M.D., Harvard Medical School, 1957; Intern and Assistant Resident in Pathology, University of California Medical Center, San Francisco, 1958; married; two children.

Dr. David W. Florence, Resident in Orthopedic Surgery—born in Cleveland, Ohio, April 7, 1930; John Carroll University, Cleveland 1948-51; accepted in Loyola University Medical School, Chicago, Illinois, after 3 years of college and no degree; M.D., Loyola Medical School, 1955; Intern, St. Luke's Presbyterian Medical Center, Chicago, 1955-56; Resident in General Surgery, St. Francis Hospital, Evanston, Illinois, 1956-57; Assistant Resident in Orthopedics, Children's Medical Center, Boston, Massachusetts, 1957-58; married; one son and one daughter.

Dr. Robert G. Frost, Assistant Resident in Anesthesia — born in Beverly, Massachusetts, April 17, 1928; military service: Sergeant, U.S. Air Force, U.S.A. and Panama, 1946-49; Boston University College of Business Administration, 1949-51; Boston University College of Liberal Arts, majoring in Biology, 1951-53; A.B., Boston University, 1953; M.D., Boston University School of Medicine, 1958; Intern rotating, Highland-Alameda County Hospital, Oakland, California, 1958-59.

Dr. Arthur L. Herbst, Intern in Surgery — born in New York City, September 14, 1931; A.B., Harvard College, 1953; military service: U.S. Navy, Line Officer, U.S.S. *Witek* (DD 848), 1953-55; M.D., Harvard Medical School 1959; married; home: Cambridge, Massachusetts.

Dr. Murray L. Janower, Assistant Resident in Radiology — born in Detroit, Michigan, October 28, 1934; University of Detroit, 1954; M.D., Wayne State University College of Medicine, Detroit, Michigan, 1958; Intern, rotating, Philadelphia General Hospital, 1958-59.

Dr. Richard T. Johnson, Assistant Resident in Neurology — born in Grosse Pointe Farms, Michigan, July 16, 1931; A.B., University of Colorado, Boulder, Colorado, 1953; M.D., University of Colorado School of Medicine, Denver, 1956; Intern in Medicine, Stanford University Hospitals, San Francisco, 1956-57; military service: Clinical Pathologist, Department of Virus Diseases, Walter Reed Army Institute of Research, 1957-59, and Assistant Chief, Medical Affairs, Department of Virus Diseases, 1958-59; married.

Dr. Herbert I. Krickstein, Assistant Resident in Pathology — born in Salt Lake City, Utah, April 28, 1934; A.B., University of Michigan, Ann Arbor, Michigan, 1954; M.D., University of Michigan, 1958; Intern in Ward Medicine, Barnes Hospital, St. Louis, Missouri, 1959; home: Hamilton, Ohio.

Dr. David J. Lang, Assistant Resident in Children's Medicine — born in New York City, September 24, 1932; B.A., Swarthmore College, Swarthmore, Pennsylvania, 1954; M.D., Harvard Medical School, 1958; Intern in Internal Medicine, Beth Israel Hospital, Boston, Massachusetts, 1958-59; married; one daughter.

Dr. Lucian L. Leape, Intern in Surgery — born in Pittsburgh, Pennsylvania, November 7, 1930; A.B., Cornell University, Ithaca, N.Y., 1952; military service: Lieutenant (jg), U.S. Navy, serving in the Mediterranean, Caribbean, and U.S. East Coast areas, 1952-55; M.D., Harvard Medical School, 1959; married; two sons.

Dr. Robert S. Lees, Intern in Surgery — born in New York City, July 16, 1934; A.B., Harvard College, 1955; M.D., Harvard Medical School, 1959.

Dr. Raphael H. Levey, Intern in Surgery — born in Brockton, Massachusetts, December 29, 1933; Phillips Academy, 1951; A.B., Princeton University, 1955; M.D., Harvard Medical School, 1959.

Dr. William J. McIlroy, Assistant Resident in Pathology, assigned to Neuropathology — born in Toronto, Canada, June 7, 1932; M.D., University of Toronto, Canada, 1956; Junior Intern, rotating, Toronto General Hospital, 1956-57; Assistant Resident in Medicine, Sunnybrook Hospital, Toronto, 1957-58; Fellow in Neurology, Toronto General Hospital, 1958-59; married; two children; home: Toronto, Canada.

Dr. Alfonso Mangoni, Assistant Resident in Psychiatry — born in Salerno, Italy, March 6, 1929; M.D., University of Rome Medical School, 1952; Institute of General Physiology, University of Rome, 1953-57; Research Laboratory, Institute of Living, Hartford, Connecticut, 1957-59.

Dr. Eldred D. Mundth, Intern in Surgery — born in Janesville, Wisconsin, March 18, 1933; B.S., Yale University, New Haven, Connecticut, 1955; M.D., Harvard Medical School, 1959; married.

Dr. Clement E. Papazian, Assistant Resident in Children's Medicine — born in Philadelphia, Pennsylvania, July 16, 1926; A.B., University of Michigan, 1950; M.A., Columbia University, 1951; M.D., Boston University School of Medicine, 1957; Intern, rotating, Meadowbrook Hospital, Hempstead, Long Island, N.Y., and Junior Assistant Resident in Pediatrics, Children's Hospital of Los Angeles, Los Angeles, California, 1957-59; married; two children.

Dr. Richmond Prescott, Intern in Medicine — born in New Bedford, Massachusetts, July 29, 1927; military service: Quartermaster (3/c), U.S. Naval Reserve, 1945-46; A.B., Harvard College, 1949; LL.B., Harvard Law School, 1952; practised law in New York City, 1954-55; M.D., Columbia University, 1959; married; three children; home: Dedham, Massachusetts.

Dr. Irwin H. Rosenberg, Intern in Medicine — born in Madison, Wisconsin, January 6, 1935; B.S., University of Wisconsin, 1956; two years at University of Wisconsin Medical School before transfer to Harvard; M.D., Harvard Medical School, 1959.

Dr. Kevin G. Ryan, Intern in Medicine — born in New York City, July 4, 1934; B.A., Dartmouth College, 1956; two-year diploma from Dartmouth Medical School, 1957; M.D., Harvard Medical School, 1959; married.

Dr. Richard E. Senghas, Assistant Resident in Orthopedic Surgery — born in Cleveland, Ohio, June 30, 1928; A.B., Harvard College, 1950; M.D., Harvard Medical School, 1954; Intern, Cleveland City Hospital (now Cleveland Metropolitan General Hospital), 1954-55; military service: Orthopedic Ward Medical Officer in the Yokosuka Naval Hospital, Yokosuka, Japan, 1955-57; Assistant Resident in Surgery, Cleveland City Hospital, 1957-58; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1958-59; married; three children; home: Natick, Massachusetts.

Dr. David B. Skinner, Intern in Surgery — born in Joliet, Illinois, April 28, 1935; B.A., University of Rochester, Rochester, N.Y., 1955; M.D., Yale University Medical School, New Haven, Connecticut, 1959; married; family home: Cedar Rapids, Iowa; temporary home: Newton, Massachusetts.

Dr. Joseph F. Stocks, Assistant Resident in Children's Medicine — born in Pittsfield, New Hampshire, September 7, 1929; B.S., Tufts College, 1951; M.D., College of Physicians and Surgeons, Columbia University, 1955; Intern, rotating, Mary Imogene Bassett Hospital, Cooperstown, N.Y., 1955-56; military service; General Medical Officer, 4050th USAF Hospital, Springfield, Massachusetts, 1956-58; Resident in Medicine, Maine Medical Center, Portland, Maine, 1958-59; married.

Dr. Rajendra Tandon, Assistant Resident in Medicine—born in Gonda, Uttar Pradesh, India, January 27, 1931; attended high school, 1944; Intermediate examination, 1946; B.Sc. in zoology, botany, and chemistry, 1949; entered medical school, 1949; M.B., B.S., 1954; M.D., 1958; served as Junior and Senior House Officer, Medical Tutor, Resident cum Registrar and Chief Resident at Gandhi Memorial and Associated Hospitals and King George's Medical College, Lucknow University, Lucknow, U.P., India, 1958-59.

Dr. Elliot S. Vesell, Intern in Children's Medicine — born in New York City, December 24, 1933; Juilliard School of Music, 1942-46; Phillips Exeter Academy, 1951; A.B., Harvard College, 1955; Rockefeller Institute for Medical Research, 1956-58; M.D., Harvard Medical School, 1959.

Dr. Karl H. Wegner, Intern in Pathology — born in Pierre, South Dakota, January 5, 1930; A.B., Yale University, 1952; military service: 1st Lieutenant, USMC, 1952-54; Fellow in Pathology, Massachusetts General Hospital, 1956-57; M.D., Harvard Medical School, 1959; married.

Dr. Richard H. Wohl, Intern in Surgery — born in Birmingham, Alabama, February 6, 1934; A.B., Harvard College, 1955; Vanderbilt Medical School, 1955-57; M.D., Harvard Medical School, 1959; married; one child.

Dr. Morey Wosnitzer, Assistant Resident in Urology — born in Passaic, New Jersey, September 4, 1929; B.S., Rutgers University, New Brunswick, New Jersey, 1951; M.S., Rutgers University, 1952; M.D., College of Physicians and Surgeons, Columbia University, New York City, 1956; Intern in Surgery, Mount Sinai Hospital, New York City, 1956-57; Assistant Resident in Surgery, Mount Sinai Hospital, 1957-58; Assistant Resident in Urology, Presbyterian Hospital, Columbia-Presbyterian Medical Center, New York City, 1958-59.

MASSACHUSETTS EYE & EAR INFIRMARY

The following appointments were made at the meeting of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on October 19:

Dr. James G. Dobbie — Fellow in Ophthalmology, assigned to the Retina Service, for one year, beginning January 1, 1960;
Dr. Kiyoshi Ishii — Fellow in Anesthesiology for one year, beginning January 1, 1960;
Dr. Henry G. Ring — Assistant in Ophthalmology;
Dr. Michael Vallinas — Fellow in Anesthesiology for one year, beginning January 1, 1960.

The Committee also voted to grant leave of absence to:

Dr. S. James Bullington, for one year, beginning October 1;
Dr. Edwin B. Goodall, for one year, beginning November 1.

The following appointments were made at the meeting of the Board of Managers, held on October 21:

Dr. J. Charles Drooker — Surgeon in Otolaryngology;
Dr. Philip E. Meltzer — Acting Chief of Otolaryngology, as of September 1;
Dr. Aram Roopenian — Associate Surgeon in Otolaryngology;
Dr. LeRoy A. Schall — Consulting Surgeon in Otolaryngology, as of September 1;
Dr. Francis L. Weille — Consulting Surgeon in Otolaryngology.

New addresses:

Dr. Norman W. Andrew (r.p. *An.* 1956), New England Center Hospital, Boston, Mass.
Lt. David W. Bailey, MC, USN (*C.M.* 1959),

No. 85 in a series of Staff photographs
George A. Talland, Ph.D. — Associate Psychologist

U.S.S. *General G. M. Randall* TAP-115, c/o Fleet Post Office, New York, N. Y.

Dr. Carl N. Brownsberger (a.r.p. 1957), Massachusetts Mental Health Center, 74 Fenwood Rd., Boston 15, Mass.

Dr. Albert H. Coons (*E.M.* 1939), Dept. of Bacteriology and Immunology, Harvard Medical School, 25 Shattuck St., Boston 15, Mass.

Dr. Charles B. Fowler (*Or.* 1929), 526 Soquel Ave., Santa Cruz, Calif.

Lt. Jack J. Greenberg, MC, USNR (*S.* 1957), Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md.

Dr. Albert I. Holtz (*C.M.* 1958), National Institutes of Health, Bethesda, Md.

Dr. Richard F. Jackanich (a.r.p. *An.* 1959), U.S.P.H.S. Hospital, San Francisco, Calif.

Dr. Ezra Lamdin (clin. & res. fel. *M.* 1959), Veterans Administration Hospital, 150 S. Huntington Ave., Boston, Mass.

Dr. LeRoy H. Maffly (clin. & res. fel. *M.* 1959), Cardiovascular Research Institute, University of California Medical Center, San Francisco, Calif.

Dr. Robert W. Milam (a.r.s. *Or.* 1959), Scott and White Clinic, Temple, Tex.

Dr. Edgar M. Neptune (*E.S.* 1928), 726 W. Onondaga St., Syracuse, N. Y.

Dr. Madan M. Singh (*M.* 1952), 32 Quarters, Gandhi Memorial & Associated Hospitals, Lucknow, U.P., India

Dr. Tetsuo Sugiyama (j.r.s. 1944 & r.s. *U.* 1946), 2524 Belknap N.E., Grand Rapids 5, Mich.

Brief bits:

Dr. Louis Bakay conducted seminars on the exchange of various isotopes between brain and circulating blood, at the Galesburg (Illinois) State Research Hospital on October 27 and 28. He then gave the opening lecture in a series of conferences in basic science at the Forest Hospital, Des Plaines, Illinois, and at the University of Chicago, on October 28 and 29. His subject was "New aspects on the concept of the blood-brain barrier".

On June 3, Dr. Edward B. Benedict attended the Editorial Board Meeting of *Gastroenterology* in Atlantic City. Following this, he attended meetings of the American Gastroenterological Association and the American Gastroscopic Society, where he took part in a symposium on instruments and techniques for esophagoscopy, presenting a paper on "The rigid esophagoscope and conventional technique". He also discussed papers presented in a symposium on endoscopic biopsy of the stomach.

On November 4, Dr. Edward D. Churchill left for Beirut, where he expects to spend the next six months as Acting Professor of Surgery at the American University there.

On November 5, Dr. Oliver Cope served as moderator for the panel on "Medical and surgical treatment of diseases of the thyroid gland" at the Joint Meeting of the Sections on Medicine and Surgery of the New York Academy of Medicine.

On October 27, Dr. Jerome Gross gave the first Bernardine Becker Memorial Lecture of the New York Rheumatism Association, at the New York Academy of Medicine. He spoke on "Basic research in the hospital setting".

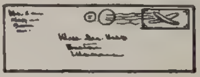
Dr. Roger W. Jeanloz of the Lovett Memorial Unit recently addressed the Convocation of the University of Geneva, held in honor of its 300th anniversary. He was one of two alumni in the field of chemistry who were invited to speak at the Convocation. Dr. Jeanloz has also been invited by Israel's Weizmann Institute of Science at Rehovot to spend two weeks there as a visiting scholar this coming spring.

Dr. Alexander Leaf served as Visiting Professor of Medicine at the University of Bahia, Bahia, Brazil, from June 23 to September 15. On November 3, he delivered a lecture entitled "Transcellular electrolyte transport" at the American College of Physicians Postgraduate Course in Syracuse, N. Y.

Liberty Mutual Insurance Company recently sponsored a symposium on "The growing challenge of disability control in an era of comprehensive medical care". MGH members of the panel on "Connective tissues and the degenerative diseases of aging" were Dr. Francis O. Schmitt (of M.I.T. and a member of our Board of Trustees), moderator, Dr. Joseph S. Barr, Dr. Melvin J. Glimcher, and Dr. Jerome Gross.

Dr. Champ Lyons (*W.S.* 1933) saw his dream materialized on October 18, when the new L. L. Hill Heart Center, at the University of Alabama Medical Center, was dedicated. Dr. Lyons, who is Professor and Chairman, Department of Surgery at the Medical Center, gave an address at the dedication ceremonies. He spoke on "The Luther Leonidas Hill Heart Center: Its purpose and objectives".

Dr. Oglesby Paul (*W.M.* 1943) was appointed President-elect of the American Heart Association at the recent meeting of the Association, held in Philadelphia. Dr. Paul will assume his presidential duties in 1960.



Dr. William V. McDermott, Jr. received this letter from Dr. Nathan D. Munro (*E.S.* 1942). It should be of interest to all MGH-ers.

It was very good to see you and many of the other MGH-ers, especially those of my vintage, but I enjoyed meeting some fine younger ones, too.

I have long thought that there should be an MGH dinner in association with the College of Surgeons meetings. One of the reasons for going to the meetings is to renew old friendships. I think this idea would be much appreciated by those of us who are out in the "Heartland of America" and even further away. I always seem to miss seeing several good friends, since the meetings are so large. Many other groups meet for dinner. I assume they have a continuing organization set up to make arrangements ahead of time each year. The tickets could be sold by mail, so that a firm commitment could be made with a hotel or restaurant.

I have never written to The News, even though I am the only MGH alumnus in this vicinity. My activities are mostly pleasant but not newsworthy. Two years ago I was elected to the Charter Commission to write a new Charter for the city. Nine of us labored mightily and brought forth a new Charter which the voters recently turned down. Now I am back to just cutting and sewing.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 191 Boston, Mass. January 1960

CLINICAL AND LABORATORY RESEARCH IN SURGERY

Within the Department of Surgery a research group, with its main base of operations on the Fourth Floor of the White Building and with tentacles extending into the Thyroid Clinic, Record Room, Physics Laboratory, and Hospital wards, and with antennae bristling in many different directions, is known as Dr. Cope's Laboratory and is directed by Dr. Oliver Cope. This laboratory has been the home of a number of diverse clinical and laboratory investigations in relation to surgical problems over the years, with a continued interest in electrolytes, burn patient therapy, and endocrine disorders. As is well known to the readers of our columns on surgical research, many laboratories in the Hospital endeavor to achieve a satisfactory balance between clinical research and more basic laboratory research. There are always pressures and demands extending from the necessities of patient care in a modern hospital that favor time and energy being spent on the solution of many practical problems of everyday significance in the treatment of patients. On the other hand, it is generally recognized that major advances in our understanding and treatment of disease today must come from a more basic approach, an approach commonly requiring extensive laboratory support. How to balance these complementary interests is always a challenge, and the research groups throughout the Hospital are often characterized by the balance they achieve between applied clinical research and investigation directed toward a more fundamental comprehension of disease. Each is essential for the best of patient care. Certainly the work conducted in Dr. Cope's Laboratory since 1955, the period of personal experience of the current reporter, is no exception to the experience of other laboratories in equilibrating these types of investigative endeavor. As an example of the diversity of surgical investigation today, it might be of interest to present briefly some of the projects that have been developed over the past four years. The clinical topics will be stressed somewhat more, only because of their general interest to those caring for patients throughout the Hospital.

During the years of the second World War and the Korean War a considerable amount of time and effort was spent in evaluating and defining the best treatment for burn patients. In this period of time many basic concepts were developed in regard to the physiological adjustment a patient with a severe burn must make if he is to survive, in regard to the type of protection most effective in decreasing the problem of post-burn infection, and in regard to the many plastic procedures necessary to achieve final healing in the care of these patients. The gross metabolic stress was defined, and supportive therapy was provided a rationale. In 1955 the time had come for an evaluation of these methods and to present a record of the treatment of burns at this Hospital as judged by mortality statistics. The record of a group of 949 burns that were treated here during the years of 1939-1954 inclusive was accumulated. There were 86 deaths in the series, and the individual burns represented a very wide range in severity, with a few patients presenting a total body burn and with some of the older patients being well into their ninth decade. From this group it was possible to measure rather precisely the increased resistance that a young adult has to an extensive burn in comparison with an elderly patient. It could be shown that for a burn of a given extent it was twice as lethal an injury for an elderly patient as for a young adult, and this increased mortality was apparently the consequence of the general physiological inflexibility that encompasses everyone approaching the later decades of life. Furthermore, the burn experience at the Hospital could be broken down into burns in different age groups and of different extent, and in comparison with studies reported from other institutions throughout the world it would appear that the results here, based on mortality statistics, are as good as any. In the care of burns at the Massachusetts General Hospital it has not been possible to provide treatment in the type of unit advocated by Dr. Leonard Colebrook in England, where a burn patient would be isolated in an environment as carefully controlled bacteriologically as the operating rooms are in this Hospital today. The precautions practised in isolating a burn patient from the rest of the Hospital to prevent contamination extending in either direction are not as bacteria-proof as those advocated by Colebrook. On the other hand, certain groups at other burn centers today feel that such precautions are overrated and they have favored a more open method and a vastly simpler method of treating burns without elaborate dressings or elaborate nursing precautions being involved. That such divergent types of care in different countries apparently give rather similar results in terms of mortality is not without interest and may suggest that the isolation of a burn patient may not be as critical as other features of the patient's illness and management. It was also possible to determine the decrease in mortality over the 15-year period of the study. The decrease in mortality after 1942, at which time many of the current methods of treatment were introduced, is significant but does not tell the entire story of improvement in treatment inasmuch as it was not possible to measure the favorable trends in such factors as morbidity, cosmetic results, nutrition, etc. One important lesson from this study was to emphasize again the well-known difficulty in clinical medicine in evaluating results of therapy when the disease itself is very much in control of the clinical situation. The age of the patient and the extent of the burned area remain as important variables in determining the outcome which is modified critically by therapy in a rather restricted group of patients. Careful secretarial work and cooperation from the Record Room were indispensable to the completion of this project.

Another clinical study completed by a group of nurses and four surgeons was concerned with the documentation of the amount of sepsis occurring on the general surgical services. This study was an outgrowth of the Committee on Cross Infection which requested, over a year ago, that an effort be made to establish the incidence of sepsis on the surgical services, in view of the then current impression that the risk of sepsis was increasing. This could be due to a laxity in the observance of conventional barrier nursing techniques by doctors and nurses alike or due to some perverse effect of the antibiotics reversing in some inexplicable manner the risk of sepsis in this Hospital. In considering this request it was realized clearly that an enumeration of all surgical cases that had septic complications in the postoperative period would not be particularly informing. The incidence of sepsis determined in this manner would in part reflect the number of serious or critical operations that were performed. For example, if in a given year or in a given month there were more operations performed on ischemic extremities, on elderly debilitated patients, and on individuals requiring gastrointestinal surgery with the well-recognized concomitant higher risk of sepsis, then the over-all incidence of sepsis would rise in response to the type of surgery being performed. Indeed, it would be surprising if over the years the over-all incidence of sepsis did not rise because of the increasing complexity of the surgical procedures being carried out and because of the greater debility seen in many surgical patients. Consequently, a review of the septic complications was restricted to two rather straightforward operations over a 21-year period. The two operations chosen were elective procedures indicated only when a patient was otherwise in general good health and executed by the rather standardized techniques that have not appreciably altered during 21 years. They were inguinal herniorrhaphies and abdominal hysterectomies for benign disease. The careful review of the records of 3,336 inguinal herniorrhaphies and 6,111 abdominal hysterectomies was carried out by Terry Ginwala, Susan Peterson, Audrey Hoverkamp, and Peggy Simons, all registered nurses, and by Drs. Glenn E. Behringer, Earle W. Wilkins, Jr., and Frank C. Wheelock, Jr. After a preliminary review of these records by the nurses, who had been carefully coached in regard to their interpretation and in regard to the purpose of the study, all the septic records identified were further reviewed by the surgeons and classified into major and minor sepsis depending on whether or not purulent drainage developed at any time. In addition, data were obtained on the "prophylactic" use of antibiotics in these clean surgical procedures to prevent postoperative incisional sepsis. To verify that the interpretation of the records given by the nurses was in agreement with that of the surgeons, over 10 percent of the records screened as negative by the nursing group were chosen at random and reviewed again. Fortunately, complete harmony prevailed in the two professional interpretations.

By this method it was possible to record the incidence of sepsis in a group of clean operations over a period of 21 years, extending from 1937 to 1957 inclusive. It was supposed that if the impressions of increasing sepsis were actually due to some major alteration in the execution of aseptic techniques in clean operations or due to an increase in the bacteria present in the patient's environment, there might be noted a significant rise in the incidence of septic complications following clean surgery. On the other hand, if the incidence of sepsis was found to be quite stable over the years in this simple type of surgical procedure, then it might be presumed that the impressions of increasing sepsis were more likely a reflection of the type of patient now presenting himself to the Hospital for surgical care in a debilitated and depleted state, with a disease requiring an extensive and prolonged operative procedure. The proper explanation is of interest to all concerned with the surgical care of patients, and, to our knowledge, previous studies of surgical sepsis do not provide an answer.

During the above years at the Massachusetts General Hospital the over-all incidence of septic complications in the combined group of 9,447 inguinal herniorrhaphies and abdominal hysterectomies was 4.3 percent. One-half of the septic complications required surgical drainage or were associated with the spontaneous drainage of pus. The remainder were examples of nonsuppurative cellulitis. This incidence of sepsis following clean surgery is about in the middle of the range of septic complications reported from other institutions in this country and Europe. Therefore, it is shockingly high or pleasingly low, depending on one's point of view, but in either case this current basic rate of sepsis serves as a rough reminder that more hard work needs to be done to extend our understanding of wound healing and of the genesis of sepsis before we can boast of an Aseptic Utopia in surgery. It is difficult to compare rates of postoperative sepsis following surgery in different hospitals, inasmuch as the definition of sepsis varies from one institution to another and oftentimes is not stated in the reports. What differencies do exist in the better reports in the medical literature could easily be explained by such prejudicial factors as the definition of sepsis, the length of postoperative follow-up, unstandardized case material, etc., rather than by some important difference in the surgical environment of the patient. Of particular interest to this institution is the fact which clearly emerged from this study: that there has been no increase or decrease in the incidence of sepsis over the years in this clean type of surgery for 21 years. Such yearly fluctuations in the rate of sepsis as were noted were not significant and could be accounted for by chance alone. This consistency in the risk of sepsis suggests that the environment a patient now finds himself placed in for a standard, clean surgical procedure at this Hospital does not lead to any greater risk of developing septic complications now than in the preantibiotic era. This in turn implies that we should devote our energies to a more careful assessment of the preparation of a patient for operation and of the selection of the patient for operation, if our septic problems stem from the prolonged procedures now carried out and from the state of lowered resistance that many patients are in as they face up to a major surgical exploration today. In the genesis of postoperative sepsis it is obviously extremely difficult to distinguish between the contribution made by the patient's condition and the contribution made by the hospital environment. Certain investigations reported in the medical literature have clearly incriminated breaks in technique and reservoirs of antibiotic-resistant bacteria in the hospital personnel. However, few studies have been directed to a more careful appraisal of the patient himself and his disease in relation to postoperative sepsis.

Another comparison was made in this study of the incidence of postoperative sepsis in 1,200 cases that had antibiotics given on a "prophylactic" basis on the assumption that such drugs would ward off postoperative sepsis, and of the incidence of postoperative sepsis in 5,600 cases in which antibiotics were not so employed. In these two groups the development of postoperative sepsis was not influenced by the use of antibiotics, and this surgical experience provides proof that the "prophylactic" use of antibiotics in these operations is not justified. Although the "prophylactic" use of antibiotics in clean surgery has long been questioned by surgeons, proof based on such standardized material and in such numbers had not previously been available.

Turning from these clinical studies to certain laboratory problems, mention should be made of studies now in progress to elucidate the metabolism of magnesium, a mineral present in the human body that is almost as common as potassium and concerning which little is known today. Although magnesium is present in virtually all tissues, with half of it located in the skeleton and the remainder in the soft tissues of the body, the paucity of information about its role in health and disease is a direct consequence of the analytical difficulties inherent in its chemical determination. Many areas in clinical medicine have been rapidly developed as tools became available to make needed measurements, but it may be said today that our understanding of magnesium metabolism is hampered by the inadequacies of current analytical techniques. Despite these difficulties which make a study of magnesium metabolism at once more arduous and also of great interest, certain progress has been made. The research has developed three different types of experimental technique: the classical balance technique as exemplified by the studies carried out on Ward 4 by many Hospital groups, tissue analysis techniques, and radioisotope techniques similar to those employed by other groups in the Hospital with a variety of isotopes. Turning to the balance technique, it was apparent at the outset that to place a patient on a meaningful balance study required a diet of very low mineral content so that the intake in the food and output in the excreta could be compared. The reason for this is a basic principle that applies to virtually all balance experimentation. It was exploited at this Hospital by the research in calcium metabolism 30 years ago by Drs. Joseph C. Aub and Walter Bauer and has since been a cardinal feature in the design of many balance studies carried out on Ward 4. In brief, it may be explained as follows: If there is an experimental error of a certain percent in determining the intake of a particular element or its output in the excreta due to such uncontrollable variables as alteration in the composition of foods, difficulty in the complete collection of specimens, analytical errors in the chemical determinations, etc., this percentage error may make it impossible to identify a significant difference between intake and output if these are large. On the other hand, if the intake is reduced to as low a value as possible and then compared with a greatly reduced output, a positive or negative balance thus determined may then exceed the percentage error in the balance method and permit more penetrating interpretations of the balance study. The old experimental adage that a modest difference between small numbers is more readily interpreted than the same difference between large numbers is another way of stating the same principle. So it was apparent that a diet had to be devised low in the particular mineral to be investigated, and in the work at hand it was necessary to devise a diet low in magnesium. Advantage was taken of the properties of cation exchange resins that combine firmly with calcium and magnesium and less so with potassium and sodium. Such resins may be used to remove calcium and magnesium from blood to prevent clotting, and this use at once commended them for processing a liquid diet to remove the calcium and magnesium and to enrich the diet with sodium and potassium in exchange. Preliminary experiments were completed, using a resin column to process a commercial dairy product known as Pream. The unique feature of Pream is that its unusual property of going promptly into solution without forming curds is because of its relatively low calcium and magnesium content, although it is rich in protein, fat, and carbohydrate. By reconstituting this powder to a convenient consistency with water and by running it through a cation exchange resin column, a palatable although monotonous diet could be obtained virtually free of magnesium and greatly reduced in calcium content. The concentration of magnesium of about 1 part per million was verified by different chemical techniques and bioassay methods. The caloric and protein content of the diet was entirely adequate for balance studies on hospitalized patients. Employing this diet on Ward 4 and also on ambulatory volunteers, it was possible to demonstrate the extraordinary powers of the body to conserve calcium and also magnesium when placed on an extremely low intake. This conserving mechanism, not previously demonstrated, goes a long way toward explaining why a magnesium deficiency is not likely to be observed clinically because of the extraordinary powers the body has of retaining this element when it is deficient in the diet and when renal conservation is functioning normally. This is in contrast with potassium, for example, which continues to be lost from the body when absent from the diet, and herein lies a significant clinical difference between these two minerals, since the renal conservation of magnesium and the reservoir of this element in bone will prevent deficiencies from developing, and, on the other hand, the obligatory urinary loss of potassium will favor the development of a deficiency. Currently, studies are being extended to patients with parathyroid disease and to patients with metastatic malignant disease in the skeleton, to compare the losses of magnesium with those of calcium in an effort to define what relationship exists between these minerals under conditions of forced, high level, pathologic losses. These investigations could not be completed without the fine analytical hand of Mrs. Esther Gordon, known to many of the Hospital staff, because of her extensive experience in clinical chemical determinations. Miss Ruth Moore's tenacity and prehensile capacity in shepherding various and sundry specimens from patient to laboratory bench have been greatly appreciated in all our balance studies.

A second approach to the problem of defining the role of magnesium in human metabolism was that of direct tissue analysis. This would appear to be a fruitful way to crack certain problems of magnesium metabolism since half the magnesium of the body is located within the cells. Only a small percentage of the magnesium is located outside the cells or outside the skeleton. In general, serum analyses for magnesium have not been helpful in the past in the management of various diseased states, and this may be because the serum magnesium is rather insensitive to other changes in the magnesium balance of the body or it may be that our methods for analyzing serum magnesium are too crude to detect the subtle differences that could be meaningfully correlated with health and disease. In any event, because of a large reservoir of magnesium in the muscle of the body, a program of skeletal muscle biopsies was initiated. After validating techniques in autopsy specimens, the control material from normal muscle and skeletal muscle derived from a variety of endocrine disorders were analyzed concomitantly. The studies were unusual in that instead of considering the composition of muscle in relation to a single reference base such as dry weight or nitrogen content or water content, the results were interpreted by relating the various components of muscle to two different reference bases. Thus, a more meaningful interpretation of the results was constructed in much the same way as the description of the Hospital in terms of the number of patients per doctor and the number of patients per nurse would be more meaningful and complete than by considering either one alone in presenting an analysis of patient care. By these time-consuming techniques it could be shown that the chemical architecture of muscle from patients with hyperparathyroidism was different from that of the control material and from that derived from other diseased states. At once the question may be asked if these abnormalities are a proper explanation for the fatigue and weariness patients with hyperparathyroidism commonly claim as their leading complaint. The future may provide further data to establish a convincing association yet to be recognized. The reason for these departures in composition is not known, and we plan to determine why the relative amounts of the minerals present in muscle, including magnesium, appear to be altered in this disease in contrast to the other diseases investigated. Because of the precision of these techniques that have been validated in the investigations of skeletal muscle, they are now being applied to the analysis of cardiac muscle obtained at heart operations, with the cooperation of Drs. J. Gordon Scannell and Melvin Lederman. These specimens will be among the first to have chemical analysis without having gone through the terminal phases of an acute or chronic illness. It will be possible to correlate the composition of the muscle with various functional states, as documented by gross observation and by electrocardiogram. This program has depended very heavily on the meticulous care that Mrs. Etta Horblit has given to many of the more involved analyses which have been custom-tailored in the laboratory for the particular analytical problem.

Finally, a third approach to the evaluation of magnesium metabolism is through the application of an isotope of magnesium. A late arrival on the medical scene is a radioisotope of magnesium with a half life of 21 hours. This necessitates expeditious air transportation from the Brookhaven National Laboratory, where it is generated in the neutron pile by the irradiation of stable magnesium in the presence of lithium. Magnesium-28 is a gamma and beta emitter, and its detection is relatively simple. The only major drawback in its use is the relatively low specific activity now achieved in its manufacture, so that the isotope must be used with some stable magnesium-24. Little was known concerning the distribution of this isotope in mammals; therefore, the first studies carried out were in rabbits to determine whether or not there might be a specific localization for this ion in the various tissues of the body. On the basis of previous analyses stating the composition of the body, it was not supposed that there would be a specific localization in the sense that iodine is localized in the thyroid gland. Studies on a number of rabbits confirmed a non-specific distribution, and with the help of Dr. Timothy S. Harrison our attention was directed to evaluating the distribution of this isotope in dogs in conjunction with isotopes of calcium and potassium. In view of the fact that magnesium-28 is a bone-seeking and a soft-tissue-seeking isotope, it seemed appropriate to compare its distribution to that of potassium-42 and calcium-45 in the same animal, since the former is an isotope equilibrating with stable potassium located predominantly in soft tissues and since the isotope of calcium goes directly to bone where virtually all the stable calcium is located. These studies, repeated in many dogs, indicated that the magnesium in soft tissues is not available for early exchange, as potassium is. The potassium-42, given simultaneously with the magnesium-28, promptly exchanged with the potassium present in the cells, but the magnesium-28 did not do so and exchanged sluggishly with the mineral present in the skeleton. In these results we see a reason why possible magnesium deficiencies or disturbances in magnesium metabolism may not readily arise. Magnesium apparently is not easily displaced from the cells in view of its poor exchangeability with the isotopic magnesium injected. Consequently, in deficiency states or in various metabolic disorders it may be that magnesium is locked quite securely in the cells, preventing any cellular deficiency to develop. After the preliminary experimental work had been completed in animals, attention was directed to studying the distribution of these isotopes in humans with various advanced diseases that might cause a distortion of the distribution of these minerals. Dr. Rafael M. Casas was responsible for collecting data on the uptake of magnesium-28 by human bone obtained at amputations or rib resections. Again it was noted that the magnesium-28 injected could not equilibrate with the magnesium in the soft tissues of these individuals, indicating that in humans the cellular magnesium was inaccessible for exchange in comparison with potassium. The planning and execution of the earlier studies were completed under the careful tutelage of Dr. Gordon L. Brownell, whose experience and advice were indispensable in the application of the isotope techniques.

In cooperation with Dr. Jack H. Mendelson a program was completed on alcoholic patients in view of the reports in the medical literature that have described aberrations in the metabolism of magnesium in alcoholics. These studies were carried out on patients admitted to B-8 for a two-day period of observation, during which time the isotope measurements were made and their renal response to injection of a test dose of stable magnesium was determined. From these studies it was possible to describe the exchangeable magnesium present in alcoholics and their renal conservation of injected magnesium. To obtain a proper physiologically normal group to serve as a control for the alcoholic patients, a study was made of the magnesium metabolism in a group of six volunteers who were inmates of the State Correctional Institution at Walpole, Massachusetts. These volunteers submitted to our studies after the methods and goals were carefully explained to them. Incidentally, the work provided an unusual opportunity to observe the enlightened way in which a modern correctional institution is operated and to participate in one of the many programs of medical research being conducted in cooperation with the inmates of this institution. Despite the claims made in many reports about the relationship of disorders of magnesium metabolism to chronic alcoholism, our techniques do not reveal any striking changes. These results will be part of an invaluable background for future studies in more advanced alcoholics. The technical help of Miss Gertrude Merrill and Mrs. Alice Mackay and of Mr. Harold Carter enabled these studies to be completed successfully, and the inexorable physical decay of the radioisotope required many determinations to be made late at night before the evanescent radioactivity became lost in the background radiation of the laboratory.

More than a year ago Dr. W. Milo Keynes participated in the work of the laboratory, helping in many of the balance studies and collecting for further review by Dr. Cope and Dr. Benjamin Castleman a group of cases of hyperparathyroidism with a previously undescribed pathological entity at first noted grossly at operation and subsequently correlated with certain clinical features and with a characteristic microscopic architecture.

Dr. Ann Wight Phillips has accepted for several years the difficult assignment of evaluating the clinical course of all well-documented serious burns in the records of the Hospital. This study should provide quantitative and semi-quantitative data that would amplify and give more perspective to our understanding of the complex problem of clinical care of these unfortunate patients. The results will make amends in large measure for the shortcomings of the burn mortality study, mentioned before, that did not attempt to weigh such factors as location of the burn, related pulmonary injury, renal and cardiovascular function as influenced by intravenous therapy, etc.

The brief listing of these major projects has not permitted an extended acknowledgment of the large measure of cooperation obtained from different departments with which we have worked. In such endeavors, requiring specialized knowledge in many fields, one can only be grateful for the opportunities available at a teaching institution for designing and completing experimental projects requiring the high-power focusing of numerous skills and abilities on questions posed, in the first instance, by the patient and his disease.

Benjamin A. Barnes, M.D.,
Assistant in Surgery

* * *

On September 30, 1959, Dr. Howard B. Sprague concluded four years of membership on the National Advisory Heart Council of the U.S. Public Health Service.

On December 5, Dr. Sprague was awarded a citation by the American Heart Association for "Distinguished service to research". This was in recognition of five years of service on the Research Committee of the American Heart Association.

The Board of Trustees, at their meetings on November 6 and 20, and December 4, 1959, voted:

To accept the resignation of Dr. Francis C. Hersey as Assistant Attending Psychiatrist at McLean, effective November 20, 1959;
To accept the resignation of Dr. S. Louis Mogul as Clinical Assistant in Psychiatry at McLean, effective November 20, 1959;
That Dr. Stanley P. Bohrer, Third Assistant Resident in Surgery, be granted an indefinite leave of absence, retroactive to July 27, 1959, because of reasons of health;
To grant Dr. Erich Lindemann leave of absence for about three months, beginning December 1, 1959, and further voted that during his absence Dr. John C. Nemiah should serve as Acting Chief of the Psychiatry Service and as a member of the General Executive Committee;
That appointments to the Obstetrical Staff be not renewed and that the Department of Obstetrics be abolished rather than as is now the case, suspended;
That the category of Clinical Associates in Obstetrics be created under the Associate Staff and that the following men be appointed to this category: Drs. Robert H. Barker, A. Gordon Gauld, John L. Newell, Charles P. Sheldon, and Bartlett H. Stone.

To appoint:

Dr. John E. Adams as Second Assistant Resident in Pathology, beginning July 1;
Dr. Arturo L. Aranas as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. Jason A. Aronson as Assistant in Psychiatry, beginning December 1, 1959;
Dr. George P. Baker, Jr. as Resident in Medicine for one year, beginning July 1;
Dr. Kathryn S. Beck as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. Paul H. Black as Resident in Medicine for one year, beginning July 1;
Dr. Kurt J. Bloch as Resident in Medicine, for a period of thirteen months, beginning December 1;
Frank M. Buckley, D.Ed. as Assistant Psychologist, beginning September 1, 1959;
Dr. Charles E. Burden as Assistant Resident on the Children's Medical Service for one year, beginning July 1;
Dr. Herman Buschke as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. George B. Carter as Second Assistant Resident in Radiology, beginning January 1;
Dr. Giulio Carugo as Clinical Fellow in Anesthesia for one year, beginning January 1;
Dr. Roy M. Coleman as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. Albert Damon as Clinical Fellow in Medicine, beginning September 1, 1959;
Dr. John R. David as Resident in Medicine for one year, beginning October 1;
Dr. Bruce W. Fischberg as Clinical and Research Fellow and Acting Assistant Resident in Psychiatry for one year, beginning January 1;
Dr. F. Daniel Foley as Third Assistant Resident in Pathology, beginning July 1;
Edna M. Follensby, Ph.D. as Assistant Immunologist in the Department of Medicine for one year, beginning November 1, 1959;
Dr. Richard F. Gibbs as Assistant Resident in Anesthesia, beginning July 15;
Dr. Gordon G. Globus as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. Mehran Goulian as Resident in Medicine for one year, beginning January 1, 1961;
Dr. John B. Isom as Clinical Fellow and Acting Resident in Pediatric Neurology for one year, beginning July 1;
Dr. Earl F. Jordan as Assistant Resident in Neurosurgery, beginning September 1;
Dr. William L. Kermond as Clinical Associate in Orthopedic Surgery, beginning November 6, 1959;
Dr. Samuel B. Kirkwood to the Board of Consultation;
Dr. Susanne J. Lamdin as Assistant in Anesthesia, beginning October 16, 1959;
Dr. Lawrence M. Leonard as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;
Dr. Bernard Levey as first year Resident in Psychiatry at McLean, beginning July 1;
Dr. Sara F. Lewis as Junior Assistant Resident on the Children's Medical Service, beginning July 1;
Dr. John B. McGinty as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;
Dr. Guy M. McKhann as Clinical Fellow and Acting Assistant Resident in Neurology for one year, beginning July 1;
Dr. Arthur W. McMahon as Clinical Associate in Psychiatry, beginning December 1, 1959;
Dr. Bucknam ~~McPeak~~ as Assistant Resident in Anesthesia, beginning July 15;
Dr. William L. Miller as Third Assistant Resident in Pathology, beginning July 1;
Dr. Arthur J. Moss as Assistant Resident in Medicine, beginning July 1;
Dr. Robert K. Osborne as Assistant Resident in Medicine, beginning July 1;
Dr. Ernest H. Picard as Clinical Fellow and Acting Resident in Pediatric Neurology for one year, beginning July 1;
Dr. Giuseppe G. Pietra as Third Assistant Resident in Pathology, beginning July 1;
Dr. Dwight R. Robinson as Assistant Resident in Medicine, beginning July 1;
Dr. Hussein E. Samiy as Resident in Medicine for one year, beginning July 1;
Dr. Louis W. Sullivan as Clinical Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;
Dr. Judith A. Tassie as Clinical Fellow in Anesthesia, beginning August 1;
Dr. Nathan S. Taylor as Clinical and Research Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;

Dr. Benjamin Tenney, Jr. to the Board of Consultation;

Dr. William M. Thurlbeck as Clinical and Research Fellow in Pathology for one year, beginning November 1, 1959;

Dr. James L. Weber as Exchange Assistant Resident on the Children's Medical Service, for the period November 1 through December 11, 1959;

Dr. Hubert J. Wolfe as Third Assistant Resident in Pathology, beginning July 1;

Dr. Gilbert F. Young as Clinical Fellow and Acting Assistant Resident in Neurology for one year, beginning July 1.

At their meetings on October 28, November 4, 18, and 25, 1959, the General Executive Committee voted:

To accept the resignation of Dr. Hugo M. Palazzi as Clinical and Research Fellow in Surgery, effective November 15, 1959.

To promote:

Dr. J. Richard Baringer to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Arthur E. Baue to the position of First Assistant Resident in Surgery, beginning November 1, 1959;

Dr. Robert W. Carey to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. James R. Carter, Jr. to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. David L. Collins, Jr. to the position of First Assistant Resident in Surgery, beginning November 1, 1959;

Dr. Frank F. Davidoff to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Karl Engelman to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Paul F. Griner to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Gilbert Hermann to the position of First Assistant Resident in Surgery, beginning November 1, 1959;

Dr. Walter E. Klingensmith to the position of First Assistant Resident in Surgery, beginning November 1, 1959;

Dr. John B. Little to the position of First Assistant Resident in Radiology, beginning January 1;

Dr. John A. Mannick to the position of First Assistant Resident in Surgery, beginning September 1, 1959;

Dr. Mart Mannik to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Yosh Maruyama to the position of First Assistant Resident in Radiology, beginning January 1;

Dr. Richmond Prescott to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Irwin H. Rosenberg to the position of Assistant Resident in Medicine for one year, beginning July 1;

Dr. Walter T. Weylman to the position of Resident in Radiology, beginning January 1.

To extend the appointment of:

Dr. Joseph H. Dimon, III, as Senior Resident in Orthopedic Surgery, from January 1 through March 31.

To reappoint:

Mary D. Albert, Ph.D. as Research Fellow in Medicine for one year, beginning November 1, 1959;

Dr. Edgardo G. Carrasco as Clinical and Research Fellow in Medicine, for the period December 11, 1959 through April 30, 1960;

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning December 1, 1959;

Dr. Paul R. Dinsmore as second year Resident in Psychiatry at McLean, beginning July 1;

Dr. Gerhart A. Duda as second year Resident in Psychiatry at McLean, beginning July 1;

Lorna J. Langer Gilmore, Ph.D. as Research Fellow in Biochemistry in the Department of Pathology for one year, beginning October 1, 1959;

Dr. Sara S. Hafter as second year Resident in Psychiatry at McLean, beginning July 1;

Dr. James C. Healey as third year Resident in Psychiatry at McLean, beginning July 1;

Dr. Eda M. Kahana as second year Resident in Psychiatry at McLean, beginning October 1;

Dr. Robert E. Kahn as Clinical and Research Fellow in Medicine for one year, beginning November 1, 1959;

Dr. John M. Kuldau as second year Resident in Psychiatry at McLean, beginning July 1;

Dr. Jacob C. Wolterbeek as second year Resident in Psychiatry at McLean, beginning July 1.

To appoint:

Anthony L. Andrikides, Ph.D. as Research Fellow in Orthopedic Surgery, beginning November 1, 1959;

Dr. Paul J. Binette as Research Fellow in Medicine for one year, beginning November 1, 1959;

Dr. Jacques Penot as Graduate Student Assistant in Orthopedic Surgery, for the period November 9, 1959 through January 9, 1960;

Leighton B. Richards, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning December 1, 1959;

Dr. Chuan-Tao Yu as Research Fellow in Medicine for one year, beginning November 2, 1959.

To change the appointments of:

Dr. Wallace A. Jones from the position of First Assistant Resident in Pathology to that of Clinical and Research Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;

Dr. Bruce W. Konigsmark from the position of Clinical Fellow in Neuropathology to that of Clinical Fellow and Acting Assistant Resident in Neurology, retroactive to July 1, 1959;

Dr. Merrill K. Wolf from the position of Assistant Resident in Neurology to that of Research Fellow in Neurology, as of October 19, 1959.

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MASSACHUSETTS GENERAL HOSPITAL'S 150TH ANNIVERSARY CAMPAIGN

A goal of $20,000,000 for the Massachusetts General Hospital's 150th Anniversary Campaign was announced at a special dinner of the Corporation, held on December 3 at the Harvard Club.

Mr. Francis C. Gray, Chairman of our Board of Trustees, greeted the more than 200 guests, who included sponsors of the 150th Anniversary Program and some members of the Hospital Staff.

Mr. Gray said, "It gives me great pleasure to be able to announce that Bishop Henry Knox Sherrill has returned to give the Hospital a hand at this time and has accepted the Honorary Chairmanship of the 150th Anniversary Program.

"At the same time, two Trustees have agreed to serve as Co-Chairmen of the drive," Mr. Gray added. "Both are well known to the community, as each has served as a Red Feather General Chairman. They are Mr. Philip H. Theopold and Mr. Francis W. Hatch."

Bishop Sherrill was a former Trustee of the Massachusetts General Hospital for 18 years and Chairman of the Board for 12 years until 1946, when he resigned upon being elected Presiding Bishop of the Protestant Episcopal Church in the United States of America. His retirement in 1958 has permitted him to assume again an active part in the affairs of the Hospital — this time a leading role in the 150th Anniversary Program.

Mr. Hatch has been a member of the Board of Trustees since 1947. He brings a wealth of experience to his position as Co-Chairman of the 150th Anniversary Program from his various activities in connection with the Red Cross, the Harvard Alumni Association, and the Boy Scouts of America.

Mr. Theopold has been a Trustee of the Massachusetts General Hospital since 1955. The Anniversary Program will benefit greatly from his experience as Trustee and Treasurer of St. Mark's School and as National Alumni Chairman of A Program for Harvard College.

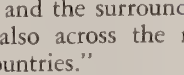
Following Mr. Gray's remarks, Mr. Theopold said, "Improved care of the patient is our primary objective. In every instance, as we formulated our plans for the 150th Anniversary Program, whether in planning the Clinics Building or the Radiation Center, the patient was given the major consideration. The same holds true with the new operating rooms, which will offer every possible advantage to the surgeon to serve his patient better.

"It is easy to understand a goal of $20,000,000 when you add capital improvements for the McLean Hospital and endowment for research to a new Clinics Building, Radiation Center, and a building for Surgical and Special Services.

"We are well aware that $20,000,000 is a big goal, but these projects are big and important. The 150th Anniversary gives us the opportunity to keep the Massachusetts General Hospital in the forefront as one of the greatest hospitals in the world, and to provide the facilities to meet the demands of the patient, not only in Boston and the surrounding communities, but also across the nation and in foreign countries."

Mr. Hatch, Co-Chairman of the drive, said, "Toward the goal which has already been mentioned, I am pleased to report that $4,364,222.48 has been received in the past twelve months. This includes gifts and pledges from the Staff and Trustees of the M.G.H. Of the amount received to date, 31% has come from outside New England."

The schedule for the 150th Anniversary program, which terminates in 1961, was announced in detail at the dinner. The first three steps are a new Clinics Building, a Radiation Center, and a Surgical and Special Services Building. Together with endowment and other capital improvements, these buildings will enable the Massachusetts General Hospital to enter its second one hundred fifty years strengthened and better equipped to render greater service.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biophysics

Balazs, E. A., Bothner-By, A. A., and Gergely, J.
Proton magnetic resonance studies on water in the presence of various macromolecular substances.
J. Molec. Biol. 1:147.

Neurology

England, A. C., Jr., and Schwab, R. S.
The management of Parkinson's disease.
A.M.A. Arch. Int. Med. 104:439.

Scholl, M. L., Abbott, J. A., and Schwab, R. S.
Celontin — A new anticonvulsant.
Epilepsia 1:105.

Schwab, R. S.
Problems in the treatment of Parkinson's disease in elderly patients.
Geriatrics 14:545.

Schwab, R. S.
Über die Parkinsonsche Krankheit.
Deutsche med. Wchnschr. 84:1485.

Neurophysiology

Brazier, M. A. B.
Impressions of the colloquium on electroencephalography and higher nervous activity held in Moscow, USSR, Oct. 6 to 11, 1958.
In Transactions of the Second Conference on the Central Nervous System and Behavior, M. A. B. Brazier, Editor, New York, Josiah Macy, Jr. Foundation.

Neurosurgery

Hirsch, O.
A patient with a pituitary tumor operated on by the cranial method, re-operated four years later for a recurrence by the trans-sphenoidal method and followed for 37 years.
Confinia neurol. 19:398.

Otolaryngology

Meltzer, P. E., and Kelemen, G.
Pyocyaneous osteomyelitis of the temporal bone, mandible and zygoma.
Laryngoscope 69:1300.

Psychology

Talland, G. A.
Age and the effect of anticipatory set on accuracy of perception.
J. Gerontol. 14:202

Talland, G. A.
The interference theory of forgetting and the amnesic syndrome.
J. Abnorm. & Social Psychol. 59:10.

Talland, G. A.
Inter-sensory perceptual set.
Brit. J. Psychol. 50:231.

Talland, G. A., and Ekdahl, M.
Psychological studies of Korsakoff's psychosis: IV. The rate and mode of forgetting narrative material.
J. Nerv. & Ment. Dis. 129:391.

Talland, G. A., and Miller, A.
Perceptual sets in Korsakoff's psychosis.
J. Abnorm. & Social Psychol. 58:234.

Radiobiology

Oyama, T., Potsaid, M. S., and Slingerland, D. W.
Effect of Di-ethyl ether anesthesia on thyroid function of rats: Pituitary, adrenal and thyroid relationship.
Endocrinology 65:459.

Radiology

Millard, D. G.
A Richter's hernia through the inferior lumbar triangle of Petit. A radiographic demonstration.
Brit. J. Radiol. 32:693.

Surgery

Austen, W. G., Monaco, A. P., Richardson, G. S., Baker, W. H., Shaw, R. S., and Raker, J. W.
Treatment of malignant pelvic tumors by extracorporeal perfusion with chemotherapeutic agents.
New England J. Med. 261:1037.

Monaco, A. P., and Austen, W. G.
Treatment of Kaposi's sarcoma of the lower extremity by extracorporeal perfusion with chemotherapeutic agents.
New England J. Med. 261:1045.

Books

Beecher, H. K.
Measurement of subjective responses: Quantitative effects of drugs.
New York, Oxford University Press.

Brazier, M. A. B. (Editor)
Transactions of the Second Conference on the Central Nervous System and Behavior.
New York, Josiah Macy, Jr. Foundation.

Faxon, N. W.
The Massachusetts General Hospital, 1935-1955.
Cambridge, Mass., Harvard University Press.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Arieti, S. (Editor)
American handbook of psychiatry, vol. 1.
New York, Basic Books, Inc., 1959.
(19S)

Beecher, H. K.
Measurement of subjective responses.
New York, Oxford University Press, 1959.
(22D)

Begg, R. W. (Editor)
Canadian Cancer Conference, Proceedings of the, vols. 1 and 3.
New York, Academic Press, Inc., 1955 and 1959.
(13V)

Berger, E., and Melnick, J. L. (Editors)
Progress in medical virology, vol. 1.
Basel, S. Karger, 1958.
(11A)

Blasingame, F. J. L.
1846-1958 Digest of Official Actions. A.M.A.
Chicago, American Medical Association, 1959.
(1R)

Boulanger, P., and Polonovski, J.
Traité de biochemie générale, vol. 1, pts. 1 and 2.
Paris, Masson et Cie, 1959.
(5A)

Brown, M.
Effective supervision.
New York, Macmillan Co., 1956.
(39Ca)

Burnet, F. M., and Stanley, W. M. (Editors)
The viruses, vol. 1.
New York, Academic Press, Inc., 1959.
(8G)

Cadwallader, L. H., and Rice, S. A.
Principles of indexing and filing.
Baltimore, The H. M. Rowe Company, 1958.
(1S)

Ciba Foundation Study Group No. 1.
Pain and itch: Nervous mechanisms.
Boston, Little, Brown and Company, 1959.
(19C)

Ciba Foundation Study Group No. 2.
Steric course of microbiological reactions.
Boston, Little, Brown and Company, 1959.
(9C)

Coers, C., and Woolf, A. L.
The innervation of muscle.
Oxford, England, Blackwell Scientific Publications, 1959.
(19D)

Coffin, K. B., and Colwell, R. F.
The medical secretary in a medical hospital or dental office.
New York, Macmillan Co., 1959.
(1S)

Croxton, F. E.
Elementary statistics with applications in medicine and the biological sciences.
New York, Dover Publications, Inc., 1953.
(31E)

Deuel, H. J.
The lipids: Biochemistry, biosynthesis, oxidation, metabolism, and nutritional value, vol. 3.
New York, Interscience Publishers, Inc., 1957.
(5D)

DuVries, H. L.
Surgery of the foot.
St. Louis, The C. V. Mosby Company, 1959.
(18O)

Gollan, F.
Physiology of cardiac surgery.
Springfield, Ill., Charles C. Thomas, 1959.
(15D)

Gurr, E.
Methods of analytical histology and histochemistry.
Baltimore, The Williams and Wilkins Company, 1958.
(5Am)

Haurowitz, F.
Progress in biochemistry since 1949.
New York and London, Interscience Publishers, Inc., 1959.
(5A)

Kjellberg, S. R., and others.
Diagnosis of congenital heart disease, ed. 2.
Chicago, The Year Book Publishers, Inc., 1959.
(15E)

Korey, S. R., and Nurnberger, J. I. (Editors)
Progress in neurobiology, vol. 4: The biology of myelin.
New York, Paul B. Hoeber, Inc., 1959.
(19Ab)

Laird, D. A., and Laird, E. C.
The techniques of delegating.
New York, McGraw-Hill Book Company, Inc., 1957.
(39Ca)

Lansing, A. I. (Editor)
The arterial wall.
Baltimore, The Williams and Wilkins Company, 1959.
(15B)

Means, J. H.
William Jason Mixter, 1880-1958.
Murray, 1959.
(1Ea)

Merrill, J. P.
The treatment of renal failure.
New York, Grune & Stratton, 1955.
(17E)

Mullane, M. K.
Education for nursing service administration.
Battle Creek, W. K. Kellogg Foundation, 1958.
(39Ca)

Netter, F. H.
Ciba Collection of medical illustrations, vol. 3, pt. 1.
Summit, N. J., Ciba, 1959.
(1Fi)

Pieper, F.
Modular management and human leadership.
Minneapolis, Methods Press, 1958.
(39Ca)

Simon, H. A.
Administrative behavior, ed. 2.
New York, Macmillan Co., 1957.
(39Ca)

Thompson, E. T., and Hayden, A. C.
Textbook and guide to the standard nomenclature of diseases and operations.
Chicago, Physicians' Record Company, 1958.
(8B)

Thornton, C. S. (Editor)
Symposium on regeneration in vertebrates.
Chicago, The University of Chicago Press, 1959.
(2Am)

Uris, A., and Shapin, B.
Working with people.
New York, Macmillan Co., 1949.
(39Ca)

Watterson, R. L. (Editor)
Symposium on endocrines in development.
Chicago, The University of Chicago Press, 1959.
(14K)

Zirkle, R. E. (Editor)
A symposium on molecular biology.
Chicago, The University of Chicago Press, 1959.
(5Am)

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DEPARTMENT OF RADIOLOGY

At the Annual Meeting of the Radiological Society of North America held in Chicago, November 15 through 20, 1959, a Certificate of Merit was awarded the scientific exhibit "Fibrous dysplasia", presented by Drs. Roy Barry (deceased April 1959), H. Robert Dudley, Jr., and William H. Harris.

Dr. Laurence L. Robbins presided at the Annual Meeting. The title of his Presidential Address was "The future of radiology".

Dr. Stanley M. Wyman recently visited ten hospitals in the Michigan Peninsula, as an inspector for the American Board of Radiology.

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VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

The many activities of the Staff Wives Association, which are carried on throughout the year, include the Chapel Concerts. Every other Wednesday afternoon at 3 o'clock there is a half-hour concert given in the Chapel by professional musicians for the enjoyment of patients of the Hospital. Mrs. Milford D. Schulz is in charge of this major activity, assisted by a committee of twenty-five, who help to plan the programs and are present at the concerts to bring the many wheel-chair patients to the Chapel from the various floors of the Hospital and return them to their respective areas.

The first program this past autumn featured a pianist, Mina Kessler, a former teacher at the Juilliard School of Music. She gave the premier performance in this country of a Kabalevsky rondo.

The second program was a record concert.

The third program featured Mrs. Nathan B. Talbot, mezzo-soprano, who has appeared several times at Chapel Concerts. The fourth program featured a flutist, Anton Winkler, formerly with the Minneapolis Symphony Orchestra.

The fifth concert was a Christmas program by pupils from the Beaver Country Day School. Girls from Beaver have appeared many times at the Chapel Concerts.

Following the holiday season, the concerts resumed on January 6 and will continue through next May.

Anyone interested in helping with this important activity is asked to get in touch with Mrs. Schulz.

DISTAFF CLUB

The Distaff Club had a busy and happy holiday season. A bake sale held on November 24 was most successful in helping to finance the delightful Christmas Party, held in the newly decorated Penthouse on December 11, for husbands and their wives as well as for bachelor members of the House Staff and their dates. Dr. and Mrs. John W. Madden were the host and hostess.

On December 15, a gift-wrapping party was held, also in the Penthouse, to wrap presents for the MGH Children's Christmas Party. Mrs. Rodman D. Starke was the hostess.

We are looking forward to going to Boston City Hospital in January, to meet with the Boston City Wives and to hear Dr. Wislocki, from Vassar College, speak on "The parents' responsibility in education".

The annual Christmas tea in honor of our Volunteers was given in Bartlett Hall by the Trustees and the General Director of the Hospital on December 2. Not only was tea served and not only did Arlène Andrew and Dick Wulf play the piano delightfully, as always, but also there were exhibits this year to show what some of our Volunteers are doing for us in addition to their usual clinic and patient-care services.

Portrait drawing was demonstrated by Mrs. Royce Baker, with several charming models who were present.

Members of the Institute of Contemporary Art exhibited the Art Wagon, with Mrs. William G. Constable in charge, assisted by Mrs. Shepherd Brooks and Mrs. Jose Luis Sert.

A familiar sight in the corridors and rooms of the Hospital — the Traveling Store, sponsored by the Ladies' Visiting Committee — was shown by Mrs. Karl Riemer and Mrs. Francis B. Haydock, members of the Committee.

Members of Red Cross Arts and Skills, Nurses' Aides, and Gray Ladies who were present included Mrs. Norman Goehring and Mrs. Morris Rosenthal, who showed textile painting, while creative work with shells was demonstrated by Mr. William Fleming. Representatives of the workers in ceramics on the Children's Recreation Service, Burnham Memorial, were Mrs. Joseph Trainor and Mrs. Nelson Vogelsohn. Mrs. Albert L. Fisher explained certain aspects of the Junior Red Cross Service and its exhibits.

Members of the Board of Trustees and the Hospital Staff stood in the receiving line to welcome the invited guests.

MASSACHUSETTS EYE & EAR INFIRMARY

The following appointment was made at the meeting of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on November 16, 1959:

Dr. Robert C. Lawlor — Assistant in Ophthalmology

THE GROWTH OF MEDICAL SCIENCE IN ANCIENT GREECE

The growth of medicine in ancient Greece is an interesting and challenging area of medical history. During this period mysticism, inductive philosophy, and careful observation influenced the analysis of diseases and their causation. The cult of Asklepios attempted to cure diseases through religious ceremony, philosophers sought to explain disease in terms of rational concepts, and the writings attributed to Hippocrates contained a highly developed observational science. These apparently conflicting doctrines coexisted in time and place, and may even have been practised by the same men. A recent trip to Greece provided the stimulus to our interest in this subject, and while we have not been able to find a satisfactory explanation for the interrelationships of these three apparently inconsistent approaches, a good deal of data is available and certain hypotheses can be formulated.

Recorded Greek history begins with the works of Homer, which probably date from the 9th century B.C. The *Iliad* and *Odyssey* describe a 12th century B.C. Bronze Age civilization in the Eastern Mediterranean regions, long thought to be legendary. However, the excavations of Schleimann at the end of the 19th century uncovered two of the principal cities of ancient Greece — Mycenae and Troy. The city of Mycenae is now deserted and stands on a sun-baked hill on the plain of Argos. One can still see the Lion Gate through which Agamemnon led his army to lay siege to Troy, over 3,000 years ago. Greek guides even point to the small room in which Agamemnon was murdered, on his return home, at the instigation of his wife Clytemnestra.

Homer regarded diseases as coming from the gods. The *Iliad,* for example, begins with a description of a pestilence inflicted upon Agamemnon's army by the angry god Apollo. In addition to this and other allusions to the magical causation of disease, the Homeric writings describe rudimentary battlefield surgery. According to Fröhlich, one hundred forty wounds are mentioned (with a mortality rate of 77.6%), and some rather accurate anatomic observations are given and extraction of foreign bodies as well as the therapeutic use of bandages and compresses to stop bleeding are described. Although the great heroes were themselves endowed with some knowledge of the healing art,

> A wise physician, skill'd our wounds to heal
> Is more than armies to the public weal.
> (*Iliad*)

The plane tree, growing in the lobby of the Warren Building

Thus, even in this legendary era both a mystical art and a practical science existed.

In the 12th century B.C. the Mycenaean civilization was overrun by Dorian invaders from the north, whose iron weapons gave them the advantage over the more civilized people of southern Greece. Very little history was recorded for the next four centuries, and it was not until the 7th century B.C. that the beginnings of the great Hellenic civilization emerged from these Dark Ages.

The reawakening of culture was accompanied by the appearance of philosophers whose influence dominated Western thinking for over 2,000 years. Geometry and astronomy were introduced into Greece by Thales of Miletus, who was born in about 640 B.C. Pythagoras, a century later, described the universe as being composed of four elements — Earth, Air, Fire, and Water. Each element was endowed with a quality — dry, cold, hot, and moist, respectively. From these four elements either Pythagoras or his pupil, Alcmaeon of Croton, evolved the doctrine of the four humors — *blood* which was hot and moist, *yellow bile* which was hot and dry, *black bile* which was cold and dry, and *phlegm* which was cold and moist. Disease was believed to be the result of an excess of one or more of these humors and health was restored by the removal of this excess. Thus arose the practices of bleeding and purging, and the terms bilious, phlegmatic, sanguine, and melancholic (melancholy = black bile). The dogma of the humors dominated medical thought in ancient Greece and Rome, and continued on in Europe through the Middle Ages. It was only with the emergence of the great anatomists of the last hundred years that it was superseded by the currently accepted ideas of the origins of disease.

After the defeat of the Persians in 479 B.C., Athens became the leading naval power of the Mediterranean world. In 461 B.C. Pericles, a man of culture and learning, became the ruler of Athens. Under his government, the arts and sciences flourished and Athens became the center of Greek artistic and philosophic growth. The remains of the magnificent temples of the Acropolis — the Parthenon, Erechtheum, Propylaea, and the Temple of Nike Apteros — still stand today, though sculptures have been destroyed, stolen, or moved away to museums, leaving only the bare skeletons of Attic marble. Stained a dull orange color by two thousand years of exposure to the elements, these marble temples are an overpowering tribute to the art of ancient Greece.

During this "Golden Age" medicine flourished in Greece. There can be no doubt that a great physician named Hippocrates lived in the 5th century B.C., for he is mentioned by two of his contemporaries — Plato and Aristotle. Unfortunately, the earliest biography of Hippocrates was written by Suidas in the 11th century A.D., by which time most of the details of his life had become legendary. He was born in approximately 460 B.C. on Cos, a small Greek island just off the coast of Asia Minor. After a boyhood spent on Cos, where he began his study of medicine, he traveled through Greece, and his fame grew until he came to be regarded as the greatest of the Greek physicians. There is now an ancient plane tree on Cos, the trunk of which is over ten feet thick. Legend has connected this tree with the most famous of the Greek physicians. Unfortunately, it is very doubtful whether this was the tree under which Hippocrates saw patients and taught his students. A slip from this tree is growing in the lobby of the Warren Building here at the Massachusetts General Hospital, thanks to Dr. Wilder G. Penfield of Montreal, Canada, who sent us the seedling.

The writings of Hippocrates have been preserved through the efforts of many translators; the oldest manuscript extant was done in the 4th century A.D. Among the works attributed to Hippocrates are writings which are undoubtedly the work of a number of authors, and some historians believe that the Hippocratic Collection is actually the collected works of the medical library of Cos. It does seem likely, however, that the finest of these descriptive accounts of disease were recorded by the great physician of the 5th century B.C.

Hippocratic medicine is characterized by careful descriptions of disease; the religious theories of causation and cure also prevalent at the time were scarcely mentioned. Indeed, the divine origin of epilepsy is specifically denied. Philosophic doctrines did influence the discussions of Hippocrates, but these, too, were subordinated to detailed observations. The Hippocratic physician recognized that collections of signs and symptoms made up a disease, that each disease ran a somewhat predictable course, and that alterations within the body and its environment could influence the occurrence and prognosis of the disease. An excellent example is the following description of tetanus:

> The master of a ship mashed the index finger of his right hand with an anchor. Seven days later a somewhat foul discharge appeared; then trouble with his tongue — he could not speak properly. The presence of tetanus was diagnosed, his jaws became pressed together, his teeth were locked, then symptoms appeared in his neck: on the third day opisthotonos appeared with sweating. Six days after the diagnosis was made he died.
>
> (Hippocratic Collection)

The therapy of the Hippocratic physician was rather benign, compared with that practised elsewhere in the ancient world. Since recovery was thought to be the natural process, the physician attempted only to remove obstacles to healing and let nature take its course. Treatment included changes in evironment, baths, purgatives and emetics, venesection, barley water and barley gruel, wine, oxymel (honey and vinegar), and hydromel (honey and water). These mild therapeutic agents may be compared with pork fat, dog feces, and human urine given orally by the ancient Assyrians.

If the Hippocratic Collection described the true state of Greek medical knowledge in the 5th century B.C., this brief survey would now be complete. However, a magical religion apparently also played a leading role in the practice of medicine at this time. This mystical and superstitious form of medicine was widely disseminated under the supervision of the influential cult of Asklepios. (Socrates's last words, recorded by Plato in *Phaedo,* were: "Crito, I owe a cock to Asklepios; will you remember to pay the debt.")

Asklepios is mentioned by Homer as a chieftain from Thessaly who was renowned for his knowledge of medicine. By the 8th century B.C. he was endowed with divine powers, and in the 5th century B.C. a complex legend had grown up around him. He was said to have been a demigod born of a union between Apollo and Coronis, the daughter of the King of Boeotia. As a newborn child, he was exposed on the slopes of Mount Thittion, near Epidauros. He escaped death by being suckled by a goat, and went as a pupil to Chiron, a physician who was transformed by legend into a centaur. Asklepios became a famous physician of Thessaly and, according to legend, was killed at the instigation of Pluto, the god of the underworld whose realm was being depopulated by the wonderful healing arts of Asklepios. The Temple of Epidauros was erected near Mount Thittion, and preserved there is a semicircular theater, built on a hillside which faces the sacred mountain. With a seating capacity of 14,000 people, its acoustics are so perfect that a whispered voice from the stage can be heard in the topmost seats. The invaders of two millenia have left this wonderful theater almost undamaged, and it is now the site of an annual festival, at which ancient Greek plays are performed.

The cult of Asklepios spread throughout Greece until there were more than two hundred temples dedicated to his worship. Each temple attempted to treat the sick by an elaborate ritual centered around a dream experienced by the patient as he slept in precincts sacred to Asklepios. The temples were built near springs from which pure water flowed, and each usually consisted of an altar on which sacrifices were made to the god, a theater for religious ceremonies, and a dormitory or abaton where the patients slept and awaited their healing dreams. Later, in the time of the Roman Empire, baths, gymnasia, stadia, and even hippodromes were added. As one walks among the ruins of these temples, the mixture of Greek and Roman structures can be seen, for it seems to have been the practice of the Romans to build their own healing baths near the already centuries-old Greek temples of medicine. On Cos, even a Christian church was erected at the site of a Temple of Asklepios.

Francis Adams wrote of these temples: "Every means that could be thought of was used for working upon the imagination of the sick, such as religious ceremonies of an imposing nature, accompanied by music and whatever else could arouse their senses, conciliate their confidence and in certain cases, contribute to their amusement." Before entering the precincts of the god, the patient was obliged to fast and often abstain from wine. Only after he was bathed and rubbed with odoriferous herbs was the patient permitted to carry out a sacrifice to Asklepios. After the sacrifice, the patient went into the abaton to sleep and await the healing dream. Some of these dreams may have been natural, some were probably induced by drugs or hypnosis, and some appear to have been feigned by priests and priestesses masking as Asklepios and the lesser gods and goddesses of medicine. The dreams were interpreted later by the priests — a practice which gave them control over the treatment which was to be given.

Tablets have been found at the excavations of some of these temples which give us some idea of the cures they advertised. These were usually miraculous in nature. Two tablets found at Epidauros will serve as examples:

No. 86 in a series of Staff photographs
Dr. Benjamin A. Barnes — Assistant in Surgery

> A man came to the god as a suppliant, he was one-eyed, he had eyelids but nothing was in the sockets which were completely empty. Some of the people in the sanctuary laughed at him because of his simplemindedness in believing that he could see when he had no trace of an eye but only a place for it. As he slept in the abaton a face appeared to him; he dreamed that the god cooked a medicine, opened his eyelids and poured it in. As the day came he walked away seeing with both eyes.
>
> Hermos of Pasos: The god cured him of his blindness, but when he refused to pay the honorarium to the sanctuary, the god made him blind again as a punishment. When he returned again and slept once more in the temple, the god healed him again.

The latter inscription seems to serve as a reminder that the bills should be paid. Other inscriptions allude to the competition between temples, and their reputations were probably enhanced by the cures described on these tablets.

What was the relationship of the Hippocratic physician to these temples? Two Roman writers, Strabo and Pliny, the Elder, state that Hippocrates gained some of his medical knowledge by reading the tablets at the Temple of Asklepios on Cos. However, these uncovered tablets describe magical healing and are quite different from the accurate observations of Hippocrates. Furthermore, archeological excavations on Cos have so far uncovered no tablets or inscriptions dating from the time of Hippocrates. The oldest altar to Asklepios was erected here in 350 B.C., and the great Temple of Cos was built in the 3rd century B.C. The Temple of Asklepios at Epidauros dates from the 5th century B.C., however, so it is clear that both observational and religious medicine flourished during this period.

Hippocrates is described as one of a group called Asklepiadae in Plato's *Phaedo* and in the writings of the following centuries. W. H. S. Jones, in his translation of the Hippocratic Collection, suggests three possible organizations of the Asklepiadae which are not mutually exclusive: that they were priests of the temples, that they were a clan of hereditary physicians, or that they were a guild of physicians tracing their origin to Asklepios. The last two are probably correct, as the Hippocratic Oath describes an hereditary guild, a member of which was pledged to teach the art of medicine only to his own sons, the sons of his teachers, and "to disciples bound by a stipulation and oath according to the laws of medicine, but to none others". Whether or not they were also the priests of the temples is not clear. It seems reasonable that a flourishing temple would benefit from a consultant like Hippocrates, and that the mystical façade could have served only to attract patients. On the other hand, a secular group of Asklepiadae may have competed with the priests of Asklepios. At present, we have not been able to find conclusive evidence for either hypothesis, but further research, perhaps including another trip to Greece, may reveal the answer.

Arnold M. Katz, M.D.,
Assistant Resident in Medicine

New addresses:

Dr. Wilfred Bloomberg (r.p. *N.* 1931), State Office Bldg., Hartford 15, Conn.
Dr. Mahlon T. Easton (s. *Oph.*), 70 Carlton St., Brookline 46, Mass.
Dr. H. Louis George, Jr. (*C.M.* 1929), 100 Stone St., Watertown, N.Y.
Dr. Timothy S. Harrison (a.r.s. 1959), Dept. of Physiology, Karolinska Institutet, Stockholm 60, Sweden
Dr. Harlin G. Knierim (clin. fel. *D.* 1959), 327 Park Ave. West, Mansfield, Ohio
Dr. H. Eugene Macdonald, Jr. (*N.S.* 1931), Majuro, Marshall Islands
Dr. Arthur J. Moss (*M.* 1958), 419 Shoemaker St., Pensacola, Fla. (through June 30)
Dr. Boris Senior (*C.M.* 1950), 3 3d Ave., Lower Houghton, Johannesburg, South Africa
Dr. John B. Tallon (a.r.p. *R.* 1953 & sr. r.s. *Or.* 1959), 57 Roy St., Kitchener, Ontario, Canada
Dr. William M. Thurlbeck (a.r.p. *Path.* 1958), Massachusetts General Hospital, Boston 14, Mass.
Dr. Howard S. Yaffee (a.r.p. *D.* 1953), 60 Brattle St., Cambridge 38, Mass.

Brief bits:

Dr. Edward B. Benedict, at the invitation of Dr. Harold O. Peterson (a.r.p. *R.* 1936), Chief of Radiology at the University of Minnesota, took part in the Continuation Course in Gastrointestinal Radiology, given at the University of Minnesota Center for Continuation Study, November 2-6, 1959. His two subjects for discussion were "Varices of the esophagus" and "Inflammation of the stomach".

At the recent meeting of the American Society of Plastic and Reconstructive Surgery, held in Miami Beach, Dr. Bradford Cannon was elected Vice-President.

Dr. James C. White will serve as Chairman of the Program Committee of the Second International Neurosurgical Congress, which is to meet in Washington, D.C., in October 1961. Dr. White went to Copenhagen last September to meet with the officers and delegates of the Congress. From there he went on to Stockholm to present a paper on "Intrasellar aneurysms simulating hypophyseal tumours" before the Scandinavian Neurosurgical Congress.

THE NEWS

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No. 192 Boston, Mass. February 1960

THE ROBERT W. LOVETT MEMORIAL UNIT

STUDIES PERTAINING TO CONNECTIVE TISSUE AND ITS DISEASES*

Research in subjects related to connective tissue in general and rheumatic diseases in particular have been conducted at the Massachusetts General Hospital for the last thirty years, since the founding, by Dr. Walter Bauer, of the Unit which has become known as the Lovett Memorial Unit for the Study of Crippling Disease. The name derives from the orthopedic surgeon, Dr. Robert W. Lovett, in whose name an endowment fund was established at Harvard Medical School.

The aim of the Unit is threefold. The first is to provide, through its clinics and consultative service, the best possible medical advice and care for patients with rheumatic and other connective tissue diseases who are referred to this Hospital. In its attempt to accomplish this objective the staff of the Unit acknowledges the active participation of members of many other Services and Departments of the Hospital. The second objective is to explore many facets of the anatomy, growth and development, chemical composition and physiology of mesenchymal tissues in order to learn more about the nature, cause, prevention, and cure of its diseases. It is, however, the firm conviction of members of the Unit that basic investigation is equally justified on the grounds of the pursuit of knowledge for its own sake. The third objective is to conduct an active teaching program at both undergraduate and graduate levels.

Although these three objectives are closely interwoven, and each one contributes to the others, this report will attempt to focus primarily on the research program. The other activities of the Unit will be summarized in a subsequent publication.

One of the strongest examples of the intertwining of research and teaching is the record which is established by former investigators of the Unit who, after obtaining research (and often clinical) training, have gone to other institutions, often in academic capacities. Thus, in the last three years, Dr. Morris Soodak has become Assistant Professor of Biochemistry at Brandeis University; five men who served as clinical and research fellows during this period are now directors of connective tissue study units—Dr. Curtland C. Brown, Jr. at Albany Medical School; Dr. John J. Calabro at Seton Hall Medical School, Jersey City; Dr. John L. Decker at the University of Washington, Seattle; Dr. Adalbert F. Schubart at the University of Maryland; and Dr. John ~~L.~~ R. Ward at the University of Utah.

Three members of the group who came to us from England have returned to their home universities—Drs. Charles I. Levene and John H. Fessler to Oxford, and Dr. Sylvia Fitton Jackson to Cambridge. Two others, who came from Holland and Belgium, have also returned to their almae matres—Dr. Arnold van den Hooff to Leyden and Dr. Guy J. Isaac to Louvain. Dr. Nathan Sharon has returned to the Weizmann Institute, Israel; Dr. Sen-itiro Hakomori to Tohoku University, Japan; Dr. Willi Burgi will soon become a member of the Department of Pathology at the University of Zürich; while nearer home, Dr. Zofia T. Glaser and Dr. Thomas Nussbaumer are working at the Worcester Foundation, Shrewsbury. Dr. Renee G. Naves is Professor of Chemistry at Newton College of the Sacred Heart, and Dr. Karl Dus will soon join the Department of Biochemistry at Brandeis University. We wish them well in their new positions.

To take the places of these individuals, new people have joined the Unit from their former positions at Yale, the Universities of Arkansas, Brussels, Geneva, Montreal, Sendai (Japan), and Pennsylvania, and the Departments of Biological Chemistry and Physical Chemistry at Harvard. Dr. John A. Mills, formerly Resident in Medicine at the Massachusetts General Hospital is receiving training at the Lister Institute, London, in preparation for rejoining the Unit, as a senior member in October 1960.

The constant presentation of new ideas by the newcomers, and the stirring up of old ideas, represent some of the most stimulating facets of this exciting environment. To facilitate this, the administrative positions within the Unit rotate to a large degree. Different people coordinate the various seminars and rounds, and senior members take turns acting as Chairman of the Laboratory Committee. For 1959-60 the Chairman is Dr. Karl Schmid.

Since research in the Unit is conducted by a number of independent investigators, a review of the current work is best divided according to the interests of these men.

I. Connective Tissue Biology—Dr. Jerome Gross

One of the prime concerns of this laboratory is the attempt to correlate events taking place in the connective tissues at the level of a) interaction between large molecules, b) biosynthesis of these molecules, and c) tissue organization in terms of the normal pattern and disease.

Most of this work has related to the composition, structure, and physical chemical properties of the fibrous components, principally collagen, and mechanisms of fibril formation *in vitro*. The initial observations concerning means of reconstituting collagen from solution have already been reviewed in these pages. Briefly, it can be stated that collagen can be extracted from tissues by a number of solutions, of which the simplest is cold neutral salt solution. The evidence is strong that the fraction soluble in cold neutral solutions is newly synthesized, probably produced less than 48 hours before extraction. The amount of collagen extractible in neutral salt is sharply reduced when the animal is fed on a limited diet such that he does not gain weight. The collagen isolated from these and other tissue extracts, and purified, may be readily polymerized to typical fibrils without further enzymatic modification or the intervention of any other substances, including mucopolysaccharides or glycoproteins, at least *in vitro*.

These and other studies support the hypothesis that the fibroblast secretes the collagen molecules into the amorphous, extracellular ground substance and there, under the influence of the physiologic ionic atmosphere, temperature, and perhaps certain rate-regulating factors, the molecules aggregate spontaneously to form fibrils.

Studies on *in vitro* fibrogenesis of collagen from solutions of the purified protein have led to the observation of the time-dependent loss of solubility of newly formed fibrils. This could explain the solubility changes observed *in vivo* consequent to cessation of growth and of aging. It has also provided some experimental support for the hypothesis of decreasing solubility of biocolloids as a general time-dependent factor in biologic aging.

The work outlined above provided the basis for a productive investigation into the pathogenetic mechanism of an experimental mesenchymal disease, lathyrism. Classically this disease, produced in growing rodents and birds by feeding them a high dietary percentage of the common sweet pea or the active lathyrogenic agent β-aminopropionitrile, is characterized by marked skeletal deformities, herniae, and dissection of the aorta. Dr. Gross, in collaboration with Dr. Charles I. Levene, observed that the application of lathyrogenic agents to the chick embryos produced dosage-dependent increase in tissue fragility, quantitatively paralleled by increase in neutral salt-extractible collagen. No collagen is extractible in the normal embryo, whereas more than 50% of the total can be removed from bones, skin, and aorta within 72 hours of administering β-aminopropionitrile. The extracted molecules are normal in that they can be transformed *in vitro* to fibrils typical of the normal tissue simply by warming the cold extract to body temperature.

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*This is Publication Number 266 of the Robert W. Lovett Memorial Unit for the Study of Crippling Disease, Harvard Medical School at the Massachusetts General Hospital.

These studies were extended, in collaboration with Dr. Arnold van den Hooff, to morphologic examination of the changes in lathyrism. It was conclusively demonstrated that collagen fibrils laid down prior to administration of the drug were profoundly altered by the agent. The chick embryo has provided a quantitative assay system for lathyrogenic agents and is being used to track down the biochemical mechanism of the disease. Dr. Serge Orloff is now taking part in this program.

It was also shown that this agent could induce the reappearance of extractible collagen in skin of non-growing and aged guinea pigs where none is normally present.

These studies provide the basis for understanding the manifestations of one experimental disease on the tissue level in terms of macromolecular interactions. These studies on experimental lathyrism have provided an experimental approach to congenital and hereditary disease affecting mesenchymal tissues. In collaboration with Drs. Alan S. Cohen and Evan Calkins, our new knowledge is being applied to investigations of human congenital and hereditary disease.

One phase of an investigation of another experimental disease, vitamin-C-deficiency, has recently been completed. It was shown that neutral salt soluble collagen, the precursor of the fibrils, is not formed in the intact skin of vitamin-C-deficient guinea pigs under conditions of growth which stimulate its formation in the normal animal. No evidence could be found for an abnormal precursor collagen postulated by others.

On the tissue level, studies on the mechanism of wound contraction are being conducted in collaboration with Dr. Hermes C. Grillo of the Department of Surgery and the Huntington Memorial Laboratories. Chemical analysis of contracting wounds in guinea pig skin revealed a lack of correlation between wound contents and contraction dynamics. It did suggest a simple morphologic approach to the problem, namely, the effect on contraction of excision of various parts of the wound. Results indicated that the machinery for contraction resides in a very narrow picture frame of new tissue which underlies the margin of skin at the edge of the wound. Further studies of the mechanism of this contraction process are now under way.

Studies on the phylogenetic comparative biochemistry of collagen continue. Quantitative and qualitative analyses of the bound sugars of the collagens of several species of three invertebrate phyla plus a number of vertebrate species have been completed. Total amino acid analysis, in collaboration with Dr. Karl Piez of the National Dental Institute, of five invertebrate collagens and five fish collagens has been accomplished. Results indicate considerable variation among the phyla of all amino acids excepting glycine, which provides important chemical support for current concepts of the structure of the collagen molecule. In addition, these studies have led to a new theory, namely, that the total imino acid content, proline plus hydroxyproline, is a major stabilizing factor in the collagen molecule by reason of its steric restriction on secondary structure, replacing the older idea that hydroxyproline was mainly responsible by reason of hydrogen bond forming capacity.

During their recent stay as research fellows in this laboratory, Dr. John L. Decker investigated the acid-soluble nucleotides in rapidly growing connective tissue; Dr. John H. Fessler worked on fractionation of neutral salt-soluble collagen and the physical interaction between hyaluronic acid and soluble collagen; and Dr. Sylvia Fitton Jackson studied the chemistry of the organic matrix of developing embryonic chick bone as it related to developmental morphology and calcification.

II. Protein Chemistry—Dr. Karl Schmid

One of the chief objectives of the group of investigators headed by Dr. Schmid is to isolate, purify, and characterize glycoproteins from serum, synovial fluid, and tissue of normal and diseased patients and animals. The importance of this work stems, in part, from the fact that elevations in the serum glycoproteins are almost universal concomitants of both acute and chronic inflammatory processes. Yet the nature of the glycoproteins involved, their physiology and function, are entirely unknown.

Previous work from this laboratory defined methods for obtaining from pooled normal human plasma an alpha$_1$-glycoprotein, the so-called alpha$_1$-acid glycoprotein or orosomucoid (MW 45,000) and an alpha$_2$-globulin fraction containing as major components three glycoproteins with in part similar properties. By procedures based on solubility differences and chromatography, the alpha$_2$-acid glycoprotein has been prepared in an extremely high state of purity as judged by physical chemical, chemical, and immunochemical analyses. Taking advantage of the specific interactions with metal ions, notably those of barium and zinc, it has been possible to separate the three alpha$_2$-glycoproteins from one another. Subsequent purification has been obtained by chromatographic fractionation on Amberlite IRC-50.

Further efforts to characterize the alpha$_1$-acid glycoprotein have been carried out in cooperation with Drs. Thomas Nussbaumer and Sigetosi Kamiyama. Determination of the terminal amino acids revealed only one mole of C-terminal serine, suggesting that this protein is built of one polypeptide chain to which probably 16 to 18 oligosaccharide chains are linked. Additional investigations concerning the three-dimensional structure of this protein involved measurement of the specific optical rotation in order to determine that portion of the protein that exists in helical configuration. Studies on the characterization of the alpha$_2$-glycoproteins in terms of their chemical composition and physical chemical and chemical properties and in terms of their chemical structure are presently being carried out in collaboration with Drs. Willi Burgi and Karl Dus.

While these studies will result in a precise description of certain specific glycoproteins, any physiologic interpretations must be based upon indication of the alterations in these components under different physiologic circumstances, including disease. Preliminary studies of this sort have been undertaken in cooperation with Dr. Burgi, and consisted in a quantitation of the individual plasma glycoproteins of Cohn's Fraction VI derived from a group of patients with rheumatoid arthritis and other diseases. The significance of this investigation lies in the fact that even relatively large changes in concentration of minor glycoprotein components are seldom reflected in the total protein-bound carbohydrate of plasma.

Studies of the proteins of synovial fluid were extended to include analysis of the proteins of post-mortem synovial fluid from patients clinically free of joint diseases. Here, as with the fluids from patients with rheumatoid arthritis, the identity of these proteins with those of blood plasma was demonstrated. It is of special interest, however, that certain joint fluids are characterized by their low, relative concentration of the alpha$_2$-globulins, as compared with serum or plasma. The implication of this observation on the permeability of connective tissue barriers is at present under investigation in collaboration with Dr. Paul J. Binette.

Another phase of the work concerns a hitherto unknown form of serum albumin. The discovery of a special form of normal albumin which was homogeneous on electrophoresis at acid pH values, in contrast with the heterogeneous behavior of the usual form of this protein, was the stimulus for studies on the stability of albumin in acid solution. In a further unrelated study, a double albuminemia was investigated in collaboration with Drs. David P. Earle and Martin P. Hutt (Northwestern University Medical

School) and David Gitlin (Harvard Medical School). From this investigation it was concluded that the anomalous albumin was transmitted genetically, and the genetic change probably involved a substitution of tyrosine for the carboxyl residues of normal albumin.

As an additional responsibility, the supervision of the analytical ultracentrifuge and electrophoresis of the Hospital has been entrusted to Dr. Schmid. These two apparatus are used by both basic investigators and clinicians. A typical application of the ultracentrifuge, often a benefit to clinicians, is the serum analysis for the detection of pathological macroglobulins such as those of the Waldenström type.

III. Bacteriology—Drs. Louis Dienes and John T. Sharp

Dr. Dienes has continued his study of the pleuropneumonia group of organisms and the L forms of bacteria and the investigation of their possible pathological significance.

The transition of bacteria into L forms is a more fundamental change in the structure and growth of bacteria than any bacterial variation previously studied. The basis of the transformation is a special growth process which may appear under widely different environmental conditions injurious to bacteria.

Dr. Dienes's recent interest has centered on the following problems: a) the morphology of the L forms of bacteria and of the pleuropneumonia-like organisms and the relation of these two groups; b) the different types of L forms and the conditions which induce their formation from bacteria and their growth in culture; and c) the possible significance of these forms in infectious disease.

Dr. John Sharp's research has been concentrated in three main areas. In collaboration with Dr. Byron H. Waksman of the Department of Neurology and Bacteriology, he has been studying a form of polyarthritis which can be induced in rats by the injection of adjuvants. This subject has aroused considerable interest because of the great need for an experimental disease which is analogous, at least in some respects, to rheumatoid arthritis. One of the questions raised concerning the polyarthritis in rats is the possible role which may be played by pleuropneumonia-like organisms. Drs. Sharp and Waksman have been unable to isolate these organisms from rats with arthritis of this type and believe that these organisms can be excluded as playing an etiological role in this experimental disease. Positive evidence has been obtained that immunological factors play a determining role and it has been deduced that the reaction is probably a systemic response to an antigen or antigens in the adjuvant mixture.

Dr. Sharp has also continued his studies on the structure of L forms and pleuropneumonia-like organisms. Effort has been concentrated on examination of aminosugars and especially muramic acid, a component of the normal bacterial cell wall. Muramic acid has been found in a component of the L form, but this material is present in a different form than in the bacterium in the one strain of L form investigated. These studies are being extended to other species of L form to determine whether this material is of general significance.

Studies on a streptococcal induced nephropathy of white mice have also been conducted during the past year. Much of the effort has been devoted to characterizing some of the clinical manifestations of this experimental condition. These studies have indicated that the experimental disease is clearly a nephrotic-like syndrome in spite of the atypical histology—namely, widespread tubular necrosis. Attention is now being turned to an investigation of the mechanism of the process.

Evan Calkins, M.D.,
Associate Physician and *Director of the Robert W. Lovett Memorial Unit*
Karl Schmid, Ph.D.,
Associate Biochemist in Medicine

(The conclusion of this article will appear in the next issue.)

* * *

Mr. Ralph Lowell, a member of our Board of Trustees, was presented with a citation of merit by the National Fund for Medical Education—the organization which raises funds for the nation's medical schools. Mr. S. Sloan Colt, President of the National Fund, made the presentation at a gathering of more than one hundred Boston industrialists and educators at the Algonquin Club on December 16. Mr. Sloan and the assembled group paid tribute to Mr. Lowell for his efforts in behalf of medical education.

* * *

DR. VIETS AND MYASTHENIA GRAVIS

At the Second International Symposium on Myasthenia Gravis, sponsored jointly by the National Institute for Neurological Diseases and Blindness at Bethesda, Maryland, and the Myasthenia Gravis Foundation, Inc. of New York, a special bronze plaque was presented to Dr. Henry R. Viets at a ceremony held on April 18, 1959. Mr. Sidney O. Raphael of New York City, President of the Foundation, presented the plaque to Dr. Viets to commemorate his outstanding contributions to the subject of myasthenia gravis over the past 25 years.

In his presentation address, Mr. Raphael pointed out that Dr. Viets introduced the treatment of myasthenia with neostigmine in 1935, immediately after the preliminary report of its effectiveness by Dr. Mary Walker of London. This was the first use of this substance for the treatment of myasthenia gravis in the entire Western Hemisphere. In that same year he organized the first Myasthenia Gravis Clinic in the world at Massachusetts General Hospital. Without the active and personal support of Dr. James B. Ayer, our Chief of Neurology at that time, this clinic could not have been started and its subsequent success could not have been achieved. The clinic has met weekly without interruption, for nearly 25 years.

Mr. Raphael further pointed out that Dr. Viets has been most helpful in advising and guiding the organization of the Myasthenia Gravis Foundation, Inc. since 1952. He was the first Chairman of its Medical Advisory Board and now holds the position of Chairman *Emeritus*.

Dr. Viets has published many important papers on myasthenia gravis, and a book on the subject of thymectomy, edited by him, will appear soon. To illustrate the influence of Dr. Viets's interest in this disease at the Massachusetts General Hospital, only 30 patients with myasthenia were seen here between 1900 and 1935. Since the opening of the clinic, we have compiled records of over 500 names in our special myasthenia gravis file. These patients have come to the Massachusetts General Hospital not only from all over the United States, but from as far away as South Africa. In spite of the fact that this condition is a relatively rare disease in the Department of Neurology at the present time, the following members of our Staff—all of whom have worked with Dr. Viets—now look after these particular patients, and are regarded as experts in the field of myasthenia gravis: Drs. Robert S. Schwab, Vincent P. Perlo, William H. Timberlake, Pierre M. Dreyfus, and Henry deF. Webster.

At a ceremony held on December 21, the bronze plaque honoring Dr. Viets was installed on a wall in the headquarters of the Nerve Clinic, which is on the 3d floor of the Clinics Building.

* * *

A ceremony, dedicating a new Chapel window in memory of Dr. W. Franklin Wood, was held on Sunday, January 17, in the Samuel Eliot Memorial Chapel at McLean Hospital.

The Board of Trustees, at their meeting on December 18, 1959, voted to appoint:

- Dr. Luther C. Hansbarger as an Exchange Assistant Resident on the Children's Medical Service, for the period December 12, 1959 through January 20, 1960;
- Dr. David T. Mahony as Assistant Resident in Urology, for a period of six months, beginning December 1, 1959;
- Dr. Alan C. Markland as Clinical Fellow, acting as Assistant Resident in Urology, beginning January 1;
- Dr. Perry F. Mullinax, Jr. as Clinical and Research Fellow in Medicine for one year, retroactive to July 1, 1959;
- Dr. James J. Pollard as Second Assistant Resident in Radiology, beginning January 1, 1961;
- Dr. Dorothy A. Wescott as Clinical Fellow in Anesthesia for one year, beginning January 16;
- Dr. Raleigh L. Wright as Assistant Resident in Neurosurgery, assigned to the Boston V.A. Hospital as Junior Resident in Neurosurgery.

At their meetings on December 9 and 23, the General Executive Committee voted:

To promote:

Dr. Chaim I. Mayman to the position of Resident in Neurology for one year, beginning July 1;
Dr. Edwin W. Salzman from Second to First Assistant Resident in Surgery, beginning January 1;
Dr. Gerald F. Winkler to the position of Resident in Neurology for one year, beginning July 1.

To extend the appointment of:

Dr. Fernando A. Cardenal as Clinical Fellow in Orthopedic Surgery, from January 1 through February 29.

To reappoint:

Dr. William C. Amman as Graduate Student Assistant in Medicine, assigned to Allergy, for one year, beginning January 10;
Laurence C. Bonar, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;
Dr. Leslie J. DeGroot as Clinical and Research Fellow in Medicine for one year, beginning January 1;
Dorothy K. Stearns, Ph.D. as Research Fellow in Medicine for one year, beginning January 23.

To appoint:

Dr. Sidney R. Cooperband as Research Fellow in Medicine for one year, retroactive to July 1, 1959;
Eubert J. Daniel, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning December 29, 1959;
Dr. John Mealey, Jr. as Clinical Assistant in Neurosurgery, this appointment to run concurrently with his position as Resident in Neurosurgery, for a period of eight months, beginning January 1;
Dr. Jan Trabka as Research Fellow in Neurology, assigned to Neurophysiology, for a period of eight months, beginning November 9, 1959.

* * *

SOCIAL SERVICE ADVISORY COMMITTEE

Our Social Service Advisory Committee observed its 50th anniversary at a Christmas coffee party on December 17. This was also an occasion to honor Dr. Edward L. Young, who has served for 20 years as Chairman of the Committee. Chaplain William B. Spofford and Dr. Edward F. Bland addressed the group. Mr. Spofford gave the following address:

To: Imperial Department of Public Welfare and Administration
From: Octavia Lucia Verus, worker in Bethlehem regional office
Date: Month of the Festivals of Winter —29th Day

In view of the Imperial census, ordered this month by the Supreme Pontiff, Caesar Augustus, all reports from this office will, in the immediate future, be tardy and limited. We will, however, seek to keep you informed as to the number of cases handled and give you indication of their dispensation, with notification as to whether they are to remain "open" or "closed" on our departmental books. Due to the requirement of the census that each Palestinian citizen be registered in his native town, our office has been overtaxed during the past fortnight, with both workers and the case-apprentice laboring to the limit of their capacities. The necessity of traveling to one's birthplace in the dead of winter in order to meet the census requirement has meant that we have had some unusual cases and, I'm afraid, has seriously overextended our local budget. Such expenses, we believe, were not disbursed contrary to departmental regulations and we welcome the annual audit in the spring to justify such expenditures.

Some typical cases might give you a clearer picture of what has transpired:

1. First, an ancient sheepherder, who, according to his papers has already exceeded his three-score and ten years, walked to Bethlehem from Hezron. He arrived here obviously suffering from extreme fatigue and malnutrition. We paid for five meals for him, plus medical care. Unfortunately, such extreme exertion was overwhelming for his ancient body and he died. Since he had no living kin, we paid for the burial in accordance with Rule 7-c of the department, which reads: "Workers may legitimately expend funds for burial services for indigent natives provided a. no blood-relatives can be located and b. said recipients are not listed in the criminal files of the state." Dispensation: Case closed due to death of client.

2. Secondly, a family of five arrived by mule from Joppa on the coast. The first night in town, the youngest son, aged three, took a chill and then a fever. We were called in, together with the medical man, who diagnosed his case as typhus. This necessitated payment for medical treatment, two funerals, and the rent of an isolation house for the three remaining members of the family. Dispensation: Case remains open until remaining members of the family return to Joppa or enter the life of the Shades.

It is to be pointed out that such cases meet the eligibility requirements established by the Department of Public Welfare and Administration. Others, however, were not so lucky, and the following case may supply us with statistics to show how unrealistic and unfair our present regulations often prove to be.

On the night of the 24th, which was exceedingly cold in this high mountainous region, we were visited by the keeper of the Imperial Eagle Hostelry. He informed us that a man from Nazareth, together with his young wife in advanced stage of pregnancy, had applied there for lodging. Due to the census and the holidays, he had no room available. He did make room for them in the stable of the inn and there, during the night, she gave birth to a son. Despite the unsanitary nature of the setting, both mother and child survived. We made a call to the stable (on my monthly statistics, you will see it is asterisked under the "house calls") to find that some members of the community—shepherds, strange merchants who happened to be in town, and others—had brought them some comforts—food, blankets, and, perhaps motivated by the spirit of the Imperial holidays, some rich gifts. We talked with the father, a carpenter from Galilee (town of Nazareth), who said that they had no funds, since his last savings had gone to purchase a poor donkey to bear his pregnant wife on the journey. We, however, were not able to help him any, since his legal eligibility was in Nazareth. The workers in this office, moved by the courage of the mother and father, and also the winsomeness of the baby, did collect some warm clothes and gave them to them. (I can see you shaking your head, Quintus, and saying, as you did in class: "The trouble with women workers is that they often think with their hearts and glands instead of with their heads!" So be it. We feel on occasion that compassion is more important than Imperial regulations. Please, as my former teacher and current supervisor, delete the above prior to recording this report in the departmental records. I would hate for it to be seen by the auditor.) We were unable to find more suitable lodging for the family, again due to the limitations of our eligibility requirements. Today, we made another call to the stable, only to find nothing there but the usual beasts. The innkeeper informed us that the party had left on the road to Egypt instead of north toward Nazareth. I have not had a chance to check further since things are in a turmoil here, with the local tyrant suddenly starting one of those recurrent blood-baths which seem to plague this section of the Empire. For some reason, he has been taking away all the first-born sons of all Jewish families. This crisis will, I am sure, further tax our office and our budget. Dispensation: Case closed due to disappearance of clients.

[We regret that Dr. Bland's remarks were not recorded, which makes it impossible to include them here.—*Editor*]

MASSACHUSETTS EYE & EAR INFIRMARY

The following appointments were made at the meeting of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on December 7, 1959:

Dr. Frank W. Brady—Fellow in Otolaryngology;
Dr. Julianna Fodor—Fellow in Ophthalmology;
Jacques Gosteli, Ph.D.—Fellow in Biochemistry, beginning March 1;
Dr. Donald K. Lewis—Director of the Winthrop Foundation;
S. Peter Marfey, Ph.D.—Director of the Biochemistry Laboratory;
Dr. Daniel Miller—Associate Surgeon in charge of the Otolaryngological Section of the Tumor Clinic;
Dr. John C. Trakas—Assistant in Otolaryngology;
Dr. Francis L. Weille—Surgeon to the Service for the Deaf.

At the Annual Meeting of the Board of Managers of the Eye and Ear Infirmary, held on December 9:

Dr. Hugh C. Donahue was not reappointed as a member of the staff;

Dr. George F. Reed was promoted to Associate Surgeon in Otolaryngology.

* * *

VOLUNTEER GROUPS

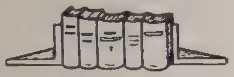
DISTAFF CLUB

On January 14, members of the Distaff Club were the guests of the Boston City Hospital House Officers' Wives Club, to hear Dr. Florence C. Wislocki speak on "The parents' role in education". Dr. Wislocki, Assistant to the President at Vassar, is a noted psychiatrist who has done considerable work with child guidance clinics.

Also in January, our Literary Club held its first meeting at the home of Mrs. G. Melville Williams, to plan its program for reviewing books in the future months.

On January 21, members of our Volunteer Project met at the Hospital with Miss Mary Ruth Wolf, Director of Volunteers at M.G.H., for instruction in orientation to our volunteer work here at the Hospital. Other Distaff members were baby sitters in the Penthouse for those doing volunteer work. They will continue to provide this service throughout the year.

Plans are coming along well for the Annual Spring Formal, to be held in May at the M.I.T. Faculty Club. This is the first year that there will be a dinner in addition to the dance. Mrs. Harold C. Urschel is the chairman of this hardworking committee.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Katz, A. M., and Chernoff, A. I.
Structural similarities between nemoglobins A and F.
Science 130:1574, 1959.

Katz, A. M., Dreyer, W. J., and Anfinsen, C. B.
Peptide separation by two-dimensional chromatography and electrophoresis.
J. Biol. Chem. 234:2897, 1959.

Dermatology

Blank, I. H.
Protection against the invasion of bacteria and fungi.
In The human integument, Washington, D.C., American Association for the Advancement of Science, p. 47, 1959.

Griesemer, R. D.
Protection against the transfer of matter through the skin.
In The human integument, Washington, D.C., American Association for the Advancement of Science, p. 25, 1959.

General Medicine

Currens, J. H.
Medical progress: Evaluation and treatment of the patient with an elevated blood pressure: With special reference to specific conditions amenable to surgical correction.
New England J. Med. 261:1062, 1959.

Otolaryngology

Jako, G., Weille, F. L., Palmer, P. E., and Irwin, J. W.
An experimental study of the dynamic circulation of the labyrinthine fluids.
Ann. Otol., Rhin. & Laryng. 68:733, 1959.

Psychiatry

Weisman, A. D.
The psychodynamic formulation of conflict.
A.M.A. Arch. Gen. Psychiatry 1:288, 1959.

The next issue of THE NEWS will be the last one in which 1959 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Adams, R. (Editor)
Organic reactions, vol. 10.
New York, John Wiley & Sons, Inc., 1959.
(5P)

Anfinsen, C. B., and others. (Editors)
Advances in protein chemistry, vol. 14.
New York, Academic Press, Inc., 1959.
(5B)

Begg, R. W. (Editor)
Canadian cancer conference, vol. 2.
New York, Academic Press, Inc., 1957.
(13V)

Benesch, R., and others. (Editors)
Sulphur in proteins.
New York, The Macmillan Co., 1959.
(5B)

Blake, J. B.
Benjamin Waterhouse and the introduction of vaccination: A reappraisal.
Philadelphia, University of Pennsylvania Press, 1957.
(1Ea)

Blake, J. B.
Public health in the town of Boston, 1632-1822.
Cambridge, Mass., Harvard University Press, 1959.
(32Ah)

Blum, H. F.
Carcinogenesis and ultraviolet light.
Princeton, N. J., Princeton University Press, 1959.
(13V)

British Postgraduate Medical Federation. University of London.
Lectures on the scientific basis of medicine, 1957-58, vol. 7.
London, The Athlone Press, 1959.
(6A)

Brooks, M. C., and Cranefield, P. F.
The historical development of physiological thought.
New York, The Hafner Publishing Co., 1959.
(4Ah)

Butler, J. A. V.
Inside the living cell.
New York, Basic Books, Inc., 1959.
(2Am)

Campbell, F. L. (Editor)
Conference on physiology of insect development.
Chicago, University of Chicago Press, 1959.
(4G)

Colby, F. H.
Pyelonephritis.
Baltimore, Williams & Wilkins Company, 1959.
(17E)

Crothers, B., and Paine, R. S.
The natural history of cerebral palsy.
Cambridge, Mass., Harvard University Press, 1959.
(19E)

Ducoff, H. S., and Ehrets, C. F. (Editors)
Symposium on mitogenesis.
Chicago, University of Chicago Press, 1959.
(2Am)

Edds, MacV., Jr. (Editor)
Conference on immunology and development.
Chicago, University of Chicago Press, 1958.
(8G)

Faxon, N. W.
The Massachusetts General Hospital, 1935-1955.
Cambridge, Mass., Harvard University Press, 1959.
(39Am)

Frenay, Sister M. A. C.
Understanding medical terminology.
St. Louis, The Catholic Hospital Association, 1958.
(1D)

Friedman, A. P., and Merritt, H. H. (Editors)
Headache: Diagnosis and treatment.
London, Butterworth & Co., Ltd., 1957.
(19F)

Gale, E. F.
Synthesis and organization in the bacterial cell.
New York, John Wiley & Sons, Inc., 1959.
(9C)

Medical Library Association.
Directory of the Medical Library Association, ed. 2.
Hamden, Conn., The Shoe String Press, Inc., 1959.
(1Ca)

Mintz, B. (Editor)
Conference on environmental influences on prenatal development.
Chicago, University of Chicago Press, 1958.
(25L)

Moore, F. D.
Metabolic care of the surgical patient.
Philadelphia, W. B. Saunders Company, 1959.
(23L)

Patterson, W. B. (Editor)
Symposium on wound healing and tissue repair.
Chicago, University of Chicago Press, 1959.
(8E)

Paul, J.
Cell and tissue culture.
Edinburgh, E. & S. Livingstone, Ltd., 1959.
(8C)

Price, D. (Editor)
Conference on dynamics of proliferating tissue.
Chicago, University of Chicago Press, 1959.
(2Am)

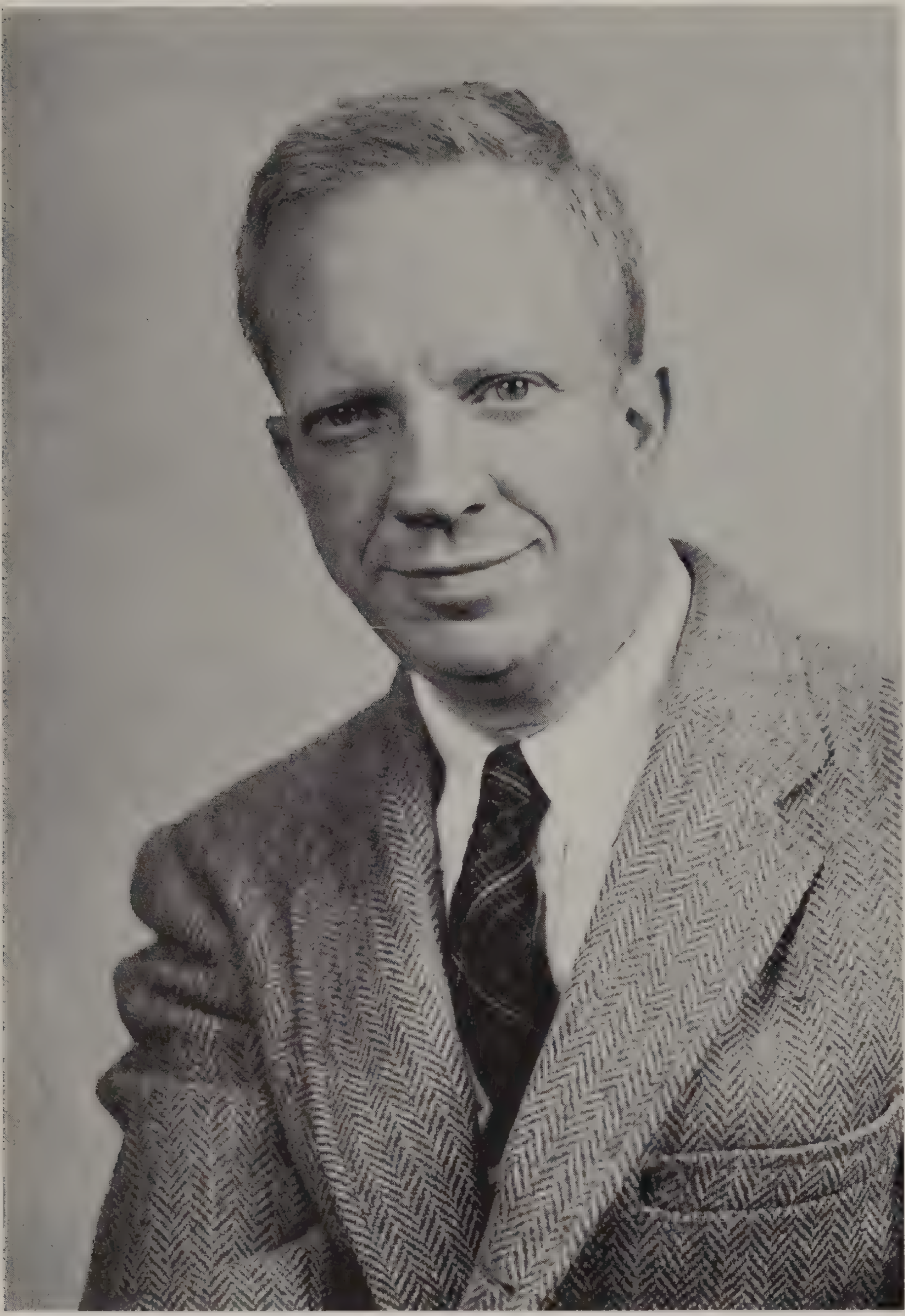
Rudnick, D. (Editor)
Symposium on embryonic nutrition.
Chicago, University of Chicago Press, 1958.
(5M)

Segré, E., and Schiff, L. I. (Editors)
Annual review of nuclear science, vol. 9.
Palo Alto, Annual Reviews, Inc., 1959.
(36Jn)

Talbot, N. B., Richie, R. H., and Crawford, J. D.
Metabolic homeostasis.
Cambridge, Mass., Harvard University Press, 1959.
(5M)

Taylor, E. M.
Psychological appraisal of children with cerebral defects.
Cambridge, Mass., Harvard University Press, 1959.
(19Op)

Welch, C. E.
Surgery of the stomach and duodenum, ed. 3.
Chicago, The Year Book Publishers, Inc., 1959.
(23R)



No. 87 in a series of Staff photographs
Dr. Evan Calkins, Associate Physician—Director of the Robert W. Lovett Memorial Unit

New addresses:

Dr. Scott Adler (sr. r.s. *Or.* 1959), 419 Maple St., N.E., Albuquerque, N. M.

Dr. George H. Carter (*M.* 1943), Boston University-Massachusetts Memorial Hospitals Medical Center, 750 Harrison Ave., Boston, Mass.

Dr. William P. Chapman (a. *M.* 1957), Medical Dept., Boston Globe, 135 William T. Morrissey Blvd., Dorchester, Mass.

Dr. Frederick H. Cummer, Jr. (sr. r.p. *Psychiat.* (*McL.*) 1950), Boston University-Massachusetts Memorial Hospitals Medical Center, 750 Harrison Ave., Boston, Mass.

Dr. Milton S. Grossman (*C.M.* 1958), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. A. Erik Gundersen (*S.* 1956), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. W. Hardy Hendren, III (*S.* 1953), Children's Medical Center, 300 Longwood Ave., Boston, Mass., or Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.

Dr. Mark M. Kartchner (*S.* 1958), USPHS Indian Hospital, Lawton, Okla.

Dr. Peter H. Knapp (a.r.p. *Psychiat.* 1947), Boston University-Massachusetts Memorial Hospitals Medical Center, 750 Harrison Ave., Boston, Mass.

Dr. Jan Koch-Weser (*M.* 1955), Dept. of Pharmacology, Harvard Medical School, 25 Shattuck St., Boston, Mass.

Dr. Raymond F. Kuhlmann (sr. r.s. *Or.* 1948), 80 Colchester Ave., Burlington, Vt.

Dr. Marvin M. Lipman (r.p. 1959), Columbia-Presbyterian Medical Center, New York, N. Y.

Dr. Donald B. Martin (*M.* 1955), National Heart Institute, National Institutes of Health, Bethesda, Md.

Dr. Harold L. May (a.r.s. 1959), Hôpital Albert Schweitzer, P.O. Box 4, St. Marc, Haiti

Dr. Anthony P. Monaco (*S.* 1957), Harvard Medical School, 25 Shattuck St., Boston, Mass.

Dr. Louis Nathan (*Or.* 1930), Veterans Administration Outpatient Clinic, 17 Court St., Boston, Mass.

Dr. Edward J. Ottenheimer (*E.S.* 1924), 132 Mansfield Ave., Willimantic, Conn.

Dr. Russel H. Patterson (*E.S.* 1919), 166 E. 63rd St., New York 21, N. Y.

Dr. Arthur Perkins (*E.S.* 1925), 813 Ogden Canyon, Ogden, Utah

Dr. David C. Poskanzer (r.p. *N.* 1959), 900 West End Ave., New York 25, N. Y.

Dr. John W. Smillie (*E.S.* 1944), Dept. of Ophthalmology, University of Michigan Medical Center, Ann Arbor, Mich.

Dr. Dagoberto Sosa (r.s. *N.S.* 1959), Centro Medico de Guatemala, Calle Real de Ciudad Vieja 91, Guatemala City, Guatemala, C. A.

Lt. William L. Strickler, MC, USNR (a.r.s.), U.S. Naval Hospital, Newport, R. I.

Dr. Chiu-an Wang (*W.S.* 1944), Room 310, Takshing House, 20 Des Voeux Rd., Central, Hong Kong, China

Dr. George D. Zuidema (*S.* 1954), Medical School, University of Michigan, Ann Arbor, Mich.

Brief bits:

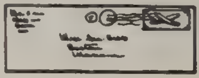
Dr. William S. Beck delivered the Bunker Leukemia Lecture at St. Luke's Hospital, New York City, on December 17, 1959. His subject was "Biochemistry and metabolism of normal and leukemic leukocytes".

Dr. Harvey E. Billig, Jr. (*Or.* 1935) has been elected President of the Los Angeles County Medical Association Surgical Section for the year 1960.

Dr. Allan L. Friedlich has been named President-elect of the Massachusetts Heart Association's Greater Boston Chapter.

Dr. Erich Lindemann has been appointed for a three-month period as Consultant to the Mental Health Section of the World Health Organization. Dr. Lindemann will be advisor to medical schools in India, helping to improve their program of psychiatric training. He reported to the World Health Organization on December 1, 1959.

Dr. Philip E. Meltzer, Surgeon in Otolaryngology at the Massachusetts Eye and Ear Infirmary, left on January 14 for Zurich, Basel, Freiburg, and Würzburg, to observe several special procedures pertaining to his field of work.



This nice letter has come from Dr. Edwin H. Mulford, II (a.r.s. *N.S.* 1947), written from 748 Post Road, Darien, Connecticut:

I am delighted to contribute an item to The News. I am not exactly a "singleton" as you suggest, however, as Dr. John P. Gens of the G-U Service [r.s.*U.* 1943] is practising in Fairfield County, also.

As you might assume from my letterhead, I am in the practice of neurological surgery, my activities confined to what we call Southern Fairfield County, which includes Greenwich, Stamford, and Norwalk areas. My office is in Darien.

As to hobbies, I find that my profession takes up most of my time these days and I must therefore bypass the several hobbies which I hope some day to have time to explore. However, my entire family (I now have four children) has one hobby in common and that is riding. We keep horses in a riding club close to our house in Darien, and this affords all of us a great deal of pleasure and is a year-round activity in this area.

Many of my happiest memories are of THE GENERAL and I always look forward to any opportunity to visit Boston and my old haunts.

The kindest regards.

* * *

The Hospital has purchased the former Mortuary property on North Grove Street, thereby completing the space from Fruit Street to Cambridge Street for the new Clinics Building.

THE NEWS

No. 193 Boston, Mass. March 1960

THE ROBERT W. LOVETT MEMORIAL UNIT

STUDIES PERTAINING TO CONNECTIVE TISSUE AND ITS DISEASES**

(Conclusion of the article on this same subject, begun in the February issue)

IV. Carbohydrate Chemistry—Dr. Roger W. Jeanloz

Dr. Jeanloz is currently in Europe on a one-year's sabbatical leave. One of the objectives of this sabbatical is the completion of a book of which he is co-editor, entitled *The amino sugars*. It will be published by the Academic Press.*

The general aim of the research of Dr. Jeanloz's laboratory is the determination of the chemical structure of biologically important carbohydrate-containing compounds, of both the high polymer type (such as mucopolysaccharides and glycoproteins) and the low molecular weight compounds (such as the aminosugar-containing nucleotides which are involved in synthetic mechanisms). The elucidation of the structure of these materials is an essential step in the direction of correlating chemical properties with biological behavior. It is also a necessary prerequisite to an understanding of the metabolism of these substances.

Among the mucopolysaccharides, chondroitin sulfate A, a main constituent of cartilage, and chondroitin sulfate B (also called β-heparin or dermatan sulfate) which has been isolated from skin, lungs, artery walls, and heart valves, have been submitted to extensive research by Dr. Pierre Stoffyn in order to establish their detailed chemical structure.

By nature of their main constituents (uronic acid and hexosamine), these substances are closely related to hyaluronic acid and alpha-heparin, the well-known blood anticoagulant. Whereas chondroitin sulfate B exhibits in certain conditions blood anticoagulant properties, chondroitin sulfate A is devoid of this property. It is hoped that the knowledge of the structures will allow an understanding of their physiological role and permit the correlation of their biological activity with a definite chemical structure. This, in turn, should lead to information which will be of great value in understanding disease mechanisms.

One of the most effective methods of establishing the sites of bonds of these structures is by the methylation procedure. This has required the synthesis, as reference compounds, of all of the twelve possible mono- and di-methyl galactosamines and glucosamines. All of these compounds have now been prepared—most of them in Dr. Jeanloz's laboratory, in collaboration with Drs. Dieter M. Schmid, Pierre Stoffyn, Dorothy K. Stearns, and Renee Naves. At the present time, this method has made it possible to establish, on the basis of isolation of crystalline derivatives, that in chondroitin sulfate A, as well as in chondroitin sulfate B, the uronic acid is linked to the position 3 of the galactosamine moiety and that the sulfate ester groups present in these two mucopolysaccharides are at position 4. In chondroitin sulfate A, the galactosamine residues are, on the other hand, linked to position 4 of the glucuronic acid.

It has also been demonstrated conclusively that the uronic acid component of chondroitin sulfate B is L-iduronic acid by the isolation of a crystalline derivative of L-idose and comparison with a synthetic sample.

Other work of this laboratory, started by Dr. Sen-itiro Hakomori, is a study of two glycolipids which have been isolated from the red cells of blood of type A+ and B+, and which possess definite blood group activities. These contain a fatty acid, sphingosine, and for each of these two components approximately five sugar molecules. The sugars have been identified as galactose, glucose, and galactosamine.

Dr. Nathan Sharon, investigating the chemical structure of an intracellular polysaccharide produced by a strain of Bacillus subtilis which synthesizes extracellularly large amounts of polyglutamic acid, has demonstrated the presence of a new diaminohexose and has studied its structure. The presence of this compound is of especial interest in that similar sugars have been discovered recently in certain antibiotics. In relationship with this work, Dr. Annette M. C. Rapin is engaged in the synthesis of this and other diaminosugars, starting from levoglucosan, and is studying the general chemistry of this interesting sugar.

As an increasing number of new aminosugars have been discovered in recent years, the synthesis of these compounds was undertaken in the laboratory. Thus, Dr. Glaser has synthesized D-gulosamine and D-talosamine and, with Dorothy Jeanloz, the syntheses of 3-amino gulose and 3-amino idose have been accomplished. The chemical structure of neuraminic acid, an important constituent of the glycoproteins, is under further study by Dr. Dorothy Stearns.

Two investigators have been interested in the chemistry of the serum glycoproteins, with special reference to the composition, and structural configuration, and point of attachment of the carbohydrate residues.

One of these is Dr. Robert G. Spiro, who has been engaged in the study of the chemistry of fetuin, an alpha$_1$-glycoprotein of fetal calf serum. Fetuin is present in the fetal serum of a variety of animals in very high concentration and may represent as much as 40% of the total serum proteins. It was isolated by Dr. Spiro from fetal calf serum by a low temperature ethanol fractionation in the presence of Zn and Ba. The resultant preparation was homogeneous by electrophoresis and in the ultracentrifuge over the pH range of 1.8 to 11.1. Its sugar constituents have been identified and quantitated. The sugars which are present in this molecule are mannose, galactose, glucosamine, galactosamine, and sialic acid, and make up about 26% of the protein by weight. Physical studies also have been carried out on this protein. Its molecular weight calculated from sedimentation and diffusion data is 48,000. This protein is very asymmetric in shape and very acid in nature, having an isoelectric point of 3.3. It has been shown that its acidic properties are due to the presence of 9% sialic acid, which is peripheral in location and can be removed selectively by mild hydrolysis conditions. The removal of the sialic acid raises the isoelectric point to a value of pH 5.3. By gradient hydrolysis it has been revealed that after the sialic acid, galactose is most external in location, while the glucosamine and mannose are located more internally. Present studies are concerned with further clarification of the sugar sequences and involve the degradation of the glycoprotein by proteolytic enzymes for the purpose of isolating carbohydrate-rich glycopeptides. It is felt that these peptides will give information with respect to the protein-carbohydrate bond.

The other individual interested in the glycoproteins is Dr. Edwin H. Eylar. His interest is focused upon the arrangement of the constituent sugar residues and the covalent linkage between the carbohydrate and the polypeptide part. Alpha$_1$-glycoprotein is being used as a model, and both enzymatic and chemical methods have been employed. The results sug-

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*In Dr. Jeanloz's absence, the work of his laboratory is continuing under the direction of Dr. Pierre J. J. Stoffyn.

**This is Publication Number 266 of the Robert W. Lovett Memorial Unit for the Study of Crippling Disease, Harvard Medical School at the Massachusetts General Hospital.

gest that the polysaccharide portion is composed of a main chain of N-acetylglucosamine and mannose units, and 15-16 side chains with the sequence N-acetylneuraminic acid-galactose-N-acetyl-glucosamine. This hypothesis is in agreement with the results from oxidation of the alpha$_1$-glycoprotein with sodium periodate.

In order to study the polypeptide-polysaccharide linkage, efforts were made to hydrolyze the polypeptide part with proteolytic enzymes. With the exception of pepsin, the alpha$_1$-glycoprotein is quite inert to most proteolytic enzymes. However, it becomes reactive after neuraminidase treatment. After action of pepsin, papain, or subtilisin, in that order, about 90-95% of the degraded polypeptide portion can be separated by dialysis from the non-dialyzable polysaccharide core. The polysaccharide-amino acid residues can be purified and fractionated on DEAE cellulose. It is hoped that structural studies on this material will reveal the number and kind of amino acid-sugar linkages involved.

V. Chemistry of the Vascular Wall—Dr. William H. Batchelor

Work in this laboratory centers upon the motion of fluid through tissue in response to pressure differences. The inquiry seeks to relate the accumulation of serum lipids in arterial tissue to changes in connective tissue organization, notably the changes suggested by extraction experiments for the recovery of collagen and mucopolysaccharides. Two experimental systems are currently under study. One makes use of infusion of solutions into the skin of anesthetized guinea pigs to study the extent to which the distribution of fluid escaping from a fine needle into the dermis is subject to control. Infusion rate and viscosity have proved most useful, giving a range of fluid distributions extending from the dermal wheal to a pattern possibly physiologic. A second system consists of a porous bed of polyelectrolyte with the useful property of reacting selectively with serum β lipoproteins. The immediate objective in this system is to relate sequestration of lipids to conditions of flow.

VI. Amyloid and Related Subjects—Drs. Evan Calkins and Alan S. Cohen

Surrounded and stimulated on the one hand by the active group of basic investigators and on the other hand by their associates in the Clinic, this group of investigators has sought to direct its research in two ways. First, to select a problem presented in the Clinic which can be recreated in the laboratory, in experimental animals, to permit detailed study; second, to explore the physiologic problem, presented in these animals, by every appropriate technique; and, third, to attempt to apply what is learned from the animals to human patients, both as regards pathologic physiology and as regards prevention and cure. The problem of amyloidosis has proved to be well adapted to this approach. This disease is incurred in approximately 25% of patients with rheumatoid arthritis. It is a major cause of death in paraplegic veterans and in patients with leprosy; it often accompanies multiple myeloma; and in its so-called primary form it is a not infrequent cause of nephrosis in adults, as well as other, often baffling, clinical syndromes. The research has followed along several lines.

1. Chemical characterization: The initial studies conducted by Dr. Robert B. Giles, Jr. and Dr. Calkins on the chemical composition of this substance have been confirmed. It is predominantly protein, but also contains approximately 1.5% hexosamine (chiefly glucosamine) and 2% neutral hexose (galactose, glucose, mannose, fucose). It is markedly hydrophilic. Further characterization of the protein has been rendered difficult by its marked insolubility and resistance to enzymatic digestion. It is non-collagenous. Studies conducted in collaboration with Dr. David Gitlin of the Children's Medical Center indicate that it is not predominantly comprised of gamma globulin.

2. Experimental induction of the disease: Experimental amyloidosis, having nearly all the characteristics of the human disease, can be reproducibly induced in rabbits by means of serial subcutaneous injections of 10% sodium caseinate. During the induction of the disease, which takes from 3 to 4 months, the rabbits exhibit marked increases in serum concentrations of hexosamine and gamma globulin, and small but demonstrable amounts of circulating antibody to the casein (studies of Dr. Adalbert F. Schubart). The manner of injections of the caseinate can be modified, but two facts appear established. First—whatever technique is used, so long as the elevations of serum hexosamine and gamma globulin are maintained for a long enough period, amyloidosis will result. Second—the only injection procedures which are effective, using sodium caseinate, are those which yield at least minimal titers of circulating antibody. The administration of cortisone simultaneously with the administration of caseinate does not make the amyloidosis worse, and appears to decrease its incidence and severity. I^{131}-labelled caseinate, injected subcutaneously, is not broken down more rapidly from casein-immunized rabbits than from normal animals, and the caseinate, labelled by this means, cannot be identified in the amyloid.

3. Physical and histologic characterization: Amyloid is faintly autofluorescent, and is birefringent in polarized light. The latter property suggested that it had a more organized structure than was apparent by ordinary histologic techniques. Electronmicroscopic studies of amyloid from rabbits and from human patients with various types of the disease, conducted in this laboratory by Dr. Cohen, have indicated that amyloid contains minute fibrils, which appear different from collagen, elastin, and other readily identifiable tissue fibers. The group would like to express appreciation to Dr. Leon Weiss of the Department of Anatomy, Harvard Medical School, for collaboration on the study of the fine structure of the spleen in amyloidosis. Isolation of this fibrillar material and determination of its chemical and physical properties and of its metabolism are at present under way.

4. Physical chemical studies: During the last two years the work of this laboratory has been strengthened by the collaboration of Dr. Borge Larsen, formerly of Dr. Teilum's laboratory in Copenhagen. Dr. Larsen has extended his studies of the *in vitro* binding of Congo red by serum proteins. These studies have shown that there is a significantly decreased Congo red binding by sera from patients with rheumatoid arthritis, with a much more pronounced decrease by sera from patients with amyloidosis. It would appear that alterations in serum binding may contribute, to some extent at least, to the rapid disappearance of Congo red from the serum of patients with amyloidosis. Dr. Larsen has also been interested in possible alterations in sulfhydryl metabolism in amyloidosis and in chronic inflammatory disease. Preliminary results indicate that there is a consistent fall in serum SH concentration during the induction of amyloidosis, occurring simultaneously with the rise in serum hexosamine concentration. Administration of certain SH donor substances prevents both the SH fall and the hexosamine rise. The physiologic implications of this observation are at present under study.

5. Clinical investigation: An extensive study of the latex fixation test was conducted by Dr. Adalbert Schubart. Since the performance of this test does not require the use of heat-inactivated serum, this system presented an excellent opportunity to study the role of heat-labile components in the agglutinating phenomena which often are seen in serum from patients with rheumatoid arthritis. The studies showed that the sera of many patients with rheumatoid arthritis possess a heat-labile component, having many of the characteristics of serum complement, which partially or, in some instances, totally inhibits the agglutination phenomenon. The exact nature of this component, its mechanism of action, and its possible implications in the physiology of the disease, have been and are under intensive investigation, both in this Unit and, during the last six months, at the University of Maryland.

Although the above studies were established as an unrelated parallel investigation to the main stream of the work on amyloidosis, one observation was made which provides grounds for considering a possible relationship. Incident to a survey of various chronic diseases, twenty sera were studied from patients with leprosy at the U.S.P.H.S. Hospital in Carville, Louisiana. Ten of these sera exhibited positive latex fixation tests—nine of these were from patients with amyloidosis. Of the ten sera which exhibited negative tests, none were from patients with amyloidosis. A follow-up study on the clinical implications of this serologic abnormality in patients with leprosy is at this writing being undertaken at Carville by Drs. Edgar S. Cathcart and Ralph C. Williams, Jr. Dr. Williams thus enjoyed a final fling in the field of epidemiology before he commenced his service here as Chief Resident in Medicine in January.

Further clinical studies in patients with amyloidosis have concerned the varied serum abnormalities, histologic peculiarities, diagnostic methods, and clinical course in patients with this disease.

The work on amyloid and related subjects has been greatly strengthened by the addition to the group of Drs. Frank Mullinax, Sidney R. Cooperband, and, on part-time basis, Ellis L. Rolett, who is at present a Resident in Medicine. Dr. Mullinax is concerned with the mechanism for the increased antibody production in the secondary response. This work requires the establishment of *in vitro* systems of antibody synthesis. Dr. Cooperband is studying the abnormal pattern of glycoprotein synthesis in chronic inflammatory disease. Dr. Rolett is studying changes in Redox potential seen during prolonged inflammatory disease.

6. Pathologic anatomy: In addition to participating in the study of amyloidosis, Dr. Cohen has been conducting anatomic studies on other connective components. The nature of the lesion (involving elastic tissue) in a rare dermatologic disorder (elastosis serpiginosa perforans) was studied with Dr. Ken Hashimoto of the Dermatology Department. Together with Dr. Gross, Dr. Cohen has been studying the skin (dermis) of patients with heritable or acquired lesions of the connective tissue. Other cooperative studies where fine tissue structure investigation can help elucidate a physiologic or pathologic problem are under way.

VII. Clinical Investigation—Drs. Bauer, Calkins, Cohen, Ropes, Sharp, and Short

The enthusiasm for laboratory research, at either the basic or applied level, has not lessened the interest and enthusiasm for clinical investigation. Indeed, the number of studies undertaken in the Arthritis Clinic has greatly increased over the past three or four years, and the Unit is in the process of establishing a second clinic for the purpose of following patients with the heritable diseases of connective tissue.

The long-established objectives of Drs. Bauer, Short, and Ropes to define the manifestations of various rheumatic diseases and to document their life courses are still being actively pursued. Drs. Short and Bauer, having completed their monograph on *Rheumatoid arthritis*, based on the numerical study of 239 patients, have set about describing the natural course of this disease. The meticulous follow-up of all the surviving patients is still under way. In addition, Drs. Ropes and Bauer are continuing to describe the experience of the Arthritis Group with other connective tissue diseases. Detailed analysis of the manifestations and course of patients with disseminated lupus erythematosus and dermatomyositis seen by the Arthritis Group over the past 28 years is in progress. The patients will be classified by strict criteria, and comparisons made between the various groups and with comparable groups of patients with rheumatoid arthritis and the other connective tissue diseases.

A report on the systemic manifestations of rheumatoid arthritis, by Drs. Bauer, William S. Clark, and Mart Mannik, is in process of completion. A study of patients with Reiter's syndrome is almost ready for publication. A paper on the entrance of sugar into joints has been submitted for publication.

Dr. Ropes is also continuing her studies of the toxic level of salicylate as further evidence of probable therapeutic level. The toxic level is apparently much higher below the age of 15 and lower above the age of 55. She is also continuing her studies of the Congo red retention in patients with rheumatoid arthritis, with especial attention to the effect on it of treatment of patients with large doses of ascorbic acid. An apparent increase in the Congo red retention in individual patients has been noted. The results are now being evaluated statistically.

During the last two years a comprehensive study of the clinical laboratory and X-ray manifestations of rheumatoid arthritis, and of its course, in 150 patients with various forms of the disease was undertaken. This study, conducted by Drs. Calkins, Sharp, Cohen, Schubart, and Calabro, was designed primarily as a basis for our own future clinical investigation. The project has led to a number of rather exciting hypotheses which are now under further investigation. Among the results is the observation that the presence of rheumatoid factor is as apt to be noted in patients with disease of one year's duration as in patients with disease of ten, twenty, or thirty years' duration. On the other hand, the presence of this factor, in high titer, is usually associated with an unremitting course and with more severe involvement of both skeletal tissues and the reticulo endothelial organs. The observations suggest that the presence of rheumatoid factor, in high titer, early in the disease, may have adverse prognostic implications. The nature of this factor, and its physiologic significance, are at present under study.

In conclusion, the authors would like to express their appreciation to the many members of the Hospital staff, both professional and nonprofessional, who have contributed so generously to these projects; to the many patients who, by their loyalty to the Hospital and Clinic, have provided the stimulus for most of this work; and to Dr. Walter Bauer for his wise and forbearing supervision and for his constant encouragement.

We are also happy to acknowledge our indebtedness to those agencies, institutions, and individuals whose generous financial aid has made these studies possible. At present, our support comes in large part from the National Institute of Arthritis and Metabolic Diseases of the U.S.P.H.S., the National Science Foundation, the American Heart Association, the Helen Hay Whitney Foundation, the New England Chapter of the Arthritis and Rheumatism Foundation, and Eli Lilly and Company. Previous long-term support, covering a period of 20 years, was received from the Commonwealth Fund.

Evan Calkins, M.D.,
Associate Physician and *Director of the Robert W. Lovett Memorial Unit*
Karl Schmid, Ph.D.,
Associate Biochemist in Medicine

A LOYAL ALUMNUS

When Dr. Linn Fenimore Cooper (*W.M.* 1928) died, on November 13, 1959, in faraway Sarawak on the island of Borneo, the Massachusetts General Hospital lost a loyal and devoted alumnus and benefactor.

Linn Cooper, a great-grandson of James Fenimore Cooper, the famous American novelist, was born in Albany in 1900, and raised in Cooperstown, N. Y. He went to the Taft School and thence to Yale College, from which he graduated in the Class of 1921. In the autumn he entered the Harvard Medical School. After two years of medical school he took a year out, six months of which he spent at Hopkins, and six in Vienna and Paris. Returning to Boston, he completed his medical course at Harvard, getting his M.D. degree with the Class of 1926. After that he went on to his internship at the M.G.H.

I remember him vividly as an intern — tall, handsome, charming, but quiet and self-effacing. He was beloved by his fellow interns and admired for his deep interest in his patients, with whom he would work endlessly, trying to get at the root of all their troubles. A truly dedicated physician is what he was, with the highest ideals and utter humility.

Internship finished, Linn betook himself to the Johns Hopkins Hospital, where he was an assistant resident until 1930; after that, to Queen Square, London, in 1931, and in 1932 to New York, to become a clinical adjunct at the Neurological Institute. In 1934, he entered private practice in Washington, and concurrently became an instructor in clinical medicine at Georgetown University. In 1938, he was promoted to Associate Professor and was made a visiting physician at Georgetown University Hospital.

From 1942 to 1946 he was in the Army Medical Corps, retiring as Colonel. After the war, he became Professor of Medicine at Hsiang-Ya Medical College, at Changsha in Hunan Province, China. He remained there until driven out by the Reds, and then he traveled in Africa. From 1950 to 1951 he attended the School of Tropical Medicine in Liverpool.

As early as 1948 he became increasingly interested in hypnosis, from both a basic psychological point of view and, later, that of practical therapeutic application. Between 1948 and 1952 he published papers on time distortion in hypnosis which appeared in several journals — in the *Bulletin of Georgetown University Medical Center,* in *Science,* and in the *Journal of Psychology.* In 1954, a book was published by Cooper, together with Dr. Milton H. Erickson under the title *Time distortion in hypnosis.* A second edition appeared in 1959. (Baltimore, The Williams & Wilkins Company)

In June of 1952 I dined with Linn at the Chevy Chase Club in Washington. Appropriately over juleps on the lovely lawn that beautiful summer evening, Linn told me of his plans for going again to Africa. He wanted to make his medical skill useful where there was the greatest possible need for it. This would be where there were people quite deprived of such skill. After considerable investigation he had settled for a job with a Catholic Mission in the hinterland of Ghana, run by an order known as the White Fathers of Africa. They needed doctors urgently and assured him that his being a non-Catholic would offer no obstacle. His work in Ghana proved very satisfactory to him and his relations with the White Fathers very congenial. Back in Washington in 1958, he told a friend that he had developed a high esteem for the work of the Catholic missionaries in Africa.

Not because of any dissatisfaction with the African job, but because he wanted a wider experience, he next took off for Sarawak, to work in a different jungle and with a different population of natives, but again with Catholic missionaries. This time it was the Millhill Fathers — a Dutch Roman Catholic organization. The work in Kanowit, Sarawak, was as intriguing to him as had been that in Ghana.

I had some correspondence with him while he was there, and last summer he was home on leave and visited Boston. He came to lunch at my house, with David Crockett, on June 10. He was in fine spirits and eager to get back to Sarawak David took him to the Massachusetts General to show him all the new developments, which he very much wanted to see. A few days later he returned to Sarawak. Not long after, I received a very generous check from him for the Hospital, via his agents in New York, and hard upon that, quite out of the blue, the shocking news came that he was dead. Apparently he had succumbed to some fulminating type of encephalitis.

Linn Cooper's benefactions to the M.G.H. extend over a period of thirty years. Undoubtedly they were an expression of his love of the place. In each case the gift was designated for a special purpose that particularly interested him. Also, they came in ever-increasing amounts. The first, in 1929, was to aid the publication of the history of the Hospital; in 1943, there was one to be used toward the equipping of the Medical Staff Room; in 1952, a generous gift for thyroid research; and in 1958 and again in 1959, very shortly before his death, most generously of all, he gave to the James Howard Means Fund.

He also, we know, made substantial gifts to the Harvard Medical School and, no doubt, to many other institutions toward which he felt grateful for what they had done for him. His untimely death is a tragic loss to medicine and to humanity.

[James Howard Means, M.D.] J. H. M.

The Board of Trustees, at their meetings on December 31 and January 15, voted:

To reappoint:

Dr. Gordon L. Brownell as Associate Physicist (Medicine), as of January 1;
Dr. Jerome Gross as Associate Biologist (Medicine), as of January 1.

To appoint:

Dr. Frederick W. Ackroyd as Third Assistant Resident in Surgery, beginning January 1;
Dr. Arthur K. Asbury as Assistant Resident in Neurology for one year, beginning July 1;
Dr. Charles H. Banov as Clinical Fellow in Medicine, beginning July 1;
Dr. Estela O. Ching as Clinical Fellow on the Children's Medical Service, beginning January 1;
Dr. Herbert S. Cline as Assistant in Psychiatry, as of July 1, 1959;
Dr. T. Corwin Fleming as Assistant Resident in Neurology, beginning July 1;
Dr. Harris Hyman, III, as Clinical Fellow in Medicine, beginning July 1;
Dr. Jan Koch-Weser as Clinical Fellow in Medicine, beginning January 1;
Dr. Edward Los as Assistant Resident in Anesthesia, beginning January 4;
Dr. Thomas E. Macnamara as Clinical Fellow in Anesthesia, beginning January 18;
Dr. Francis D. Milligan as Clinical Fellow in Medicine, beginning July 1;
Dr. Arthur L. Prensky as Assistant Resident in Neurology, beginning July 1;
Dr. Lewis F. Scribner, Jr. as Clinical Fellow in Medicine, beginning July 1;
Dr. Mustafa L. Sipahi as Clinical Fellow in Radiology, beginning December 1;
Dr. Vincent W. Steward as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;
Dr. Ansgar Torvik as Clinical and Research Fellow in Neurology, assigned to Neuropathology, for one year, beginning July 1.

At their meetings on December 23 and 30, 1959, and during January 1960, the General Executive Committee voted:

To promote:

Dr. Edwin W. Salzman to the position of Resident in Surgery for one year, beginning July 1.

To extend the appointment of:

Dr. Harilaos T. Sakellarides as Clinical Fellow in Orthopedic Surgery, from January 1 through June 30.

To reappoint:

Dr. Michael H. M. Dykes as Clinical Fellow in Anesthesia for one year, beginning January 1;
Dr. Paul J. Kestens as Clinical and Research Fellow in Surgery, for an additional eight months, beginning January 1.

To appoint:

Dr. F. William Bora, Jr. as Clinical Assistant in Orthopedic Surgery, for the period February 5 through March 31, with the privilege of assisting Dr. Aufranc in the care of his private patients during this period. It was further voted that he be appointed to the position of Senior Resident in Orthopedic Surgery, for the period April 1 through July 31, assigned to the Shattuck Hospital, and that on August 1 he will return to the MGH Orthopedic Resident Staff;
Dr. Herbert A. Haessler as Research Fellow in Medicine for one year, beginning July 1;
Dr. Raymond N. Kjellberg as Clinical Assistant in Neurosurgery, effective as of January 1, with the privilege of occupying space in the office of Dr. William H. Sweet;
Dr. J. D. Gwynne McNeil-Smith as Graduate Student Assistant in Orthopedic Surgery, for the period January 4 through March 31;
Dr. Valentin Malagon as Graduate Student Assistant in Orthopedic Surgery, for six months, beginning January 6.

THE MASSACHUSETTS GENERAL HOSPITAL

1935 - 1955

by

NATHANIEL W. FAXON, M.D.

The life of the institutional organism which began in 1811 (at least its period of gestation began as early as that) has been duly chronicled to 1935, by Bowditch, Myers, and Washburn, successively. Now that invaluable sequence is extended again by the arrival of Dr. Faxon's fine work which continues the story to 1955.

Dr. Faxon's book is a labor of love. He has written of something of which he himself is a part. His first-hand account gains vividness because he has seen his subject from within. But also he has viewed it from afar, because while, together with the medical dean, George Hoyt Whipple, he was creating from the ground up, *de novo,* the great teaching hospital in Rochester, N. Y. — the Strong Memorial, he was constantly watching the behaviorism of his *alma mater* hospital — the M.G.H. On the subject of teaching hospitals he is, therefore, expert. No one could be found better equipped to write the history of these two decades in the life of the Massachusetts General than he.

His story is direct, clear, and readable. The book is arranged with the reader's convenience in mind. The difficult task of getting good perspective, both horizontally and vertically, is achieved by dividing it into two parts — one, a chronologic year-by-year account; the other, a collection of articles on special subjects which require concentrated attention, without limit of time, for full understanding of their significance in the evolution of the Hospital as a whole.

To anyone who, like this reviewer, has also spent the two decades in question, and perhaps more, as a member of the MGH family, to read Faxon is to live a happy life over again. The tale is one of events, of men and women, of policies, and of affairs. It is the picture of socio-economic and cultural evolution in action. It is a drama in twenty acts — each year an act. At least, so it will seem to all those who were part of it.

Part I. The chronological account runs along through the years smoothly and with good continuity. It must be remembered that Faxon is writing the history of the Hospital, not of the march of medicine itself, although he touches on the latter in Part II. He shows the role of the Hospital in the community and in the world. He indicates all the kinds of people that are necessary to make it serve its function. It takes many besides doctors of medicine to do this. The whole must be well integrated administratively, so that teaching and research can be utilized to improve the care of patients, which, after all, is the prime objective of any hospital.

If one gallops through Part I certain very high spots flash by, such as: 1935, M.G.H. joins Community Fund; Boston Hospital Council formed; 1939, Dedication of White Building; 1940, 6th General Hospital organized; Archives Department started; 1941, Defense organization set up; 1942, Cocoanut Grove disaster; 6th General Hospital activated; Huntington Memorial Hospital for cancer research transferred to M.G.H.; effects of war on the home front; 1943, 6th General at Casablanca; 1944, Penicillin arrives; 1945, V.E. and V.J. Days; return of doctors and nurses; 1946, Ether Centenary; Bishop Sherrill resigns as Chairman of the Board of Trustees, Mr. Gray replaces him; 1947, Vincent-Burnham Building opened; 1949, Dr. Faxon retires, Dr. Clark appointed to succeed him; 1950, Research Building begun; 1953, Bartlett Hall dedicated; 1954, New Pathology Building; 1955, Polio epidemic dealt with. If one goes through Part I at a more leisurely pace, a great wealth of other important and interesting material emerges.

Coming to Part II, which bears the illuminating title of "Care of the sick, teaching, and research", one finds first an account of structural growth and development, which begins actually in 1821. By word, map, and picture Faxon traces this expansion in a way to make it come alive. Then we find a chapter on the McLean Hospital (which is part of the M.G.H.), and one on affiliations with other hospitals. A good exposition of the growing research activities of the Hospital is given in Chapter 4, to which is added a supplement by Paul C. Zamecnik on the explosive expansion of research after World War II. The various kinds of teaching going on at the Hospital are described in Chapter 5 by the present General Director, Dean A. Clark, and a description of the development of the residency system is given by Oliver Cope.

A number of chiefs of service give particulars on their own services in Chapter 6 — Fritz B. Talbot on the early history of the Children's Medical Department and Allan M. Butler on the more recent events in that Service; Henry K. Beecher on Anesthesia; Laurence L. Robbins on Radiology; and Faxon himself on a number of other special activities — Tumor Clinic, Blood Bank, Physical Medicine, and Institute of Pastoral Care — completes the picture.

The author by no means neglects the ladies. Both volunteer and professional come in for good portrayal. The Ladies' Visiting Committee, the Staff Wives Association, and the Distaff Club are the chief organizations of the former, and the nurses, social workers, and dietitians of the professional group. He has evidently made a supreme effort to forget no one, and so in the next to the last chapter we find him winding up under the title of "Some other departments". Here he does justice by such indispensable "other departments" as Apothecaries, Photography and Medical Art, Medical Records and Record Librarians.

Part II ends with a chapter on the war effort of the M.G.H., which includes an authoritative history of the 6th General Hospital by its Commanding Officer, Colonel Thomas R. Goethals.

The book concludes with a battery of appendixes comprising a huge amount of factual material which will be of great help to persons who, in the future, are exploring the past history of the Hospital.

Altogether, this book serves well its first avowed purpose: to record the history of the Hospital during two decades, for the permanent use of posterity. But this book is also a living one which will be meaningful to contemporary readers in various ways. To members of the M.G.H. it will be a pleasant souvenir of their experience here. To all others who participate responsibly in the operation of great hospitals, especially in teaching hospitals, it will be an inspiration and guide.

James Howard Means, M.D.,
Honorary Physician

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it.

The following new titles have been received:

Anesthesia

Bunker, J. P., Bendixen, H. H., Sykes, M. K., Todd, D. P., and Surtees, A. D.
A comparison of ether anesthesia with thiopental — nitrous oxide — succinylcholine for upper abdominal surgery.
Anesthesiology 20:745, 1959.

Biochemistry

Dus, K., and Schmid, K.
The terminal amino acids of the barium-alpha$_2$-glycoproteins of normal human plasma.
Biochim. Biophys. Acta 37:172, 1960.

Schmid, K.
Electrophoresis of human serum albumin at pH 4.0: I. A systematic study on the effect of organic acids and alcohols upon the electrophoretic behavior of albumin.
J. Biol. Chem. 234:3163, 1959.

General Surgery

Barnes, B. A., Behringer, G. E., Wheelock, F. C., Jr., and Wilkins, E. W., Jr.
Surgical sepsis: An analysis of factors associated with sepsis in two operative procedures.
New England J. Med. 261:1351, 1959.

Churchill, E. D.
Origins of American surgery.
J.A.M.A. 172:219, 1960.

Neuro-ophthalmology and Neurosurgery

Hirsch. O.
Life-long cures and improvements after transsphenoidal operation of pituitary tumors (thirty-three patients, followed up for 20-37 years).
Acta ophth., supplementum 56, 1959.

Otolaryngology

Kelemen, G.
Germfree reared animals in otolaryngic experimentation.
Proceedings of the Second Symposium on Gnotobiotic Technology, 183, 1960.

Plastic & Reconstructive Surgery

Cannon, B., and Zuidema, G. D.
The care and treatment of the burned hand.
Clinical Orthopaedics 15, pt. II, 111, 1959.

Psychiatry

Lorenz, M.
Language as index to perceptual modes.
J. Project. Tech. 23:440, 1959.

Publications from the Tumor Clinic during 1959, in addition to those already reported:

Curtin, R. R., and Ulfelder, H.
Medical progress: Gynecology.
New England J. Med. 261:798, 849.

Green, T. H., Jr.
Hemisulfur mustard in the palliation of patients with metastatic ovarian carcinoma.
Obst. & Gynec. 13:383.

Reed, G. F., Mueller, W., and Snow, J. B., Jr.
Radical neck dissection.
Laryngoscope 69:702.

Ulfelder, H.
Radical vulvectomy with bilateral inguinal, femoral, and iliac node resection.
Am. J. Obst. & Gynec. 78:1074.

Ulfelder, H.
Reply to an editorial entitled "Carcinoma of the cervix is not a surgical disease".
Obst. & Gynec. 14:544.

This is the last issue of THE NEWS in which 1959 titles will appear.

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VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

Last year the Staff Wives Reception Center took over the distribution of all tickets donated to the Hospital for symphony concerts, theater, etc. Mrs. H. Dunster Howe and Mrs. Philip M. Dodge are in charge of this activity. A list of people wishing to receive tickets is kept at the Reception Center and is checked against donations given us by members of the Ladies' Visiting Committee, staff members, and other interested people. Very often a ticket given to a visitor from another country will provide him with his only opportunity to hear the Boston Symphony Orchestra while he is here. We have been able to place tickets with almost

No. 88 in a series of Staff photographs
Karl Schmid, Ph.D., Associate Biochemist in Medicine—Chairman (1959-1960), Laboratory Committee, Robert W. Lovett Memorial Unit

all visitors at least once. This year we have distributed 97 tickets compared with 80 last year. We also try to place tickets within the various departments of the Hospital — such as Dietary, Nursing, etc. We owe great thanks to the many donors of the tickets, and will welcome future contributions, especially for the Tuesday night Symphony Series. Anyone unable to use his tickets may telephone the Staff Wives Reception Center (MGH Extension 2366), giving the seat location. We will handle the rest, and some grateful soul will enjoy the concert.

Correction: In the January News we stated that the Staff Wives Music Committee numbered 25. Actually, the committee consists of 12 members, with 25 volunteers available for help with the concerts, such as conveying patients to and from the Chapel.

Distaff Club

Mrs. Richard T. Johnson was the hostess for a husband-wife game night, held February 9 in the Penthouse. A good time was enjoyed by all.

The Book Club has got under way by reading and discussing *Victory* by Joseph Conrad. The first meeting was held at the home of Mrs. Donald W. Sutherland on February 25, with Mrs. Sutherland as the leader of the discussion. The next book to be discussed will be *Courage to be* by Paul Tillich. Those who wish to become members of this group are invited to telephone Mrs. Edwin L. Carter for further details.

The Distaff Volunteer Project seems to be progressing well. The members have received a thorough orientation to the Hospital by other volunteers, and have chosen their specific areas of interest. This group meets Thursday mornings. Baby sitters are provided in the Penthouse from 9 to 12:30.

This month the Distaff-ers will hear Mr. Tom Payette, architect, discuss points to look for in buying or building a house.

On March 23, there will be a social evening of dinner and a fashion show at Filene's. Fashions for limited budgets will be stressed.

We are looking forward to hearing Dr. Paul Tillich on April 13, at which time husbands will be invited to attend.

New addresses:

Dr. Julia G. Arrowood (r.p. *An.* 1936), Harlan Memorial Hospital, Harlan, Ky.
Dr. Richard C. Batt (r.p. *R.* 1940), 83 Park St., Glens Falls, N. Y.
Dr. Edwin F. Cave (*E.S.* 1926 and *Or.* 1928), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Stephen E. Hedberg (*S.* 1956), Dept. of Experimental Surgery, Walter Reed Army Institute of Research, Washington, D. C.
Dr. William J. James (r.s. *N.S.* 1949), 2929 Loma Vista Rd., Ventura, Calif.
Dr. A. Gedeon Matoltsy (assoc. biol. *D.* 1957), Dept. of Medicine, Jackson Memorial Hospital, Miami 36, Fla.
Dr. Albert J. D. Michel (a.r.p. *An.* 1950), 70 rue Parmentier, Lyon VII^{e}, France
Dr. Federico Mora (*M.* 1951), 717 Encino Place, N.E., Albuquerque, N.M.
Dr. Thomas W. Moran (a.r.p. *Path.* 1950), Mellon National Bank Bldg., Latrobe, Pa.
Dr. Olaf H. Pearson (*W.M.* 1941), Western Reserve University School of Medicine, Cleveland 6, Ohio
Dr. Philip Solomon (a. psychiat. 1937), 1824 Beacon St., Brookline 46, Mass.
Dr. Dagoberto Sosa (r.s. *N.S.* 1959), 11 Calle 2-37, Zone 1, Guatemala City, Guatemala, C. A.
Dr. Lionelle D. Wells (clin. assoc. *Psychiat.*), 82 Marlborough St., Boston, Mass.
Dr. Philip D. Wilson (*E.S.* 1914), 14 E. 90th St., New York, N. Y.
Dr. Alfred Yankauer (*C.M.* 1941), N. Y. State Dept. of Health, 84 Holland Ave., Albany, N. Y.

Brief bits:

Dr. H. Thomas Ballantine was elected President of the Boston Society of Psychiatry and Neurology at its annual meeting on January 14.

Dr. Evan Calkins spoke on "Amyloidosis" at the New York Academy of Sciences meeting, held in New York City on January 7. On January 25, he again spoke on this subject before the Department of Medicine at Johns Hopkins Hospital. Dr. Calkins has been invited to give the annual lecture of the Atlanta Clinical Society on March 23. He will speak on "Connective tissue diseases".

On February 4, Dr. Oliver Cope conducted a symposium entitled "The present-day surgical training of physicians, both intern and resident, in the non-university (Community) hospitals", before the Providence Surgical Society, Providence, R. I. On February 21-24, Dr. Cope participated as guest speaker in the postgraduate course of the California Medical Association. He spoke on "Nontoxic nodular goiter and thyroid therapy: The evolution of the responsibilities of the surgeon" and "Hyperparathyroidism — Surgical experiences in the treatment of 225 cases, over 25 years".

Dr. Jerome Gross presided as Chairman at the Biochemical Symposium on Structure and Metabolism of Collagen — a program sponsored by the Chicago section of the A.A.A. Chemical Society, held in Chicago on December 28, 1959. Dr. Gross also presided at a session of a Conference on Connective Tissue and Connective Tissue Diseases, sponsored by the New York Academy of Sciences (the section on Biological and Medical Sciences), held on January 7.

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An article about the Massachusetts General Hospital, by Mrs. Frances Burns, medical writer for the *Boston Globe,* is to appear in an early issue of *Harper's magazine.*

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 194 Boston, Mass. April 1960

THE PULMONARY DISEASE UNIT

The Trustees of the Hospital authorized the establishment of the Thoracic Clinic on June 20, 1925 and it began its operations the next year. The *Annual Report* for 1926 contains the following quotation:

"The Thoracic Clinic was organized during the first two months of 1926, and started work in April, 1926. Its purpose is to make an intensive study of certain thoracic conditions, by men especially trained and interested in this work, in order that more knowledge of these conditions may be acquired and thereby improve the individual patient's care." This purpose has not changed over the years and remains the same with the formation, as of July 1959, of the Pulmonary Disease Unit by Dr. Bauer, as a part of the Department of Medicine.

Earlier workers in the Clinic included Drs. Frederick T. Lord, Gerardo M. Balboni, Joseph H. Pratt, and Donald S. King. Dr. King was Chief of the Clinic from 1931 to 1942, when he left for military service with the 6th General Hospital. It was Dr. Balboni, along with Drs. Lord and Pratt, who introduced to the Hospital artificial pneumothorax in the collapse therapy of pulmonary tuberculosis and in 1934 an Artificial Pneumothorax Clinic was begun, which was finally discontinued in 1945.

Dr. Helen S. Pittman joined the Clinic staff in 1931 and became the Chief of the Clinic in 1942 when Dr. King entered the Service. It was her tireless devotion that kept the Clinic going during and following the years of the Second World War. She retired from her Clinic duties in July 1959, after serving continuously for twenty-eight years. She left a large group of devoted, well-cared-for Clinic patients. At a dinner in her honor at the Harvard Club in July 1959, her colleagues gathered and expressed their admiration and warm esteem. Fortunately for us, Dr. Pittman continues her lively interest in chest disease by attending the Pulmonary Disease Rounds.

During the 1930's, the Thoracic Clinic was attended by both medical and surgical staff members. It was during the 1930's and early 1940's that the major advances in diseases of the chest occurred as a result of the development and perfection of thoracic surgical procedures. During this era, tuberculosis, bronchiectasis, lung abscess, and bronchogenic carcinoma were the main problems. Various methods of obtaining collapse of the lung in pulmonary tuberculosis were developed and utilized, such as thoracoplasty, phrenic nerve crushing, and artificial pneumothorax. The techniques of lobectomy, segmental resection, and finally pneumonectomy were applied to the problems of bronchiectasis, lung abscess, and cancer of the lung. During the middle and later 1930's, Dr. Churchill demonstrated the successful use of lobectomy and segmental resection in the treatment of suppurative lung disease. During the early 1940's, Dr. Richard H. Sweet published his classic papers on the natural history and surgical treatment of lung abscess. Dr. Edward B. Benedict perfected the techniques of bronchoscopy and endoscopy in general. As the techniques of thoracic surgery were improved and the risks diminished, the training of the surgical house staff began to include this specialty, and today thoracic surgery is a routine part of the general surgeon's education.

With the advent of the antibiotics, chest medicine entered another rapid growth phase, beginning in the mid-1940's. At the present writing, lung abscess and bronchiectasis have become distinctly uncommon surgical problems and are usually managed successfully by medical means. Indeed, they have become uncommon diseases per se, relative to the pre-antibiotic era. Most of our present surgical problems in chest medicine, excluding cancer, involve the drainage of empyema. Only occasionally is segmental or lobe resection done for bronchiectasis.

The development of streptomycin and para-aminosalicylic acid therapy in tuberculosis, followed by the more recent discovery of isoniazid, has wrought a tremendous change in all aspects of chest medicine, including socio-economic factors (sanatorium versus home care) and the teaching and learning of the specialty. Tuberculosis is becoming more a part of general medicine and will become an increasing problem in general hospital and home care.

Cancer of the lung has become very prevalent and, along with pulmonary tuberculosis, presents the most common *diagnostic* problems with which we are faced in the specialty of chest medicine today. Surgery remains the chief hope in pulmonary cancer, and chemotherapy has radically altered the face of pulmonary tuberculosis.

What is the *commonest* and most pressing problem in chest medicine today? In the place of frank chronic suppurative disease of the lung, pulmonary tuberculosis, and cancer, there has appeared the sixty-year-old man complaining of shortness of breath with exertion. He has smoked heavily for years and has a productive cough. His heavy, sometimes wheezing, breathing can be heard easily as he *slowly* approaches the Clinic or office door. His eyes are bulging, his face reddish purple. The muscles around his neck are large, and the flesh around his shoulders sunken into his chest. He has the barrel chest. He comes because of his shortness of breath or he has another chest cold or even a frank pneumonia. More often than not he has been told nothing can be done and that he has a little "chronic bronchitis". There are no National Foundations or money-raising programs to publicize his plight, and, of all the common chronic afflictions of man, it is this one about which layman and physician alike know the least. The disease is obstructive pulmonary emphysema and it is the main problem in chest medicine today.

This brief review is admittedly inadequate, and presents only a bird's-eye view of one neophyte's impression of the problems of pulmonary disease, past and present. It is offered as an introductory orientation to the present and future plans and activities of the newly created Pulmonary Disease Unit, now one year old.

Present membership

The present full-time members of the Pulmonary Disease Unit are our two fellows, Dr. H. Irving Schweppe, Jr., from the University of Texas—the Medical Branch at Galveston, and Dr. Margaret A. Single, who came to us from the Children's Medical Service of this Hospital. We have been very fortunate to have two such outstanding individuals in our first year of operation, and they have been a tremendous help. On a part-time basis, Dr. Edgardo G. Carrasco, Research Fellow in Allergy, spends two days a week with us. During the summer months, Mr. Douglas Almond, H.M.S. II, worked with us. Dr. Eduardo Salazar, from the School of Medicine of the University of Mexico, has recently joined us for a period of six months, beginning in January 1960. Dr. William M. Thurlbeck (a.r.p. *Path.* 1958) has returned from a year in England, where he was studying pulmonary pathology and methods of examining emphysematous lungs, and is an active member of our group. Dr. Albert Damon (*M.* 1952 and now at the Harvard School of Public Health) will be working with us on a part-time basis and is a regular member of our weekly Pulmonary Clinic. We have had the continuing and invaluable support of the members of the Pulmonary Clinic—Dr. Kenneth T. Bird, Dr. Lewis W. Kane, and Dr. Arthur S. Pier, Jr.—much to the benefit of the Clinic, its patients, and the participating physicians.

Teaching and care of patients

The care of patients and teaching are inseparable activities and involve our consultative work, the Pulmonary Clinic, and the Pulmonary Rounds.

Our consultative activities are concerned mainly with patients on the Medical or Surgical Service, with occasional requests from the Pediatric and Neurologic Services and the Massachusetts Eye and Ear Infirmary. The problems we see are divided, nearly equally, into two main categories—1) diagnostic and therapeutic and 2) problems concerned with the abnormal physiology of chest disease and the functional evaluation of the patient. This latter category includes cases of acute respiratory failure, as well as problems in the genesis of dyspnea, the severity of obstructive emphysema and the effects of therapy in this disease, preoperative evaluation of risk for thoracic surgical procedures, the differentiation of primary and secondary polycythemia, and disability evaluation in patients with lung disease. The patients are seen first by Dr. Schweppe or Dr. Salazar or, in the case of pediatric problems, Dr. Single, and are then reviewed on Rounds every Wednesday and Friday morning at 8 o'clock. Beginning this past February, Drs. Kane and Bird and Pier will share the responsibility for the Rounds.

Since 1954, the Pulmonary Clinic had met on a bimonthly basis. Beginning in September of 1959, we have been meeting on a weekly basis between 1 and 3 o'clock on Wednesday afternoons. Drs. Bird, Damon, Kane, Knowles, Pier, Schweppe, and Single attend the Clinic regularly. We schedule no more than four patients for each physician and attempt to run the Clinic on a strict time schedule. From 2:45 to 3:30 we have our Clinic Conference, at which we all discuss the cases we have seen that day, reviewing the diagnosis, therapy, and radiographic findings. Occasionally, members of the medical house staff or private physicians bring their problem cases to these Rounds for a "quick" consultation. These Clinic Conferences have proved both popular and profitable for the members, and a good spirit has prevailed. Obviously, both patient and physician benefit immensely from such meetings. At present, we see between sixteen and twenty-four patients each week, of which usually four or so are new cases referred to our Clinic. The Clinic population consists mainly of cases of chronic bronchitis and emphysema, bronchiectasis (acquired in the 1930's, before the advent of antibiotics), and tuberculosis, with scattered cases of sarcoidosis, kyphoscoliosis, cancer, silicosis, and even a case of coccidioidomycosis!

We have obtained a new timed vital capacity machine and a set of six new X-ray view boxes which have been installed in our conference room (the antechamber of rooms 15-20 in the Medical Clinic) through the good graces of Dr. John D. Stoeckle and Miss Ruth M. Farrisey, R. N.

The Pulmonary Rounds retain their informal atmosphere and continue to center around problems of chest disease in patients in the Hospital. They remain "working Rounds" and are attended by surgeons, internists, pathologists, radiologists, and house staff. The time of the Rounds has been changed from Tuesday to Monday, from 4:30 to 6 P.M. We review between four and six cases at these Rounds each week. Occasional private patients as well as ward patients are presented. Changing the time of the Rounds has allowed more of the house staff to attend, as well as more of the visiting staff. The last three Monday meetings each month are devoted, from 5 to 5:30, to short "fairly formal" teaching sessions. One is devoted to an illustrated review of the preceding month's supply of pulmonary pathology. Dr. Thurlbeck's maiden voyage during February was a rousing success. The other two sessions, from 5 to 5:30 each month, are concerned with pertinent subjects of interest. Thus far, we have had Dr. Kane discussing "The pneumoconioses", Dr. Bird reporting on the Annual Tuberculosis Chemotherapy Conference, Drs. Knowles and Schweppe discussing the problems of artificial ventilation with Dr. Pontoppidan and the team of Banks, Guarino, and Hansen helping considerably, and Dr. Thurlbeck discussing "The pathology of emphysema". Those of you whose names are not on our monthly mailing list will have them added if you will let us know. The goals of these Rounds are 1) better service to the Hospital for its patients with chest disease, 2) wider dissemination of knowledge amongst the staff, 3) maximal extraction of benefit from a potentially tremendous educational opportunity, and 4) stimulation and exchange of ideas concerning lung disease, its pathogenesis, and treatment.

Our main teaching activities are those concerned with the consultations, the Pulmonary Clinic, and the Pulmonary Rounds. In addition, during our first year of operation, a small group of us have met weekly to study 1) the radiology of the chest, using interesting cases seen, as well as the teaching files of the Department of Radiology, 2) the segmental anatomy of the lung, and 3) the interpretation of bronchograms. In addition, we have a Seminar every Friday from 12:30 to 2, at which we discuss clinical and physiological problems.

We have attempted to increase interest in chest medicine as a clinical sub-specialty of medicine. This is not difficult in a hospital such as the M.G.H. where such a remarkable number of fascinating clinical problems are at hand, with an equally remarkable number of fascinated house staff members to care for the patients. What field of internal medicine can claim such an array of new diseases as pulmonary alveolar microlithiasis, alveolar proteinosis, formes frustes of cystic fibrosis in the adult, beryllosis, agammaglobulinemia with bronchiectasis, silo-filler's disease, farmer's lung, the atypical Mycobacteria—and at the same time be so closely allied to general medicine, with the chest the mirror (or window) of systemic disease, with all the problems of allergy, bacteriology, radiology, and physiology represented? In the field of respiratory physiology, what can equal the excitement of the problems concerned with altitude physiology and "space medicine" on the one hand, or gas exchange during hypothermia on the other? With the revolution in the care of patients with pulmonary tuberculosis, chest medicine in a general hospital setting becomes even more important, and, for the first time, the general physician must be able to assume more active responsibility in the care of this disease. It is hoped that in the future the use of fluoroscopy, bronchoscopy, and bronchography could be offered to students of pulmonary disease at this Hospital.

Yet, the teaching of chest disease has been relatively difficult in most medical schools and university hospitals and the specialty of chest medicine has not been as popular as other sub-specialties in internal medicine. This has occurred for several reasons, all interrelated. It begins with the standard American textbooks of medicine, where the Chest Disease Section of the text is stripped bare by other specialties. Tuberculosis and fungous disease are treated under Infectious Diseases, asthma and Loeffler's syndrome under Allergic Diseases, sarcoidosis as Diseases of Unknown Etiology (aren't most diseases?), and pulmonary vascular disease under Diseases of the Cardiovascular System. The section on Diseases of the Chest is left with, amongst others, bronchiectasis (a disappearing disease), chronic bronchitis and emphysema (not popular), pleural effusion (must be considered with pulmonary tuberculosis for proper perspective), cancer of the lung and mediastinal tumors (surgical exercises).

The problems of the specialty increased with the development of respiratory physiology and the use of pulmonary function tests. For some unknown reason, teaching and interpretation of the subject to medical students and doctors of medicine fell far behind the rapid advances in the basic science. Perhaps this was because much of the field is of no immediate or practical use to the doctor, while the clinical physiologists were busy trying to convince the doctor to the contrary. At any rate, the dust is settling on the clinical usefulness of pulmonary function tests and the truth of the matter is that determinations of the timed vital capacity, maximal breathing capacity, and arterial blood gases (oxyhemoglobin saturation and CO_2 tension) at rest and on exercise, coupled with functional fluoroscopy, will give all the information one needs in the usual clinical problem. Medical and surgical house staff members are now doing these tests themselves and interpreting the results. In certain instances we help with the interpretation and do more extensive testing where indicated. The new pathophysiology of pulmonary disease, which has developed because of the widespread use of pulmonary function testing in clinical investigation, has only just begun to be taught in medical schools, but has not been forcibly injected into textbooks of internal medicine or chest disease as yet. Thus, this problem is being solved, but slowly.

Still another problem which is being solved as a result of the therapeutic advances, is pulmonary tuberculosis. Pulmonary tuberculosis is to the chest physician what cutaneous syphilis was to the dermatologist. Because of the nature of the treatment of the disease and the place of the sanatorium in it, prior to the development of effective chemotherapy, the diagnosis and natural history of the disease was known chiefly to the physicians in residence at the sanatoria. Medical students and general physicians were not exposed to this knowledge, nor was it easy to come by in the setting of the medical school and university hospital. With the new chemotherapy and the deemphasis of the need for prolonged rest in the sanatorium, pulmonary tuberculosis is becoming more and more a part of general medicine. More cases will be seen and followed in the community in the setting of the general hospital, and, therefore, adequate teaching material will become available.

Finally, the teaching of chest medicine and its popularity as a specialty has been hampered because, of all the specialties of internal medicine, pulmonary disease relies most heavily on other specialties Thus, the complete chest physician is bacteriologist, radiologist, bronchoscopist, allergist, and physiologist. In addition, the chest being the window through which to see systemic disease, he must be well-trained in general medicine. He must be well-versed in cardiology because of the obvious important interrelationship of heart and lungs. Finally, he must be proficient in the techniques of occupational medicine because of the ever-present pneumoconioses. So, there is something of interest for everyone in chest disease. In our Unit, we attempt to retain proficiency in general medicine while we acquire what we need for the specialty from the neighboring specialties. At our Chest Rounds, we try to discuss subjects as well as show cases which illustrate the above specialties, without bearing too heavily on any one topic. In the future. it would be desirable to be able to offer all these special skills needed in pulmonary disease to students and fellows.

Research projects

We moved into our present laboratory in March 1959 and, as of this writing, we are able to carry out all the tests of pulmonary function and have shifted our research projects from first into second gear. Our investigations are concerned mainly with learning as much as we can about obstructive emphysema and, if possible, with adding to the knowledge of this disease. Our main project at present is to define the effects of aging on respiratory function, and for this purpose we are studying all the parameters of respiratory function in an aged population of healthy Spanish-American War veterans (ages 72-92, average 82 years) and comparing the results with control groups of children, young adults, and patients with obstructive emphysema. The investigation will provide extensive data from one laboratory on normal respiratory function in the very aged, much of which is unavailable at the present time. By detailed analysis of the patient's life history (occupation, smoking, lung disease, etc.), it may provide pathogenetic explanations for the changes found. The project may shed light on the pathogenesis of obstructive emphysema, which some investigators have considered an acceleration of the normal aging process in the lungs. To date, we have shown that the elderly individuals have (when compared with the young adult controls) a lower timed vital capacity, maximal breathing capacity, and maximal mid-expiratory flow rate; lower values in all subdivisions of the lung volume except the residual lung volume which is absolutely increased; tidal volume, respiratory frequency, and minute ventilation (per m^2 B.S.A.) are all greater as is the ventilatory equivalent; oxygen consumption per m^2 B.S.A. is less; arterial oxygen saturation is less; resting end-expiratory intrapleural pressure is less negative; index of intrapulmonary mixing is greater. These changes in themselves offer some fascinating leads for future investigation.

Dr. Single is studying the ventilatory response to graded degrees of hypercapnia and hypoxia in children. Although the ventilatory response to alteration of the various chemical determinants of ventilation has been determined in adult subjects. this has not been accomplished in children. Acquisition of this knowledge should allow us to determine whether the respiratory center responsiveness varies with age and we plan to compare the results with a normal adult control group as well as with our aged group of individuals. Simultaneously, we are determining the reproducibility of measurements of vital capacity, maximal breathing capacity, and maximal flow rates (as well as the reproducibility of ventilatory responses to hypercapnia and hypoxia). virtually unknown information of obvious importance. Children are very difficult to work with in terms of attaining a fairly "steady state", and Dr. Single has been particularly successful in developing reliable methods with the roughly twenty-five subjects she has studied to date.

Dr. Schweppe is reviewing cases of lung abscess seen at the M.G.H. since 1942—the last review having been written by Dr. Richard H. Sweet at that time. He will attempt to define more clearly the natural history of this disease since the advent of antibiotics. In addition, he has initiated a study concerned with pulmonary pathophysiology of rheumatoid spondylitis.

As part of a continuing interest in the problems of chronic obstructive emphysema, we are planning a project which will attempt to differentiate obstructive emphysema and intrinsic bronchial asthma.

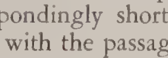
In conjunction with Dr. Damon, we plan to begin a study of innate host or "constitutional" factors in pulmonary disease, beginning with pulmonary cancer and obstructive emphysema.

In collaboration with Dr. Thurlbeck, we are presently exploring methods of producing chronic lung disease in animals, beginning with the use of oxides of nitrogen—a very toxic exhaust product of great importance in problems of air pollution. We hope to be able to produce a disease state similar to obstructive emphysema in man.

The laboratory is called upon fairly frequently for help in clinical problems where testing of pulmonary function can give definite aid as regards diagnosis, disability evaluation, management of therapy (acute and chronic), and preoperative evaluation for thoracic surgical procedures. During the winter months we see many cases of respiratory failure where artificial respiration is required. The house staff is remarkably proficient in the management of these difficult cases, and the improvement in the care of these patients over the past five years or so is astounding. Seeing and studying these cases and aiding in their management is an important part of our work, combining patient care, teaching, and clinical investigation.

I have not resisted the tendency of those interested in the short-winded to be long-winded, and I suspect that, as we accomplish more, these reports will become correspondingly shorter. We are hopeful that with the passage of time the Pulmonary Disease Unit will be of value in improving the care of patients with chest disease and will contribute to the knowledge of diseases of the chest. Finally, we are vitally interested in the teaching of the subject and hope to contribute to the new look of a vigorous, broad-based specialty of internal medicine.

John H. Knowles, M.D.,
Assistant in Medicine
and *Chief, Pulmonary Disease Unit*



The Board of Trustees, at their meetings on January 29 and February 19, voted:

That the Radiology Department be allowed an extra residency for Dr. Stanley P. Bohrer, formerly of the Surgical Service, his appointment to begin March 1;

That Mr. Harold Dodd, Senior Surgeon, King George Hospital, Ilford Royal Hospital, Richmond, England, be invited to give a Richardson Lecture at the Hospital on June 16;

To change the appointment of Dr. Clement A. Hiebert from Assistant in Surgery to Clinical Associate in Surgery.

To appoint:

Dr. Anton T. Appels as Clinical and Research

Fellow in Medicine, beginning April 1;

Dr. Mignon C. Chasen as Assistant in Psychiatry, beginning February 1;

Dr. Allan Goldblatt as Exchange Assistant Resident on the Children's Medical Service, for the period January 21 through March 2;

Dr. Eduardo Salazar as Clinical and Research Fellow in Medicine, for six months, beginning January 1;

Dr. T. David Seigne as Clinical Fellow in Anesthesia, beginning June 1;

Dr. Stewart Sell as Intern in Pathology for one year, beginning July 1;

Dr. Isadore Starr as Clinical Fellow in Medicine for one year, beginning April 15;

Dr. Rudolf Toch as Clinical Associate in Children's Medicine, beginning January 11;

Dr. Cecil J. Watson as Visiting Physician for one week, beginning March 6.

At their meetings on February 10, 17, and 24, and March 2 and 9, the General Executive Committee voted:

To accept the resignations of:

Dr. Willi Burgi from the position of Research Fellow in Medicine, effective as of January 31;

Karl Dus, Ph.D. from the position of Research Fellow in Medicine, effective as of December 31, 1959;

Dr. Pierre A. Maurice from the position of Clinical and Research Fellow in Medicine, effective as of February 15.

To rescind the appointment of:

Harish C. Srivastava, Ph.D. as Research Fellow in Medicine.

To extend the appointments of:

Dr. Bernard D. Grant as Clinical Fellow in Orthopedic Surgery, for one month, through March 31;

Dr. Alberto Salama as Clinical and Research Fellow in Neurology for one year, beginning March 1;

Dr. Alejandro H. Villegas as Clinical and Research Fellow in Surgery, for an additional month, beginning March 1;

Dr. Alfred D. Weiss as Clinical and Research Fellow in Neurology for one year, beginning July 1.

To reappoint:

Dr. Barry G. W. Arnason as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. George E. Battit as Assistant Resident in Anesthesia for one year, effective as of January 1;

Dr. George H. Collins as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Robert S. Harper as Clinical Fellow and Acting Resident in Pathology for one year, beginning July 1, 1959;

Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, retroactive to April 28, 1959;

Dr. Walid A. Mnaymneh as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Dr. Kenneth G. Potee as Clinical and Research Fellow in Medicine for one year, beginning March 1;

Annette M. C. Rapin, Ph.D. as Research Fellow in Medicine for one year, beginning February 1;

Dr. Margaret A. Single as Clinical and Research Fellow on the Children's Medical Service for six months, beginning January 1.

To appoint:

Dr. Glenn E. Behringer as Chief of the Surgical Out-Patient Clinic, to succeed Dr. Clement A. Hiebert, who has resigned that position;

Marvin W. Colter, M.A. as Research Fellow in Psychology, in the Department of Psychiatry, for one year, beginning September 1, 1959;

Dr. Bruce W. Konigsmark as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. George Küry as Research Fellow in Neuropathology for one year, beginning July 1;

Dr. Jean P. Lamour as Graduate Student Assistant in Orthopedic Surgery, for the period February 8 through April 3;

Dr. Alexander M. McPhedran as Clinical Fellow in Neuropathology for one year, beginning July 1;

Gerald L. Mechanic, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning March 1;

Albert F. Parlow, Ph.D. as Research Fellow in Biology, in the Department of Surgery, for one year, beginning March 1.

150th ANNIVERSARY PROGRAM

Mr. Philip H. Theopold, co-chairman with Mr. Francis W. Hatch of our 150th Anniversary Program, has announced a gift to the Hospital of $250,000 from the Abbot and Dorothy H. Stevens Foundation, in memory of the late Abbot Stevens of Andover. This gift will be used for the construction of the Heart Clinic in the new Clinics Building, and brings the total amount of the contributions toward our $20,000,000 goal to $5,149,972 as of February 29.

Mr. Abbot Stevens was a member of the Massachusetts General Hospital Corporation for eight years prior to his death on May 12, 1958. His interest in the M.G.H. was only one of his countless activities in community affairs. The results of his sense of civic responsibility will long serve as enduring memorials, as will the Heart Clinic in the new Clinics Building serve as a reminder of hope to all those patients afflicted with heart disease.

Through the MGH Clinics, the Hospital most directly extends its medical care into the community, for annually some 200,000 visits are made by patients to our 44 clinics. For these patients, the Hospital must provide the best possible care in an attractive setting that will contribute to their total comfort and well-being.

The facility is to be designed primarily for the care of patients who cannot afford to pay the full cost of their medical care, and for the teaching of medical students, house staff, and clinical fellows. At the same time, it is to be designed so that it can be adapted easily to any future changes in the general pattern of medical care.

The new Clinics Building will do more than re-house present activities. It will include complete diagnostic and special therapeutic facilities, such as X-ray, Electrocardiography, Psychometric Testing, Transient Operating Rooms, Pharmacy, and Social Service, to mention but a few These facilities will be readily accessible to all ambulatory patients who are to be cared for in the building, so that they may obtain the best in modern medical care with a maximum of convenience at a minimal cost. It will also provide for needed expansion of services in such areas as rehabilitation, preventive and community health services, industrial medical services, family health, headquarters for various home care activities, and other similar efforts on behalf of the community's health.

UNITED CEREBRAL PALSY ASSOCIATION

As a highlight of its 10th anniversary, the United Cerebral Palsy Association, through its Research and Educational Foundation, announced on March 2 a grant of $27,346 to the Massachusetts General Hospital.

Drs. Ellsworth T. Neumann, Frank R. Ervin, and Vernon H. Mark accepted the generous check from Mrs. Solomon M. Feldman of Lynn, President of the United Cerebral Palsy Association of the North Shore, and Mr. Richard E. Daly of Salem, Executive Vice-President.

The research project, "Investigation and treatment of movement disorders by stereotactic methods", which will continue through December 1960, is under the direction of Dr. Ervin, Associate Psychiatrist at Massachusetts General Hospital and Instructor in Psychiatry at Harvard Medical School, and Dr. Mark, Assistant in Neurosurgery at M.G.H. and Instructor in Surgery at Harvard Medical School.

Through the joint efforts of medical investigators at Massachusetts General, the treatment of movement disorders, such as those present in cerebral palsy, are being studied. In the hope of clarifying the physiological disturbances which underlie these poorly understood conditions, the technique of making precisely located lesions in the depths of the brain is being used. This type of procedure has proved useful in several medical centers throughout the world.

This investigative work, supported by grants from the United Cerebral Palsy Association and the United States Public Health Service, has significance from both a therapeutic and research point of view.

Since its founding in 1949, the United Cerebral Palsy Association has consistently supported the research of hundreds of nationally-known scientists in an effort to find the causes of brain damage, ways to prevent this tragic disability, and better methods of treatment for the more than 600,000 Americans with cerebral palsy. In addition, the organization's 344 affiliates provide medical treatment, education and rehabilitation services to thousands of children and adults.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Cardiology

Morse, R. L., Brownell, G. L., and Currens, J. H.
The blood pressure of newborn infants: Indirect determination by an automatic blood pressure recorder in 20 infants.
Pediat. 25:50.

Endoscopy

Benedict, E. B.
Comments: A gastroscopic biopsy study of 50 postoperative stomachs.
Gastroenterclogy 38:267.
Benedict, E. B.
Gastritis.
In Current therapy, 1960, Philadelphia, W. B. Saunders Company, p. 244.
Benedict, E. B., and Nardi, G. L.
Dysphagia and esophageal obstruction.
In Current therapy, 1960, Philadelphia, W. B. Saunders Company, p. 230.

Neurology

Schwab, R. S
Dequalinium in myasthenia gravis.
Brit. M. J. *i*:57.
Schwab, R. S., and Murphy, J. T.
Recent experiences with parenteral Dilantin.
Epilepsia 1 (1959/60):227.

Ophthalmology

Leahey, B. D.
Beta radiation in Ophthalmology.
Am. J. Ophth. 49:7.

Plastic & Reconstructive Surgery

Murray, J. E., and Cannon, B.
Basal-cell cancer in children and young adults.
New England J. Med. 262:440.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Academy of Medical Sciences, USSR.
Problems of etiology and pathogenesis of tumors (English translation).
Washington, D. C., United States Government Printing Office, 1959.
(23K)
Albanese, A. A. (Editor)
Protein and amino acid nutrition.
New York, Academic Press, Inc., 1960.
(5M)
Bogaert, L. van, and Radermecker, J. (Editors)
First International Congress of Neurological Sciences, vols. 3, 5.
New York, Pergamon Press, 1959.
(19A)
Cross, L. M.
The preparation of medical literature.
Philadelphia, J. B. Lippincott Company, 1959.
(1Aa)
Culver, W. E.
Effects of cold on man: An annotated bibliography.
Washington, D. C., American Physiological Society, 1959.
(23Z)
Danielli, J. F. (Editor)
General cytochemical methods, vol. 1.
New York, Academic Press, Inc., 1958.
(2Am)
Fairbank, T.
An atlas of general affections of the skeleton.
Edinburgh, E. & S. Livingstone, Ltd., 1951.
(18E)
Ford, F. R.
Diseases of the nervous system in infancy, childhood, and adolescence, ed. 4.
Springfield, Ill., Charles C. Thomas, 1959.
(19E)
Freud, S.
Standard edition of the complete psychological works, vols. 9, 20.
London, The Hogarth Press and the Institute of Psycho-analysis, 1959.
(19Op)
Gould, E. S.
Mechanism and structure in organic chemistry.
New York, Henry Holt and Company, 1959.
(5R)
Gurdjian, E. S., and Webster, J. E.
Head injuries: Mechanisms, diagnosis and management.
Boston, Little, Brown and Company, 1958.
(19J)
Harris, H.
Human biochemical genetics.
New York, The Cambridge University Press, 1959.
(2Am)
Hoffman, W. S.
The biochemistry of clinical medicine, ed. 2.
Chicago, The Year Book Publishers, Inc., 1959.
(5A)
Lederer, M. (Editor)
Chromatographic reviews, vol. 1.
New York, Elsevier Publishing Company, 1959.
(5A)
Lowman, E. W. (Editor)
Arthritis: General principles, physical medicine, rehabilitation.
Boston, Little, Brown and Company, 1959.
(18K)
Martin, H.
Surgery of head and neck tumors.
New York, Paul B. Hoeber, Inc., 1959.
(23P)
Roberts, J. A. F.
An introduction to medical genetics, ed. 2.
New York, Oxford University Press, Inc., 1959.
(2Am)
Russell, D. S., and Rubinstein, L. J.
Pathology of tumours of the nervous system.
London, Edward Arnold (Publishers) Ltd., 1959.
(19E)
Russell, W. M. S., and Burch, R. L.
The principles of humane experimental technique.
London, Methuen & Company, Ltd., 1959.
(2B)
White, P. R.
The cultivation of animal and plant cells.
New York, The Ronald Press Company, 1954.
(8C)

BOOKS ADDED MORE RECENTLY TO TREADWELL LIBRARY

Allen, J. G. (Editor)
Extracorporeal circulation.
Springfield, Ill., Charles C. Thomas, 1958.
(15D)
American Medical Association.
New and nonofficial drugs, 1960.
Philadelphia, J. B. Lippincott Company, 1960.
(22F)
Byrne, J. J.
The hand: Its anatomy and diseases.
Springfield, Ill., Charles C. Thomas, 1959.
(18O)
Crook, E. M. (Editor)
Glutathione (Biochemical Symposium No. 17).
Cambridge, Eng., At the University Press, 1959.
(5A)
Davis, L. (Editor)
Christopher's textbook of surgery, ed. 7.
Philadelphia, W. B. Saunders Company, 1960.
(23A)
Durham, R. H. (Editor)
Encyclopedia of medical syndromes.
New York, Paul B. Hoeber, Inc., 1960.
(6G)
Gautheret, R. J.
La culture des tissus végétaux.
Paris, Masson et Cie, 1959.
(2M)
Goss, C. M.
A brief account of Henry Gray, F.R.S. and his anatomy, descriptive and surgical during a century of its publication in America.
Philadelphia, Lea & Febiger, 1959.
(1Ea)
Hanson, N. R.
Patterns of discovery.
Cambridge, Eng., At the University Press, 1958.
(36Eh)
Harris, R. S., Marrian, G. F., and Thimann, K. V. (Editors)
Vitamins and hormones, vol. 17.
New York, Academic Press, Inc., 1959.
(5N)
Kelsall, M. A., and Crabb, E. A.
Lymphocytes and mast cells.
Baltimore, The Williams & Wilkins Company, 1959.
(14Am)
Lotspeich, W. D.
Metabolic aspects of renal function.
Springfield, Ill., Charles C. Thomas, 1959.
(17E)
Merchant, D. J., Kahn, R. H., and Murphy, W. H., Jr.
Handbook of cell and organ culture.
Minneapolis, Burgess Publishing Company, 1960.
(8C)
Miale, J. B.
Laboratory medicine: Hematology.
St. Louis, The C. V. Mosby Company, 1958.
(14B)
Nachmansohn, D.
Chemical and molecular bases of nerve activity.
New York, Academic Press, Inc., 1959.
(19C)
Ogilvie, Sir H.
Hernia.
Baltimore, The Williams & Wilkins Company, 1959.
(23S)
Sobotka, H., and Stewart, C. P. (Editors)
Advances in clinical chemistry, vol. 2.
New York, Academic Press, Inc., 1959.
(7D)
Stainsby, G. (Editor)
Recent advances in gelatin and glue research
New York, Pergamon Press, 1958.
(5B)
Timakov, V. D. (Editor)
Microbial variation.
New York, Pergamon Press, 1959.
(9A)
Welford, A. T.
Ageing and human skill.
New York, Oxford University Press, 1958.
(13Po)
The world almanac 1960 and book of facts.
New York, New York World-Telegram and The Sun, 1960.
(1D)

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THE YEAR ABROAD

In recent years a number of house staff members have interrupted their residency training to spend periods of a year or more studying in Europe. Although some few have taken clinical appointments in hospitals abroad, the bulk of people from the M.G.H. have gone to laboratories, and most of these to research positions in England. Drawn to Britain by the language, which the English reluctantly share with us, they have quickly come to appreciate Whitehead's observation that the English language has been a major barrier to Anglo-American understanding, since this common tongue has encouraged the erroneous belief that the two cultures are fundamentally similar—a misconception promptly dispelled by attending a cricket match, visiting a pub, or chatting with a London bobby.

Even apart from the considerable general appeal of a year in Europe, the attractions of interrupting one's residency to study there are legion. Basic science in England speaks for itself, but the value of working in an English laboratory is not restricted to sitting at the feet of an illustrious mentor. The year abroad is a

No. 89 in a series of Staff photographs
Dr. John H. Knowles, Assistant in Medicine—Chief of the Pulmonary Disease Unit

time for taking stock, an opportunity to step aside from the demanding pressures of clinical responsibility to follow hunches, to indulge one's curiosity, and to examine one's fitness for investigation. It is a chance to resurrect tangential interests that were quietly interred at the onset of one's internship. There is time to read, to think, to relax, and to mature.

England is particularly suited for such a venture. The self-confidently reserved English laboratory atmosphere lends itself well to introspection. Although the Industrial Revolution came early to Britain, the assembly line is a contribution of the New World which has been slow to infiltrate English life. One may be an individual without being eccentric, although he may be an eccentric if he prefers. In the lab, he is likely to be treated as a research worker with a special field of interest rather than as an anonymous contributor to a giant project. He is not victimized by the pressure to produce. His time is generally his own. He is surrounded by a tradition of close reasoning and critical review that stems from the public (private) schools. A high standard of performance is expected.

There is also an appreciation that all work makes Jack very dull indeed, and the beauty and cultural heritage of England and the nearness of continental Europe provide an appealing complement to the laboratory.

Dr. Churchill has predicted wisely: "In twenty years, the portion of this period in your life you will recall most vividly will be the year you spent abroad."

Edwin W. Salzman, M.D.,
Assistant Resident in Surgery

VOLUNTEER GROUPS

MGH Staff Wives Association

March 1, 1960, from 3 to 5 P.M. at Bartlett Hall, was the occasion of the tea given by the Staff Wives Association for the 150 personnel and their wives who are visiting M.G.H. from foreign countries. Mrs. Jackson M. Thomas of Wellesley was chairman of the tea, assisted by Mrs. Bartlett H. Stone of Wellesley. This annual affair is our formal entertainment, as an association, for our visitors from many countries. Invitations are also extended to all members of the Staff and their wives, to the Trustees of the Hospital, to secretaries of the Chiefs of Staff, and to heads of Departments.

The pourers were Mrs. Oliver Cope, Mrs. Sylvester B. Kelley, Mrs. Walter Bauer, Mrs. Charles B. Burbank, Mrs. John M. Head, Mrs. Howard Ulfelder, and Mrs. Soma Weiss.

The hostesses were the Community Chairmen.

The annual meeting of the Staff Wives Association will be held on Tuesday, May 10, at 10 A.M., in Bartlett Hall.

Distaff Club

"Contemporary architecture" was the subject of Mr. Tom Payette's very interesting talk, given on March 16 in the Penthouse. What to look for in buying or building a house was also emphasized.

At the same meeting, Mrs. George M. Williams discussed the progress of the Volunteer Project, which has been most successful and is greatly appreciated by the Hospital. We hope to continue this project indefinitely.

The Book Club's selection for March was *The fall* by Camus, which stimulated a lively discussion at the home of Mrs. Edwin L. Carter.

We are looking forward to hearing Dr. Paul Tillich at our meeting on April 13.

New addresses:

Dr. Fernando A. Cardenal (a.r.s. *Or.* 1959), Columela 4, Madrid, Spain
Dr. Harry B. Ditmore, Jr. (*S.* 1954), Ireland Army Hospital, Fort Knox, Ky.
Dr. Edward A. Gall (r.p. *Path.* 1937), University of Cincinnati College of Medicine, Cincinnati 29, Ohio
Dr. Walter E. Garrey (*E.S.* 1933), 585 Main St., Malden 48, Mass.
Dr. Luke Gillespie (past a. obst.), Boston Lying-in Hospital, 221 Longwood Ave., Boston 15, Mass. P.H
Dr. Philip H. Leiderman (r.p. *Psychiat.* 1957), Massachusetts Mental Health Center, 74 Fenwood Rd., Boston, Mass.
Dr. Edwin H. Mulford, II (a.r.s. *N.S.* 1947), 748 Post Rd., Darien, Conn.
Dr. Pauline Owyang (*C.M.* 1943), 35 Binney St., Boston 15, Mass.
Dr. Eugene E. Record (*N.S.* 1937 and *Or.* 1941), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. William A. Rogers (*Or.* 1924), Peacham, Vt.
Dr. Agnes Burt Russfield (*Path.* 1950), Bio-Research Institute, Inc., 9 Commercial St., Cambridge, Mass.
Dr. Edward L. Sleeper (clin. assoc. *Dn.*), 29 Lincoln St., Framingham, Mass.
Dr. Avery D. Weisman (r.p. *Psychiat.* 1945), 80 Woodbine Rd., Belmont 78, Mass.

THE NEWS

No. 195 Boston, Mass. May 1960

ACTIVITIES OF THE ENDOCRINE UNIT

An invitation from the MGH News to outline the structure and function of one of the specialty areas in the Hospital gives one pause. What are the boundaries of the area to be described?—or is the search for such boundaries archaic now? Is our Hospital in fact a tight federation of specialty units?—or is there a perceptible common market in the day-by-day activities of medical care, teaching, and particularly in the approach to medical research? The writer feels that the answer should be clear to those who have been reading these columns over the past several years. This brief summary should offer further evidence of the marked similarity of approach to these problems by many individuals involved in what is called academic medicine in the M.G.H. as a teaching hospital.

The question as to what constitutes Endocrinology is particularly intriguing. Vexed by this task, Dr. Fuller Albright retreated into a definition of what Endocrinology was not. He protested that when major advances are made in an area of Endocrinology—such as in diabetes—forthwith the subject is rechristened "Metabolism" and carefully extracted from the amorphous residue. At the M.G.H., for many years, the study of diabetes and thyroid diseases has been carried out in separate clinics and research facilities, and with eminent success. This fragmentation has in practice promoted more intensive programs in all these areas of medicine. The Endocrine Unit is quite content with its legacy of the "amorphous residue" of endocrine and metabolic disorders. There are compensations in being amorphous. It allows one to thrust out pseudopods in many interesting directions.

The primary function of the Massachusetts General Hospital is the care of the sick. The Endocrine Unit has organized a general Endocrine Clinic which meets weekly on Monday afternoons for consultative recommendations or for the long-term care of ambulatory patients. Endocrine diseases are, almost by definition, diseases of "too much" or "too little", and the latter in particular require close medical supervision in the administration of replacement therapy over extended periods of time. Many of the patients in this clinic have been followed for periods of twenty to thirty years, allowing valuable studies of the natural histories of their disorders to be made. Individual members of the Endocrine Unit serve on a rotational basis as consultants to the ward services on the wide variety of medical problems which fall within our area of major interest. In this work, Drs. Irving P. Ackerman and Daniel D. Federman have been particularly active. Dr. Walter T. St. Goar has maintained his long-term interest in Endocrinology, particularly in diseases of the parathyroid gland, and has contributed in many ways to the clinical and teaching program of the Unit.

The internal teaching program of the Endocrine Unit is designed for continual review of problems ranging from clinical decisions of immediate concern in the Ambulatory Clinic to basic scientific theory underlying endocrine and metabolic research. The former need is met by an informal conference, following the weekly Endocrine Clinic, under the capable direction of Dr. Federman. Here specific problems presented by patients seen that day are reviewed by all the members of the clinic. Somewhat similarly, the physician acting as the consultant for the month leads a walking Rounds once weekly, so that all members can benefit from the experience offered by patients who have been seen in consultation. The weekly Endocrine Grand Rounds allows a more formal review of one or two patients in the Ether Dome. This exercise is now a combined Endocrine Rounds, under the rotational sponsorship of the Diabetes, the Thyroid, and the Endocrine Units. Finally, a series of weekly evening seminars on basic science are sponsored, with topics of widely varying scope, such as: current concepts of protein biosynthesis, porphyrin metabolism, studies on the mechanism of action of estrogens, etc. The above teaching program was termed "internal" in contradistinction to the participation by members of the Unit in many other teaching functions, such as the HMS IV elective course in endocrinology, the graduate course in internal medicine, and many other programs of the Harvard Medical School.

It is within the field of research that the Endrocrine Unit has changed most definitively within the past two years. There has been no sharp rupture with the past, but certainly a change in emphasis. Hormones are secreted, circulate accessibly in the blood, and catalytically monitor virtually every cell in the body. The rate of secretion seems always to be controlled by a feedback mechanism, comparable to a thermostat—a "chemostat", if you will. It is this accessibility of hormones in transit (or in their spillage into the urine) which should allow eventually for great precision in the diagnosis of "too much" or "too little". Of course, considerable progress has already been made in this regard in the measurement of the adrenal steroids and thyroid hormones—substances of sufficient chemical individuality to allow direct quantitative analyses. Most of the remaining hormones do not offer such convenient handles and their concentrations can only be approximated by immunochemical or bioassay procedures. The study of how a hormone functions, intriguing in itself, may carry an ultimate additional bonus in a medical setting in spawning a more sensitive and specific assay procedure. The field of metabolic diseases stretches out endlessly—for which disease is not "metabolic" in its final analysis? The inborn errors of metabolism (Garrod's "chemical analogues of structural malformations") are much more distinctly circumscribed. They have been called "molecular diseases"—diseases caused by the genetic ablation or alteration of an enzyme. These diseases cut across all the medical specialties, but a number of them have traditionally fallen within the scope of the Endocrine Unit. Here, again, the opportunity exists for a precise definition of the disease mechanism through the application of biochemical techniques.

Following the pioneering work of Drs. Joseph C. Aub, Fuller Albright, and Walter Bauer, the M.G.H. has continuously maintained a deep interest in metabolic bone disease. In the Endocrine Unit, Dr. Stephen M. Krane is now most directly engaged in the study of bone physiology and disease. He has begun a long-term program of biochemical investigations relating to bone formation and destruction. It has long been known that bone is particularly rich in citrate, and that parathyroid hormone results in an elevation of citrate in venous blood from bone. It has been speculated that citrate accumulates in bone because of a relative enzymatic deficiency of isocitric dehydrogenase, and that perhaps parathyroid hormone may affect calcium indirectly through an action on citrate metabolism—a potent chelating agent. Dr. Krane has recently shown conclusively that bone contains normal amounts of the Krebs cycle enzymes and cofactors necessary for citrate utilization. His studies suggest that the calcium ion competes with the enzyme aconitase for citrate, effectively removing citrate from the metabolic pool. Thus, citrate accumulation seems to be secondary to the calcium concentration, and no primary defect in citrate metabolism exists in bone. These precise quantitative studies have contributed significantly to current concepts of bone metabolism. As is often the case with such fundamental work, there have been many interesting scientific by-products, such as the development of new techniques for measuring Krebs cycle activity and the levels of reduced and oxidized pyridine nucleotides. Rather far removed from osseous tissue while summering at Woods Hole, Dr. Krane turned to the metabolism of marine eggs (*Arbacia punctulata*) and demonstrated striking changes in the pattern of pyridine nucleotides and glucose metabolism following fertilization. In conjunction with Dr. Melvin J. Glimcher of the Orthopedic Research Laboratory, interesting studies have been undertaken concerning the early phases of ossification. It has been found that purified collagen, the major protein of osteoid, takes up radioactive phosphate *in vitro* during incubation. Collagen was found also to split phosphate from adenosine triphosphate (ATP). The nature of this chemical bond and the conditions necessary for its formation are under investigation. It is apparent that this phenomenon may be of great importance in the deposition of bone salts in osteoid. Working with Dr. Krane, Dr. Dwight R. Robinson has made ingenious modifications of a technique to measure the phosphaturic effect of parathyroid hormone in parathyroidectomized rats. Although now in its early stages, this gives promise of being a more sensitive assay procedure for this hormone than any previously devised. It is hoped that this technique may eventually allow for a clinically useful assay procedure for parathyroid hormone in the occasional patient where this information would be of great diagnostic or research interest.

Dr. Anne P. Forbes has been carrying out clinical investigations on a variety of endocrine disorders. Major attention has been directed toward physiological studies to elucidate the mechanism of the impaired water excretion in patients with panhypopituitarism. In this work she has been assisted by Dr. Jorgen G. Jacobsen, from Copenhagen. She has also been concerned with a number of studies relating to growth hormone. With Dr. Richard A. Field, changes in the level of non-esterified fatty acids (NEFA) as an index of growth hormone activity are being measured. Attempts are being made to find more objective evidence for a proposed estrogen inhibition of growth hormone release by measurement of the "sulfation factor" of Daughaday before and after estrogen therapy of acromegaly. Dr. Patricia H. Benedict has continued her follow-up studies of cases of fibrous dysplasia seen at the M.G.H. and of the adrenal and ovarian morphology found in women with hirsutism.

The writer has been interested in studies of nucleic acid metabolism in man, particularly in developing quantitative assay procedures for individual steps in pyrimidine biosynthesis. Assay techniques have now been devised for six sequential steps leading to uridylic acid, using preparations from circulating leukocytes and erythrocytes. So far, the main applications of these techniques have been to hematological disorders, with grossly abnormal patterns demonstrable in leukemic cells and in pernicious anemia. Several members of a new class of antimetabolites have been synthesized and found to be effective inhibitors of pyrimidine synthesis *in vitro*. These compounds are currently being tested for *in vivo* activity as anti-neoplastic agents. Knowledge of the mechanism of action of fluoropyrimidines has been extended with the demonstration that these compounds serve as feed-back inhibitors of earlier stages of pyrimidine biosynthesis. In other words, they not only metabolically compete with their normal analogues, but also shut down the rate at which they are being synthesized.

Quite recently we have been interested in orotic aciduria—or, rather, the disease which *was* orotic aciduria, since the single known patient with this disorder died several years ago. This child, with refractory megaloblastic anemia, was discovered at Emory University in Atlanta to be excreting large amounts of orotic acid (a pyrimidine precursor) in the urine. With the cooperation of Dr. Charles Huguley, in Atlanta, blood was collected from the deceased child's parents and three siblings. It has been possible to demonstrate the heterozygous enzymatic defect in the erythrocytes of the parents and two of the three siblings, the other child being normal. Preliminary evidence suggests that the enzymatic defect can also be demonstrated in saliva and that the trait of orotic aciduria may not be so rare as was previously thought. Thus, the investigation of a rare metabolic defect found only once in a family from south Georgia may have significance considerably greater than that initially anticipated.

It is planned in the near future to extend these studies to certain other metabolic diseases, particularly gout, and to study the effect of growth hormone and gonadotropins on nucleic acid synthesis. Certain studies on amino acid transport by kidney cortex slices have also been started in an attempt to elucidate more fully the tubular disorder of cystinuria.

The Endocrine Unit has been most fortunate in the close collaboration of Drs. Janet W. McArthur and Maurice M. Pechet. Through their independent laboratory facilities and research projects they have greatly broadened the over-all investigative program of the Unit. Dr. McArthur is internationally known for her work on gynecologic endocrinology and particularly for significant contributions on the biological characterization and assay of human gonadotropin hormones. During the year she devoted a great deal of time to the organization and function of an international "workshop conference" on human pituitary gonadotropin, in an effort to standardize nomenclature and assay procedures. In her laboratory a number of advances have recently been made in assay techniques for gonadotropic activities. Of particular interest is the demonstration that gonadotropic hormones (notably "LH") cause an acute depletion of ovarian ascorbic acid, which, in the hands of Dr. Albert F. Parlow, has allowed convenient quantitative measurements to be made. Dr. Pechet's thorough grounding in organic chemistry is reflected in his long-term interest in the relationship of structure to function of steroid derivatives of the glucocorticoid series. In this work he effectively utilizes the balance study facilities of the Mallinckrodt Research Ward. Recently he has begun studies of individual, chemically pure components of vitamin D mixtures, showing different qualitative effects on calcium and phosphorus absorption and excretion. Purified parathyroid hormone prepared by Dr. Howard Rasmussen (*M.* 1953), who is now at the Rockefeller Institute for Medical Research, is being used in studies of pseudohypoparathyroidism.

Within this brief review it is not feasible or even desirable to attempt to outline all the current activities of the Endocrine Unit except in the broadest of terms. The legacy of the Unit is a brilliant one in patient care and in the imaginative study of disease, carried out by Dr. Albright and his collaborators over many years. The attempt to maintain such a tradition is a continuing challenge to all current members of the Endocrine Unit.

Lloyd H. Smith, Jr., M.D.,
Assistant Physician
and *Chief, Endocrine Unit*

* * *

The American College of Physicians has announced that Dr. Chester M. Jones has been named its president-elect for 1960-1961.

Dr. Robert F. Loeb (*W.M.* 1920) has been awarded the 1959 Kober Medal by the Association of American Physicians for his contributions to the medical sciences.

The American Cancer Society has reported that Dr. Paul S. Russell (*S.* 1949), Assistant in Surgery on our Staff, has successfully transplanted organs and tissues from one strain of mouse to an unrelated strain. This achievement is of basic theoretical importance in cancer research.

Dr. John D. Stewart (*E.S.* 1930) has been elected President of the American Surgical Association.

The Law-Science Academy of America has conferred the Gold Medal and a citation of the organization on Dr. James C. White, for distinguished contributions in bringing Neurological Surgery into closer relationship and cooperation with Law in the administration of justice. The Medal is regarded as the highest honor attainable in this country for integrative work between the learned professions.

In presenting the award, Dr. Hubert W. Smith, Director of the Institute, said, in part:

> Today 80% of all cases tried in civil courts involve personal injury actions. Questions of causal connection, immediate and delayed effects of injuries, disability, and prognosis may pose very complex issues which nevertheless must be resolved in this area. The Law-Science

Academy has endeavored to develop criteria of Proof, resting on the judgment of outstanding medical specialists, in order to more safely guide judges and juries in their conclusions.

In honoring Dr. White, the Committee of Fellows of the Academy took into account his distinguished contributions to literature of Neurological Surgery, particularly in areas such as pain, which are of much importance in the administration of justice. They also made the award in recognition of Dr. White's active work, during recent years, in lecturing systematically at various Short Courses conducted by the Law-Science Academy in metropolitan cities of the United States.

Dr. W. Stewart Whittemore (*S.S.* 1910) was recently honored by the City of Cambridge and the Middlesex South District Medical Society Auxiliary "for selfless devotion to all, regardless of station, and for bringing happiness, productivity, and dignity to our community and citizens." He was presented with a gift as a token of the group's esteem and its appreciation of his more than 50 years' service as a practising physician in the community.

It is interesting to note that Dr. Whittemore should enjoy the distinction of having delivered, at Mount Auburn Hospital, in December of 1927, the only King ever born in this country — King Phumiphon of Thailand.

The Board of Trustees, at their meetings on March 18 and April 1, voted:

To accept the resignation of Mr. Frederick D. Foster from the position of Assistant Director.

To appoint:

Dr. David W. Allen as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. J. Claude Bennett as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Irving D. Bornstein as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Caesar Briefer, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Mervyn F. Burke, Jr. as Second Assistant Resident in Surgery, beginning September 1;

Dr. Monroe Cole as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Lois R. Davidson as Clinical Fellow in Anesthesia for one year, beginning November 1;

Dr. Roman W. DeSanctis as Clinical Fellow in Medicine, assigned to Cardiology, beginning July 1;

Dr. Leon M. Edelstein as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Peter A. Freeman as Clinical Fellow in Orthopedic Surgery for one year, beginning March 12;

Dr. Robert S. Ganelin as Exchange Assistant Resident on the Children's Medical Service, for the period May 22 through June 30;

Dr. Mehran Goulian as Research Fellow in Medicine, for the period July 1 through December 31, 1960, and as Resident in Medicine, beginning January 1, 1961;

Dr. Richard T. Johnson as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Richard A. Katz as Exchange Assistant Resident on the Children's Medical Service, for the period April 12 through May 21;

Dr. David Korn as Clinical and Research Fellow and Acting Assistant Resident in Pathology, for the period September 1, 1960 through June 30, 1961;

Dr. Burnham E. Lamkins as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Donald R. Lintner as Clinical Fellow in Radiology for one year, beginning May 9;

Dr. Myron Lotz as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Thomas E. Macnamara as Assistant in Anesthesia, effective as of March 10;

Dr. James Q. Miller as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Alexander Polak as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1;

Dr. Mitchell T. Rabkin as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Edward J. Riseborough as Clinical Fellow in Orthopedic Surgery for one year, beginning May 9;

Dr. Ellis L. Rolett as Clinical Fellow in Medicine, assigned to Cardiology, beginning July 1;

Dr. Allan I. Sandler as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. William L. Strickler as Assistant Resident in Urology, beginning July 1;

Dr. Se Mo Suh as Exchange Assistant Resident on the Children's Medical Service, for the term March 3 through April 11;

Dr. James D. Sullivan as Clinical Fellow in Physical Medicine, beginning July 1;

Dr. Marvin S. Weinfeld as Assistant Resident in Orthopedic Surgery for one year, beginning April 1.

The Trustees also voted to appoint the following Interns for the period of one year, beginning July 1:

Medicine

Dr. David H. Alpers
Dr. Stanley H. Appel
Dr. Peter V. Barrett
Dr. Lloyd A. Ferguson
Dr. Stephen E. Goldfinger
Dr. James R. Hughes
Dr. Rex L. Jamison
Dr. Raphael F. Smith
Dr. William B. Stason
Dr. Samuel O. Thier
Dr. Richard J. Wurtman
Dr. William J. Yount

Surgery

Dr. Joseph R. Barrie
Dr. Sheldon C. Binder
Dr. John D. Burrington
Dr. George P. Canellos
Dr. Ruben F. Gittes
Dr. Donald B. Halverstadt
Dr. Ashby C. Moncure
Dr. Gerald S. Moss
Dr. Leslie W. Ottinger
Dr. John M. Reed

Children's Medicine

Dr. John M. Davis
Dr. Leonard I. Kleinman
Dr. Brigid P. Nesburn
Dr. John T. Truman

At their meetings on March 16 and 30, the General Executive Committee voted:

To promote:

Dr. Harold Simon to the position of Resident in Radiology, beginning April 1.

To extend the appointment of:

Dr. David Korn as Intern in Pathology through August 31.

To reappoint:

Dr. Károly Balogh as Clinical and Research Fellow in Pathology, retroactive from May 1, 1959, and also for one year, beginning May 1, 1960;

William H. Ellett, B.Sc. as Assistant Physicist (Medicine) for one year, beginning September 24, 1959;

Dr. Jorgen G. Jacobsen as Clinical and Research Fellow in Medicine for one year, beginning April 1;

Borge Larsen, Ph.D. as Research Fellow in Medicine, for the period April 15 through September 30;

Dr. John D. Turner as Clinical and Research Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1.

* * *

VOLUNTEER GROUPS

The MGH Spring Formal, sponsored by the Staff Wives and the Distaff Club, will have many innovations this year. To be held on a Saturday, May 7, rather than a Friday evening, it will be a dinner-dance and will take place for the first time at the beautiful M.I.T. Faculty Club, overlooking the Charles River. (There are free Club parking facilities in the rear.) Cocktails may be ordered at the Club between 7 and 8 (and through the evening), and dinner will be served promptly at 8. The Club has the reputation for excellent cuisine, and the menu for the evening will feature their specialty! Sammy Eisen, who earned many favorable comments last year, will again provide music for dancing.

The invitations, including an explanation of how reservations may be made, were mailed in April. A reminder: reservations should be sent to Mrs. Charles E. Huggins, Monument Street, Concord, with a check for $12.00 per couple. She will arrange the seating plan, so that couples and groups who indicate on their reservations that they wish to sit together may do so. A table number will be assigned as couples with reservations arrive at the door. No tickets are being mailed. The number of reservations is limited, so the Dance Committee suggests that you act promptly.

Co-chairmen for the dance are Mrs. George L. Nardi and Mrs. Harold C. Urschel, Jr. The committee members are: Mrs. Homer L. Ash, Mrs. Francis G. Barnum, Jr., Mrs. Arthur E. Baue, Mrs. Glenn E. Behringer, Mrs. Roman W. DeSanctis, Mrs. Charles E. Huggins, Mrs. John H. Knowles, Mrs. Anthony S. Patton, Mrs. Stuart E. Price, Jr., Mrs. William G. Stewart, Jr., and Mrs. William R. Waddell.

The Formal is a highlight of the MGH year for both Staff and Distaff couples. This year a dinner-dance in a new setting will be a particularly exciting event.

1811

Massachusetts General Hospital has chosen May 10 for the observance of National Hospital Week. There will be four showings of the MGH 150th Anniversary film, "A watch in the night", in the Lower OPD Amphitheatre at 9:45 and 11:15 A.M., and 2:45 and 4:15 P.M. In addition, two performances of "A day at the M.G.H. — Many hands, many skills" — a parade of the people who serve our patients — will be presented in the Moseley Rotunda at 10:15 A.M. and 3:15 P.M. Everybody is cordially invited to attend.

Dr. Madelaine R. Brown, attending a neurological conference in the Ether Dome

A COURAGEOUS STAFF MEMBER

Dr. Madelaine R. Brown was a member of our Neurology Staff from 1936 until her retirement on June 30, 1959. Although she still maintains a private practice, Dr. Brown has curtailed her office hours and now sees only a few of her regular patients in her office in the Warren Building. She continues to attend the neurological conferences here at the Hospital, however.

The March issue of *The Johns Hopkins Magazine* carried an illustrated article about Dr. Brown. Having received the kind permission of the Editor of the Hopkins journal to reprint the article and a selected picture, and also Dr. Brown's rather hesitating and modest sanction (typical of her where any publicity concerning her is involved), we give you the story of Dr. Brown as it appeared in *The Johns Hopkins Magazine*:

DETERMINATION

THOUGH ALMOST TOTALLY CRIPPLED, DR. BROWN STILL DOES HER BEST

Shortly before she received her M.D. from Johns Hopkins in 1927, Madelaine Ray Brown saw a bulletin board card announcing an internship in neurology at Bellevue Hospital. She applied, was accepted, and after serving a rotating internship at the University of Michigan Hospital, began her career at Bellevue Hospital as a neurologist.

At the end of her year at Michigan, however, Dr. Brown suddenly lost the sight of her right eye. After six weeks, before the malady had been diagnosed, she regained her sight. She was relieved, but puzzled. She had no way of knowing that this had been her first contact with an insidious and crippling disease (later to be called multiple sclerosis) of the central nervous system.

Since Dr. Brown's first attack thirty-three years ago, medical scientists have learned much about multiple sclerosis, but its cause and cure remain mysteries. They know that it causes deterioration of the fatty sheath (myelin) which covers and protects the nerve fibers in the brain and spinal column. This disintegration obstructs nerve impulses, causing paralysis or impaired use of the parts of the body innervated by these nerves. Curiously, multiple sclerosis strikes two-thirds of its victims during their young adulthood (between twenty and forty years of age), and one out of every four hundred young adults suffers from the disease.

As Dr. Brown discovered, multiple sclerosis is characterized by periods, sometimes lasting for years, in which the disease does not progress and even seems cured. Following her first attack, Dr. Brown experienced several more, often a year or more apart, which impaired the use of her limbs, then passed, leaving her normal. Between attacks, she kept active in her profession and worked vigorously to keep herself physically fit. She learned to ski and made canoe trips to Minnesota and Ontario. She continued research in neurological diseases like her own. She studied in London, became a resident in neurology at Bellevue Hospital in New York City, was the first woman intern at Boston City Hospital. She was a neurologist at New England Hospital and later at Massachusetts General Hospital. By 1940, when she became an instructor in the Harvard Medical School, her left leg was permanently weakened. Nevertheless, she took on more duties during the war.

Gradually, Dr. Brown lost ground against her disease. In 1953, she bought her first wheel chair. And four years later, she was so severely handicapped that she purchased a hydraulic lift to move her from her wheel chair. Today, Dr. Brown is almost totally handicapped and must rely on other people and a host of mechanical gadgets to perform even the simplest tasks of turning pages, eating, and smoking. Yet, as the photos on these pages indicate, she continues her work.

AN UNCOMMON COURAGE

Dr. Brown's own attitude toward her handicap is rather matter-of-fact, and she has said, "There are two ways of meeting this thing. One way is to go to bed and not move out for the rest of your life. The other way is just to do your best." Her choice is obvious: Since her confinement to a wheel chair, she has received the Elizabeth Blackwell Citation and has been named Medical Woman of the Year by the New England Medical Women's Association.

But Dr. Brown is aware that she has been more fortunate than some others. No amount of courage and determination can keep some of these victims active. The rapid and devastating onslaught of multiple sclerosis can reduce a person to a hopeless and helpless cripple to whom advice about staying active and eating properly is nonsense.

The victims who do have a choice between going to bed and staying active may find in Dr. Brown's experience a measure of hope. Since 1927, she has lived with a disease that would eventually overcome her. Yet, after each attack, she intensified her effort to make the best use of what was left to her. Even today, when the disease is in its most advanced stages, and when she knows the ultimate outcome, she does her best. And this takes uncommon courage.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Research and common sense in a clinical specialty — Anesthesia.
J.A.M.A. 172:449.

Bacteriology

Sharp, J. T.
The cell wall of bacterial L forms and pleuropneumonialike organisms.
Ann. New York Acad. Sciences 79:344.

Endoscopy

Benedict, E. B., Taylor, G. W., Rogers, W. P., Jr., and Burbank, C. B.
Carcinoma of the tongue, and paralytic dysphagia.
Gastroenterology 38:456.

General Medicine

Pittman, H. S.
Gamma globulin concentrations in ambulatory patients with bronchiectasis.
Am. Rev. Respir. Dis. 81:251.

General Surgery

Burke, J. F.
Lymphatic localization of malignant and bacterial cells.
Surg. Forum 10:39.

Churchill, E. D.
The scientific endeavors of a surgeon.
In Papers dedicated to Professor Carl Semb on the occasion of his sixty-fifth birthday, February 19, 1960, pp. 9-14. Also published as a supplementum 253 to Acta Chirurgica Scandinavica, Oslo, Nationaltrykkeriet.

General Therapy

Butler, A. M.
The use of glucose, electrolyte, albumin, and amino-acid solutions and whole blood in parenteral fluid therapy.
Quart. Rev. Pediat. 15:34.

Otolaryngology

Kelemen, G.
Basic anatomy and neurophysiology of speech and language.
Cerebral Palsy Rev. 21:8.

Psychiatry

Nemiah, J. C.
The lecture: A reconsideration.
J. Med. Ed. 35:183.

Miscellaneous

Clifford, M. H.
The effect of neoplasms on longevity. Should we change our underwriting practices?
In American Life Convention, 1959, Chicago, Ill., p. 142.

Dohan, F. C.
Convalescence — when does it end?
In American Life Convention, 1959, Chicago, Ill., p. 27.

Garland, J.
Editor resartus.
Canad. M.A.J. 82:239.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American Board for Psychological Services, Inc.
Directory of American psychological services, 1960.
Glendale, Ohio, American Board for Psychological Services, Inc., 1959.
(38P)

American College of Surgeons.
Surgical forum: Proceedings of the forum sessions, clinical congress of the American College of Surgeons, vol. 10.
Philadelphia, W. B. Saunders Company, 1959.

Benjamin, B.
Elements of vital statistics.
Chicago, Quadrangle Books, 1959.
(31E)

Bruner, H. D. (Editor)
Methods in medical research, vol. 8.
Chicago, The Year Book Publishers, Inc., 1960.
(2As)

Buchborn, E., and Bock, K. D. (Editors)
Diuresis and diuretics: An international symposium.
Berlin, Springer-Verlag, 1959.
(17C)

The central nervous system and behavior . . . Selected translations from the Russian medical literature.
Washington, D.C., U.S. Department of Health, Education, and Welfare, 1959.
(19A)

Ciba Foundation.
Ciba Foundation Colloquia on aging, vol. 5. The lifespan of animals.
Boston, Little, Brown and Company, 1959.
(13Po)

Ciba Foundation.
Ciba Foundation Symposium jointly with the International Union of Biological Sciences on biochemistry of human genetics, Wolstenholme, G. E. W., and O'Connor, C. M. (Editors)
Boston, Little, Brown and Company, 1959.
(2Am)

Ciba Foundation.
Ciba Foundation tenth anniversary symposium on significant trends in medical research, Wolstenholme, G. E. W., O'Connor, C. M., and O'Connor, M. (Editors)
Boston, Little, Brown and Company, 1959.
(1Ns)

Ciba Foundation Study Group No. 3.
Cancer of the cervix: Diagnosis of early forms, Wolstenholme, G. E. W., and O'Connor, M. (Editors)
Boston, Little, Brown and Company, 1959.
(13V)

Clark. W. M.
Oxidation-reduction potentials of organic systems.
Baltimore, The Williams & Wilkins Company, 1960.
(5Q)

Cobb, S.
Foundations of neuropsychiatry, ed. 6.
Baltimore, The Williams & Wilkins Company, 1958.
(19E)

Cold Spring Harbor Symposia on Quantitative Biology, vol. 24.
Genetics and twentieth century Darwinism.
Cold Spring Harbor, L. I., New York, The Biological Laboratory, 1960.
(2As)

Collected papers from the Radiumhemmet and the Radiopathology Institute of King Gustaf V's Jubilee Clinic, vol. 8.
Stockholm, Karolinska Sjukhuset, 1957-1958.
(22Wj)

Dekaban, A.
Neurology of infancy.
Baltimore, The Williams & Wilkins Company, 1959.
(19Ap)

Encyclopedia Britannica, Inc.
Britannica book of the year, 1960.
Chicago, Encyclopedia Britannica, Inc., 1960.
(1A)

Evans, F. T., and Gray, C. (Editors)
General anaesthesia, 2 vols.
London, Butterworth & Co., Ltd., 1959.
(22Ea)

Farnsworth, P. R. (Editor)
Annual review of psychology, vol. 11.
Palo Alto, Annual Reviews, Inc., 1960.
(19L)

Gould, S. E.
Pathology of the heart, ed. 2.
Springfield, Ill., Charles C. Thomas, 1960.
(15D)

Kazanjian, V. H., and Converse, J. M.
Surgical treatment of facial injuries, ed. 2.
Baltimore, The Williams & Wilkins Company, 1959.
(23N)

Kurtz, R. H. (Editor)
Social work year book 1960, ed. 14.
New York, National Association of Social Workers, 1960.
(177.7)

Ling, T. M., and O'Malley, C. J. S. (Editors)
Rehabilitation after illness and accident.
London, Baillière, Tindall and Cox, 1958.
(355.115)

McKusick, V. A.
Heritable disorders of connective tissue. ed. 2.
St. Louis, The C. V. Mosby Company, 1960.
(18E)

Miller, W. C., and West, G. P.
Encyclopedia of animal care (formerly Black's veterinary dictionary). ed. 5.
Baltimore, The Williams & Wilkins Company, 1959.
(2B)

Ministry of Health, USSR.
Curricula of the higher medical schools. (Translation from the Russian)
Moscow, Medgiz, 1957.
(1N)

Osteuropa — Institute of the Free University Berlin.
Current problems of Soviet medicine, no. 1.
Berlin, Prof. Dr. Max Brandt, 1958.

Pearse, A. G. E.
Histochemistry, ed. 2.
Boston, Little, Brown and Company, 1960.
(5Am)

Raven, R. W. (Editor)
Cancer, vol. 6.
London, Butterworth & Co., Ltd., 1959.
(13V)

Reports of the Osteuropa — Institute of the Free University Berlin. Medical Series No. 38.
Blood pressure and subarctic climate in the Soviet Union, by B. Hoffmann.
Berlin, Prof. Dr. Max Brandt, 1959.
(7F)

Research Bureaus, Detroit, Michigan.
The preparation of the annual report: A document of modern business.
Detroit, Research Bureaus Incorporated, 1960.
(1Aa)

Rodahl, K., and others. (Editors)
Bone as a tissue.
New York, McGraw-Hill Book Company, Inc., 1960.
(18C)

Smith. R. M.
Anesthesia for infants and children.
St. Louis, The C. V. Mosby Company, 1959.
(22Ea)

Social Workers' International Club, Japan.
Glimpses of social work in Japan.
Kyoto, Social Workers' International Club, 1958.
(177.7)

Wohl, M. G., and Goodhart, R. S. (Editors)
Modern nutrition in health and disease:

No. 90 in a series of Staff photographs
Dr. Lloyd H. Smith, Jr., Assistant Physician—Chief of the Endocrine Unit

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Dietotherapy, ed. 2.
Philadelphia. Lea & Febiger. 1960.
(5M)
The world of learning, ed. 10.
London, Europa Publications, Ltd., 1959-1960.
Wright, W. E. (Editor)
American library and book trade annual, 1960.
New York, R. R. Bowker, 1959.
(1C)

This very interesting letter has come from Dr. Anthony A. Arzimanoglu (a.r.s. *Or.* 1952), 1 Neofytoy Vamva St. (K), Athens, Greece:

I do not know whether you call me a "singleton" in Athens or in Psychico. [Both. — *Editor*] Psychico is only three-quarters of a mile from Athens proper and is where I live and where most of the Americans stationed in Athens also live. It is a residential town.

In Psychico, only a few yards from my house, is the campus of the American Athens College, of which I am an alumnus. The college has a board of trustees in New York and another in Athens. It is the best college we have in Greece. When I was using its desks there were only 250 students, while now there are over 1200. It is expanding fast in the number of both pupils and buildings.

We have three children — a boy nearly five years old and a pair of non-identical twins of two and a half years. My private office is located in Athens, opposite the building of the American Embassy.

Mountain Pendeli is about ten miles from Athens. All the white marble from which the Parthenon was erected, as well as the white marble for the ancient statues, monuments, and modern buildings, came from Pendeli.

Two years ago a new 250-bed hospital for pediatric orthopedics (surgical cases) was opened in Pendeli. It has two orthopedic services and I am the surgeon-in-chief of one of them. Another 400-bed affiliated hospital for physiotherapy and rehabilitation is by the seashore, about ten miles from Athens, in the opposite direction from Pendeli. We transfer all children after surgery to this hospital for post-surgical physiotherapy. The children return to Pendeli for regular follow-up, even after their discharge. Thus we have been able to build up long follow-ups and publish papers on congenital hips, polio sequelae, spastics, etc.

I work also as an orthopedic consultant and surgeon in the USAF Hospital in Athens, where most of the American citizens stationed in Athens — civilians and members of the armed forces — are treated.

So far, I have seen the following members of the MGH family here in Athens: Dr. and Mrs. Joseph S. Barr, Dr. and Mrs. Peter E. Sifneos, and Dr. and Mrs. John F. Burke. I hope to see more and more of you coming to visit Athens — a sister city of Boston, since you call Boston the Athens of the States.

Dr. Arzimanoglu enclosed a picture of the very attractive Children's Orthopedic Hospital in Pendeli, which you may see on the bulletin board near the foot of Treadwell stairs.

New addresses:

Dr. Mignon C. Chasen (a. *Psychiat.*), 111 Cedar St., Newton Centre, Mass.
Dr. John C. Coolidge (*C.M.* 1945), 141 Coolidge Hill, Cambridge, Mass.
Dr. Thomas G. Gabuzda (*M.* 1956), 94 Baekkeskov Vej, Bronshoj, Denmark
Dr. Harriet L. Hardy (assoc. p.), Medical Dept., Massachusetts Institute of Technology, Cambridge, Mass.
Dr. Timothy S. Harrison (a.r.s. 1959), Penny Farms, Fla.
Dr. Guy J. Isaac (clin. and res. fel. *M.* 1959), Hôpital Saint Pierre, Louvain, Belgium
Dr. Robert E. Key (sr. r.s. *Or.* 1958), 800 5th Ave., Fort Worth, Tex.
Dr. Jesse T. Nicholson (r.s. *Or.* 1933), Children's Hospital, 1740 Bainbridge St., Philadelphia 46, Pa.
Dr. John T. Potts (*M.* 1958), National Institutes of Health, Bethesda, Md.
Dr. Harvey D. Rothberg, Jr. (*M.* 1954), Seton Hall College of Medicine, Jersey City, N. J.
Nathan Sharon, Ph.D. (res. fel. *M.* 1958), Weizmann Institute of Science, P.O. Box 26, Rehovoth, Israel
Dr. Robert L. Thomas (*N.S.* 1933 and *E.S.* 1936), 2844 Summit St., Oakland 9, Calif.
Dr. Theodore van Ravenswaay (a.r.p. *Path.* 1957), 2009 Parkade Blvd., Columbia, Mo.
Dr. Walter P. Zmyslowski (a.r.p. *An.* 1959), 28 Marion Ave., Worcester, Mass.

Brief bits:

Dr. Joseph S. Barr spoke on "Modern concepts of backache" at the Annual Spring Clinic of the Norfolk County Medical Society, in Norfolk, Virginia, on March 12. From March 14 through 18, Dr. Barr served as Visiting Professor in the Department of Orthopedic Surgery at the University of Pittsburgh and Children's Hospital, Pittsburgh, Pennsylvania.

Dr. Edward B. Benedict attended the meetings of the American Gastroenterological Association and American Gastroscopic Society in New Orleans. On March 30, he presented a paper at the latter meeting, on "The treatment of benign stenoses of the esophagus". One of the social events of the meeting was an evening boat ride on the Mississippi, with buffet supper and dancing included.

Miss Edna S. Lepper, R.N., Associate Director of Nursing Service, and Miss Mary Ruth Wolf, Director of the Volunteer Department, were guest speakers at the Maine Medical Center Auxiliary meeting, held in Portland on May 4.

On March 30, Dr. Francis C. Lowell was elected President of the New England Society of Allergy, to succeed Dr. Walter S. Burrage.

Miss Mary Ruth Wolf participated in a workshop on Hospital Volunteer Services, at the spring meeting of the Connecticut Association of Hospital Auxiliaries, in Cheshire, on April 19.

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IMPORTANT NOTICE

Watch for the June issue of *Harper's magazine.* It will contain the article titled "Massachusetts General: What it takes to make a great hospital", by Frances Burns, Medical Reporter of the *Boston Globe.*

THE NEWS

No. 196 Boston, Mass. JUNE 1960

ELECTRORETINOGRAPHY

> People forget that it is the eye which makes the horizon and the rounding mind's eye which makes this or that man a type or representative of humanity, with the name of hero or saint. — *Emerson*

During the last few months a laboratory for electroretinography has been established at the Massachusetts Eye and Ear Infirmary. We would like to express our deepest gratitude to our Chief of Ophthalmology, Dr. Edwin B. Dunphy, for without his help there would be no such laboratory. Dr. Charles L. Schepens assisted in obtaining part of the basic equipment for the laboratory.

Electroretinography (ERG) is a term which has more than one meaning. Literally, it means the recording of the bioelectrical potentials from the retina. The broader meaning of ERG we will explain later in this paper.

As life itself is a sequence of natural developments, with discoveries and inventions evolving from the intelligent human mind, so the scientist in his dedicated work makes progress in enlarging the knowledge of the physiology of man. Naturally, each new theory must have not only a firm basis in the already known facts, but it must also be in harmony with our knowledge of anatomy and physiology.

The earliest and most primitive eye that can be called an eye is that of the *Euglena viridis.* This creature appears just on the borderline between the microscopic and the macroscopic worlds. It is of green color and has a specialized mouth, just below which is a tiny rose-colored spot with pigment — the *Euglena's* eye. This minute eye is both a thermometer and a photometer; it measures the intensity of both the heat and the light in its surroundings. However, this eye — or better, pigment-eye — never has a picture of the outer world.

It is a long step from this rudimentary eye to the recording of the bioelectrical potentials from the vertebrate retina. To help bridge this step rapidly we will give some data on the development of the knowledge of the retina.

It was the Swiss writer, Platter, in the 16th century, who first described the definite light-sensitive function of the retina. Prior to Platter, it was thought that the lens was the receptor of light. It was Kepler, in 1604, who explained the path of light rays in the eye and the optical function of the crystalline lens. Because of his pioneering work as a microscopist, it is not surprising to learn that it was Leeuwenhoek, in 1674, who made the first microscopic examination of the retina. The macula was discovered by Buzzi in 1782, and Sömmering described the fovea in 1795. Sömmering interpreted the fovea as the blind spot on the retina. It was Mariotte, in 1666, who proved that it is the blind spot of the optic papilla which is the blind spot on the retina. It was not until 1835 that Trevianus discovered the visual cells. The technique of fixation with chromic acid, to prepare retina sections for microscopic examination, was made by Hannover in 1840.

The complicated structure of the retina was further described by Bowman in 1846, when he distinguished six retinal layers, and by Corti when he traced the nerve fibers from the visual cells to the optic nerve in 1850. It was Müller, in 1853, who proved the photosensitive function of the retinal cells; and Schultze, in 1866, described the different forms of the receptor cells — the rods and cones.

The retina, being a complicated neural structure, is not only a layer of sensory cells, but it is also a part of the central nervous system. The impulses originate in the sensory cells and pass from them through three neurons: the rods and cones, the bipolar cells, and the ganglion cells, whose axon is one of the fibers of the optic nerve. Several collateral elements — the amacrines and the transverse or horizontal cells — are also involved in the transmission of the impulse.

The center of the human retina — the fovea — is made up exclusively of cones, while the remainder of the retina is composed of both rods and cones, with the rods being more predominant toward the periphery of the retina.

This knowledge of the sensory cells (rods and cones) led to the development of the so-called duplicity theory, first suggested by Schultze in 1866. In essence, this theory states that there are two kinds of visual functions: the one mediated by the rods and the other mediated by the cones. The cone vision, if one may call it this, is responsible for the high degree of visual acuity and for color perception and intensity. Rod vision mediates low intensities and is achromatic.

The Purkinje phenomenon or shift, described first in 1825, can be shown in the ERG. This phenomenon illustrates the basic fundamental duplicity theory of the retina — the rods and cones. If a recording of the ERG is made in the light-adapted eye and in the dark-adapted eye with the same equal-energy spectrum as a stimulus, there will be a definite difference in size and shape of the b-waves of the ERG. It has been shown on the frog retina that in dark adaptation and with weak stimuli, the maximum amplitude of the b-wave was at a wave length of 510 mμ, while in light adaptation this maximum shifted to 560 mμ.

Experiments have established that the visual function is of two types: photopic or light-adapted vision or cone vision, and scotopic or dark-adapted vision or rod vision. This is to say that the retina does not necessarily function best at high intensities or less well at low illuminations. It is in the rod and cone layers that the visual image is formed. The ultimate messages from the retina are transmitted by the optic nerve chiasma.

It is interesting to note the exceptional vision of birds. The eyes of birds are the finest and most remarkable of all eyes on earth. They are often both telescopic and microscopic. The focusing mechanism is chiefly the cornea, not the lens as in the human eye. Their visual acuity is incredible. In some instances it is one hundred times greater than that of human eyes. A bit of grain, a tiny insect, which we can barely see at a distance of one yard, birds can readily see at the same distance. We have all witnessed small birds in the twilight make a dash for an insect on a leaf or twig more than a city block away and see them pick it off accurately while still flying.

The eyes of many birds are on the sides of their heads, and because of this they cannot have binocular vision. In spite of this fact, many of them do have stereoscopic vision. They accomplish this because they have two maculae in each eye. Thus, they have two pictures from two different angles.

Birds' retinas do not have any vessels and this absence probably sharpens the sight of the bird. We recall that normally our maculae do not have any blood vessels either. Birds cannot see blues and violets. This helps in their distance vision because the haze which hangs about distant objects and which, for our eyes renders them invisible, simply does not exist for birds. Birds, on the other hand, see infrared radiations which for us affect only the temperature sense of the skin and not the retina.

It is also interesting to note the characteristics of some fishes' eyes. There are fishes with thermometer eyes, and fishes with incandescent eyes which illuminate the sea so that other types of fish may have vision. The choroid coat of some fishes' eyes is a reflector, which shines in the dark. Some fishes have two pupils in each eye, one for seeing in the water and the second for seeing in the air. Also, in some young fishes, the eyes lie in the usual way — one on each side of the head — when the fish are first hatched, but as they grow older they begin to swim along only on the bottom of their habitat, scraping constantly on the gravel and sand with one side of the head. As a result, the skull twists until the two eyes lie together on the upper side of the head.

The usually accepted division of the human retina into layers is that proposed in 1852 by Müller: (1) pigment epithelium consisting of a layer of cells filled with an absorbing pigment which prevents the diffusion of stray light; (2) layer of rods and cones consisting of the photosensitive ends of the receptor cells (rods and cones); (3) external limiting membrane — thin membrane separating (2) from (4); (4) outer nuclear layer — the nuclei of the visual cells, those of the cones being generally in contact with the external limiting membrane while those of the rods are disposed below them; (5) outer fiber layer consisting of the axons of the rods and cones, ending in feet or spherules, which are sometimes regarded as forming a separate layer; (6) inner nuclear layer, containing the nuclei of the bipolar cells and of the cells of association (horizontal and amacrine cells); (7) inner fiber layer, made up of the axons of the bipolars; (8) layer of ganglion cells or, at least, of nuclei of those cells; (9) layer of optic nerve fiber, i.e., the axons of the ganglion cells; (10) internal limiting membranes — a thin membrane adjacent to the hyloid membrane of the vitreous body.

Although the retina is nervous tissue and is a part of the central nervous system, it is interesting to note that the central cortex shows an optimum respiration at a pH of 9.0 to 9.5, while the optimum respiration of the retina is at a pH of 7.4 to 8.0.

Retinal metabolic changes due to the influence of light have been reported. The energy spectrum, 400 to 800 mμ, can stimulate the retina and give rise to visual sensation. Before this spectrum is able to stimulate the retina, the light must be absorbed by a part of the retina, otherwise the light would pass through without imparting some of its energy to the photoreceptors. Only that portion of light which is absorbed effects a photochemical reaction.

Substances of the retina which have the property of absorbing parts of the visible spectrum are called pigments. One of these pigments is termed rhodopsin, or visual purple. As a result of exposing the rhodopsin to light, a bleaching takes place in the pigments which is comparable to photographic processes. If a bleached retina is put back into the dark, it is found that the rhodopsin is re-formed. This process can be repeated. In the human eye, only the rods contain rhodopsin. Rhodopsin is the chemical basis of rod vision, and is also the basis of vision in dim light. The dark-adapted eye (scotopic) is most sensitive to light of wave length 500 mμ.

Vitamin A must be supplied continually for good vision. In the process of sight, the retina constantly withdraws the active isomer of vitamin A from the circulating blood and returns the inactive isomer.

The regeneration of visual purple is most important for vision. Should it not be regenerated constantly, while being bleached at the same time by light, vision would consist of only short periods of visual sensation.

In man, no visible photosensitive pigments have been isolated from the fovea. It was Wald who first extracted a photosensitive pigment from the cone retina of the chicken. This was bleached to form a yellow photo-product and was called iodopsin. Its absorption spectrum is at a peak of 560 mμ in yellow-green. In human eyes, the maximum sensitivity of foveal cones is at 555 mμ.

For the functioning of the retina it is necessary that there be pigments which absorb light and are bleached down to products which in their turn stimulate the photoreceptors. These then discharge an impulse to the optic nerve fibers. Continuous breakdown of these pigments in the light and their continuous re-formation in the dark, establishes a steady state, which depends to a large degree on the state of illumination. The breakdown of rhodopsin and iodopsin changes the retinal potential and, as a result of this action, the ERG is possible.

As stated previously, electroretinography — the recording of the bioelectrical potentials from the retina — is a member of the electrodiagnostic family of electrocardiography and electroencephalography. Acting in its capacity in both research and clinical use, electroretinography is a fortunate tool for objective examination. Radiant energy, or light stimulus (blue-white xenon light), is applied on the retina through the pupil in order to evoke the existing resting potentials. The variations or imbalance, caused by the light stimulation, produces the so-called action potential, which is the electroretinogram.

It is then easy to understand that the electroretinogram of the normal eye depends on the quality (wave-length) of the light which stimulates the retina, the size of the pupil (amount of light stimulating the retina), and the state of adaptation (dark or light).

In the pathological eye, the electroretinogram depends naturally on more variables. The ERG is affected according to the given pathology of the eye. Of course, sometimes in the evaluation of the pathology, there might be no difference between the recording of a degenerated retina and a detached retina, for example. In both cases, no ERG would be obtained if the degree of impairment were severe.

Electroretinography is still a limited science. This condition exists in spite of the tremendous amount of work done in the field and the great number of papers published. There is still a limitation and a lack of definitiveness in its use in the clinic. However, the ERG is being used more and more as a tool for the diagnosis of a number of ophthalmic diseases.

Perhaps the reason for ERG's limitations rests in the fact that relatively few ophthalmologists are really interested in the subject and that few ophthalmological centers have equipped themselves to do ERG work. In a way this is fortunate, for ERG has thus not become the exclusive experimental tool of only one group of workers — ophthalmologists, but has been taken up and utilized by physiologists, biologists, neurophysiologists, chemists, photochemists, and psychologists. These independent associations or approaches have provided the foundation for basic investigative work that is daily adding depth and clarity to the subject of electroretinography.

It was in the 1840's that electrical methods were first applied to the study of physiology and ultimately to the study of the physiology of vision. So, the ERG is not new. It is exactly 111 years since DuBois Reymond discovered that a potential of about 6 millivolts appeared between an electrode placed behind the eye and a similar electrode placed on the surface of the cornea. Holmgren, in 1870, was the first to succeed in recording an electrical response from a human eye. In 1908, Einthoven and Jolly investigated and named the various waves. They called the small negative wave "A-wave", the large rapid positive wave "B-wave", and the slowly-rising positive response "C-wave". These three waves represent the on-effect. The small sharp positive, or off-effect, was called the "D-wave". In 1933, Cooper and Creed were the first to amplify electronically the human ERG. About the same time, Granit analyzed the ERG into separate components, of which P III was negative (or "A-wave"), and P II and P I were positive (or "B-wave" and "C-wave"). He also found that the so-called I-retina, or inhibitory type, is dominated by cones, and that the E-retina, or excitatory type, is dominated by rods.

Kahn and Loevenstein, in 1924, were the first to appreciate the clinical importance of ERG. However, technical difficulties caused them to give up the idea of recording on human subjects.

It was Riggs of Brown University who, in 1941, invented the scleral type contact lens electrode. This electrode permits the recording of the ERG in human subjects for many hours with no discomfort.

The present-day technique of recording the ERG is as follows: The subject's pupils have been dilated to the maximum with a 10% solution of neo-synephrine. An electrode — the reference electrode — is placed on the temporal area of the face adjacent to the eye and close to the outer canthus. A second electrode — the ground electrode — is then placed on the forehead. The patient then assumes a supine position in order to reduce muscle activity which may interfere with the recording. After this, several drops of an anesthesia are put into the fornix of the eye and the contact lens electrode is placed on the eye which is to be examined, while the fellow eye is covered. The contact lens is then filled with saline solution and a silver rod is inserted into it. The electrical contact is thus made by the saline solution and the silver rod. This rod is hooked to the amplification system and finally to the recording device. A photostimulator supplies the light for the stimulation of the retina. During this stimulation, the subject is fixating on a rod-fixating point.

To better understand the recorded results of ERG, it is necessary to speak of the various components of the response.

The principal characteristics of the different components are as follows: In the vertebrates, with the exception of some birds, the component I disappears almost completely if the eye is light-adapted. This suggests some connection with the activity of the rods. This component is absent in cone retinas. The physiological function of this component is still uncertain. It may be that component II is sensitized in such a manner that it may develop a useful function at the transition time from night- to day-adaptation.

As far as the component II is concerned, the characteristics are unstable. In low illuminations, the B-wave is indefinite and often shows several successive fluctuations. At high illuminations, one can obtain double initial undulations, and this not only in rod-free retinas but also in white-blue xenon light. Physiologically, this component is important because of its way of developing, which corresponds to the electrical activity of the optic nerve.

As for component III, it is regarded as having an inhibitory function. It is the first component to appear in the ERG. P III begins before the discharge in the optic nerve and is the component which is most resistant to effective chemical agencies and to pressure.

It is well to emphasize that the ERG depends upon the light intensity and its quality, the transparency of the ocular media, the size of the pupil, and the state of adaptation. The most important component for the evaluation of the ERG in clinical use is the height of the B-wave.

In the studies of ERG, flicker (or repeated flashes) is used. Flicker, a phenomenon described by Brucke in 1864, arises as a result of frequent repetitions of brief flashes. The chief characteristic of the qualitative sensation is the sequence of its modulatory nature. In the senses of touch and pressure it is called vibration, and in vision it is called flicker. Repeated light flashes, when the rate is slow, produces the sensory effect known as flicker, while the rate which produces an impression of steady illumination is called fusion, or critical flicker frequency (CFF).

Flicker is used as a cone activity test (macula test). The so-called X-wave, which is a positive response, similar to the scotopic B-wave but smaller in size, is obtained with brief flashes of high intensity. It has been shown that in protanopic human eyes this X-wave is absent while the eyes are stimulated with red light. Yet, by stimulation with red light, one gets on the ERG both the photopic X-wave and the scotopic B-wave.

As to the origin of the bioelectrical retinal response (ERG), many controversial papers have been published. The following locations have been given as to the seat of its origin: the receptors, bipolar cells, external plexiform layer, and inner margin of the outer nuclear layer, while Bruch's membrane and the pigment epithelium have been named as the seat of A- and C-waves.

More confusion exists as to the relative role of the rods and cones. In 1952, Ottoson and Svaetichin, using microelectrodes directly from the receptors, suggested that all positive responses are from the rods and all negative from the cones. This conclusion can be questioned when it is pointed out that an A-wave can be obtained from the pure rod eye of the gecko, a species of lizard, and also that the eyes of turtles, which have only cones, produce C-waves as well as A-waves.

Although it is somewhat removed from our subject, I would like to mention the work of Stone at Yale. He has found that salamanders are capable of regenerating a new retina if the old one is destroyed. He transplanted eyes from one species of salamander to another species and he found that vision eventually followed. In these transplanted eyes, when circulation was blocked, the retina degenerated in a few weeks and the optic nerve also degenerated. The surviving pigment epithelium cells then underwent rapid mitosis and migrated to form a new retina which eventually became differentiated and functional. The optic nerve would grow back from the neural layers of the retina to the brain, and vision would return after several months. In these transplanted eyes, the response of the C-wave is the same, although somewhat smaller, than in the normal salamander eye.

Typical ERG's have been obtained from isolated retinas. This shows that the response *is* from the retina itself. I have made recordings from an enucleated human eye and have found that 3 minutes after enucleation there was still a response. In another experiment, I recorded the ERG on a rabbit which died during the experiment, and an ERG recording was still possible 35 minutes after death. Could this phenomenon mean that death does not really come until after this time? . . . From all this evidence, we can say that the ERG is a mass response, with its origin in several layers of the retina.

We are now ready for the important question: Of what value is the ERG in the Ophthalmic Clinic?

Before answering this question, it is well to restate that, in general, successful ERG recordings depend on light intensity, transparency of ocular media, the size of the pupil, and the state of adaptation. Any disease process which affects any or all of these factors will also affect the quality of the ERG accordingly.

On the list of clinical entities that can be studied with the ERG is retinitis pigmentosa and its variations. This is a hereditary and familiar disease. It can be dominant, recessive, and recessive sex-linked (males) in form. It affects, as a rule, both eyes, but it can also be unilateral and can also affect a single sector of the retina. The characteristic findings are the pigmented bone corpuscles (mostly in the periphery of the retina), an optic disc with a waxy color, narrow blood vessels, and narrow visual fields. It may be associated with nerve deafness, obesity, hypogenitalism, polydactylia, and other defects. In true and advanced retinitis pigmentosa, and also in the diffused tapeto-retinal degenerations, there is practically no response. In symptomatic pseudo-retinitis pigmentosa, such as that of syphilis, measles, and other secondary pigmentations of the retina, a fairly good response can be obtained. Both retinitis pigmentosa *sine* pigmento and amaurosis from the tapeto-retinal degenerations of Leber type do not produce any — or, at best, have very poor — ERG's. The differential diagnosis between the retinitis punctata albescens and the abortive forms of fundus albipunctatus with congenital hemeralopia of Lauber is possible only with the help of the objective ERG test, since ophthalmoscopically the two fundi appear the same.

In retinitis punctata albescens the ERG is absent, while in retinitis albipunctatus, the response is positive. Naturally, in this case it is very helpful and important to be able to give the patient an objective reassurance that, although his vision is not very good, his prognosis is good. It is possible to separate the typical macula degeneration of Stargardt from the tapeto-retinal degeneration only by help of the ERG. Stargardt has greying deposits in the perimacular area, is an abiotrophy, and belongs to the group of macular heredo-degeneration. It is being observed in patients younger than 40 years of age. Since it is the macular region which is mostly involved, the recording of the ERG shows a good response.

In choroideremia the ERG is extinguished, while in the atrophia gyrata of the retina there is still a response. Choroideremia is a congenital disease where choroid and pigment epithelium are absent, with the exception of small parts in the macular area region. Ophthalmoscopically, one sees a white fundus, since the sclera is exposed. This disease affects both eyes and is often associated with myopia. The vision is reduced and so are the visual fields.

Often surprising findings will come one's way in the course of the routine clinical use of the ERG. One such instance is that of a child diagnosed as having Tay-Sachs disease. This child was followed in the eye clinic of Geneva, Switzerland, and the case was systematically recorded by ERG every 6 months from the time the child was 6 months old until its death at the age of 4 years. Throughout this period, the ERG was found to be normal in all respects. This one experience can be taken to mean that in Tay-Sachs disease the visual cells are usable, at least until the age of 4.

Incidentally, it is possible to take ERG recordings even from premature infants. No one is too young or too old for the ERG. It is not necessary for the patient to be able to communicate with the examiner. The machine does it for him.

The principal use of the ERG in infants is in the study of suspected tumors, congenital anomalies of the inner eye, and in all cases when one cannot look into the eye with the ophthalmoscope.

Foreign bodies in the eye, particularly if they are non-magnetic, will affect the ERG considerably.

In cases of detachment of the retina, the ERG response is related to the degree of the detachment. However, much work must still be done on this subject.

In hemorrhages of the vitreous body and of the retina in retinal impairments and in circulatory disturbances, one finds a reduced and even a flat ERG.

And, finally, there is notable use of electroretinography in the Ophthalmic Clinic. From time to time there are cases of cataracts (and they may be of any origin) in which there is such a poor light projection that there is doubt in the ophthalmic surgeon's mind as to the integrity of the retina behind the cataract. Should the patient be subjected to surgery? Will he have a retina capable of normal visual tasks after surgery? A good ERG recording will help the surgeon to reach a decision for or against surgery. This would also be true for all impairments where the ocular media are not transparent, and one cannot see what is going on in the retina. For example: In cases of corneal opacities, when the transplantation of a cornea is suggested, and in hemorrhages of the vitreous body when the fundus cannot be seen, it would be useful to the surgeon to know what condition the retina is in. So, it is obvious that the ERG is of definite value in the Ophthalmic Clinic.

As stated earlier, we know that the ERG is a summation response from the entire retina because of the scatter of light by the crystalline lens. It is impossible with present-day equipment to direct a single pin point of light to a specific area of the retina and receive a response from only that area. This is proved when light, directed to the blind spot, produces an effect on the ERG, in spite of the fact that this area has no receptors. Also, Dr. Ernst G. Wolf, Research Associate and Biophysicist, has shown that dark-adaptation curves can be obtained by projecting a 1° test field into the blind spot and that when this is done the recording shows a rod and cone segment. Such curves can be due only to the action of scattered light on the surrounding retinal elements. As long as the difficulties of scatter exist, ERG's from localized and specific areas of the retina will be impossible to obtain. It can easily be seen what contributions a well-localized retinal response would make to our clinical work.

Earlier I made mention of the limitations of the ERG. I would now like to discuss some of the work we here at the Infirmary's laboratory for ERG are doing to remove at least some of these limitations.

One problem that has been a constant one concerns the contact type lens electrode. This contact lens does not exactly follow the globe when the eye moves. This means that the electrical contact with the cornea may be partially broken off, with a lessening of the ERG response. In our laboratory we have developed and tested a new contact type film electronic electrode, which may be called a "physiological electrode". This physiological electrode is a strip of film 1 mm. wide, 7 mm. long, and is only .00065″ thick. It is very flexible and is electroconductive. This little strip of conductive film, as a result of the force of the suction action of the cornea, takes the exact shape of the cornea, and thus the cornea and the physiological electrode behave as a unit. The tears of the eye make the electrical contact. Naturally, being so light and thin, this physiological electrode even follows the microscopic movements of the eye, while steady potentials are being recorded. With this physiological electrode, it is no longer necessary to use the saline solution, which often produced artifacts because of air bubbles. We wish to express our appreciation to Mr. Frederick Koury, from the Research Laboratories, Sylvania Electric Lighting Division, a subsidiary of General Telephone, Inc., for his help at this point in our work.

We are, in addition, currently developing a new illumination source for the stimulation of the retina during ERG. At present the light stimulation used is 33″ from the eye. The slightest movement of the head or of the eye prevents the light from falling directly into the pupil, and, therefore, the retina is deprived of the full amount of light and the response is then altered. As a consequence, the interpretation of the ERG cannot be correct. The same situation also prevents us from really knowing how much light was actually used to obtain the response. We are now in possession of a minute bulb, ½ mm. wide and 1 mm. long. It is proposed to place this bulb directly on the cornea itself so that in case the eye moves while being stimulated, the light bulb will move with the eye. For the study of color vision, it is possible to make the bottom of this bulb from colored filters.

Another most important factor is the standardization of the ERG. Up to now it has not been really possible to compare results obtained from one ERG laboratory with those of another, since each laboratory has different equipment. One can easily understand the advantages in having all ERG laboratories standardized. To accomplish this, we do not think that each laboratory should entirely change its present equipment, as some have suggested. Instead, we are now working on a system which would for the first time allow exact measurements of the light stimulation used in ERG. This system will employ a photocell, installed on the cornea exactly opposite the pupil. Since the photocell will give the exact reading of the used light, we feel that by this very simple and inexpensive device we could accomplish the purpose of standardization of the ERG.

At the same time, we are engaged in clinical studies of two very serious diseases which affect the human eye: glaucoma and diabetic retinopathy. In reference to glaucoma, we are making a comparative study. The idea for this came from an experimental study on normal young students' eyes, which I made a few years ago. This consisted of applying pressure to the normal eye. At 60-70 mm. Hg. there was no longer any response on the ERG. At the same time, vision was lost and the pain which usually accompanies glaucoma was present. While I slowly released the pressure to 15-10 Hg., the subjects began to see again and the ERG came back to normal. These findings are of extreme importance for comparison with those of acute glaucoma, with high tension. In diabetic retinopathy, it is believed that the disease has its beginnings in the retinal vessels themselves. Since vaso-constriction affects the ERG in the same manner as does a blackout of the retina from lack of oxygen supply, we feel that the ERG might prove its usefulness as an early diagnostic tool before any ophthalmoscopical changes are visible.

Along with our regular research projects, we are also doing routine recordings on all retinas where the diagnosis is questionable. There are many more projects that could be undertaken, but we are limited physically and economically.

We do feel that this Electroretinography Laboratory of the Massachusetts Eye and Ear Infirmary has, for the future, many fruitful years of work. This endeavor can produce many benefits for ophthalmic clinicians, as well as for those engaged in research on the basic sciences of the eye.

Benjamin Ziv, M.D.,
Fellow in Ophthalmology,
Massachusetts Eye and Ear Infirmary,
in charge of the
Electroretinography Laboratory

These announcements have been received from the Massachusetts Eye and Ear Infirmary since our last report on the Eye and Ear staff appeared in The News:

The following appointments were made at the meeting of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on January 18:

Dr. John M. Carroll — Fellow in Ophthalmology, assigned to the Howe Laboratory for six months, beginning April 1;
Dr. Kamil Ergin — Fellow in Anesthesia for one year, beginning February 20;
Dr. Jack E. Goldstein — Fellow in Ophthalmology, assigned to the Howe Laboratory for six months, beginning January 1;
Dr. John W. Irwin — Coordinator of Otolaryngological Research;
Dr. David B. Karlin — Fellow in Ophthalmology, assigned to the Retina Service for one year, beginning July 1;
Dr. J. Wallace McMeel — Fellow in Ophthalmology, assigned to the Retina Service for one year, beginning July 1.

It was voted to accept with regret the resignation of Dr. Peggy J. Clark-Roberts as Fellow in Anesthesiology at the Infirmary.

The Executive Committee of the Board of Managers made the following appointments at their meeting held on February 15:

Dr. Byron S. Lingeman—Assistant in Ophthalmology, beginning February 1;
Dr. Stephen S. Pappas—Fellow in Ophthalmology, assigned to the Retina Service, for one year, beginning July 1;
Dr. Raniero Di Piero—reappointed as Fellow in Anesthesiology, from February 23, 1960 through March 31, 1961;
Dr. Sydney Shore—Assistant in Otolaryngology;
Dr. Edward C. Sweebe—Assistant in Ophthalmology, beginning February 1;
Dr. Michael Wiedman—Assistant in Ophthalmology, beginning March 1;
Dr. Albert H. Williams—Assistant in Otolaryngology.

It was also voted to accept with regret the resignation of Dr. Mendell Robinson as Assistant in Otolaryngology.

The following appointments were made at the meeting of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on April 18:

Dr. Paulo R. L. Barros — Fellow in Ophthalmology, assigned to the Retina Service, as of July 1;
Dr. Yale J. Berry — Resident in Otolaryngology, as of July 1, 1961;
Dr. Oscar De La Cruz — Resident in Otolaryngology, as of July 1, 1961;
Dr. Dennis Harris — Fellow in Ophthalmology, assigned to the Retina Service, as of July 1;
Dr. Roy A. Johnson — Resident in Otolaryngology, as of July 1, 1961;
Dr. Roger S. Kaufman — Resident in Otolaryngology, as of July 1, 1962;
Dr. Anne S. Morgan — Fellow in Ophthalmology, assigned to Pathology, as of April 18;
Dr. Denis B. Sweeney — Fellow in Ophthalmology, assigned to the Retina Service, as of July 1.

At this meeting the following resignations were accepted with regret:

Dr. Robert E. Klotz — as Assistant to the Chief of Otolaryngology;
Dr. George F. Reed — as Assistant to the Chief of Otolaryngology.

Both Dr. Klotz and Dr. Reed will remain on the staff of the Infirmary.

The following appointments were made at the meeting of the Board of Managers, held on April 20:

Dr. Alexander S. Macmillan, Jr. — Roentgenologist, as of July 1;
Dr. Alexander S. Macmillan, Sr. — Senior Consulting Roentgenologist, as of July 1;
Dr. William W. Montgomery — Associate Surgeon in Otolaryngology, as of April 20.

Dr. Bronson Crothers (*W.M.* 1911) was posthumously granted the John Howland Award at the Annual Meeting of the American Pediatric Society, held in Swampscott in May. Dr. Crothers died on July 17, 1959.

The Board of Trustees, at their meetings on April 15 and 29, voted:

That the appointment of Dr. Hubert J. Wolfe be changed from Third Assistant Resident in Pathology, beginning July 1, to Clinical and Research Fellow in Pathology and Acting Assistant Resident for one year, beginning July 1.

To reappoint:

Robert W. Jeanloz, D.Sc. as Associate Biochemist (Medicine) for the three-year period, ending December 31, 1962.

To appoint:

Dr. William J. Adelson as Assistant to the Children's Medical Service, beginning July 1;
Dr. Noel H. Aldridge as Clinical Fellow in Radiology, beginning July 1, with the understanding that when he obtains a permanent Massachusetts license he will become Assistant Radiologist;
Dr. Howard P. Baden as Clinical and Research Fellow in Dermatology, beginning July 1;
Dr. Irwin M. Freedberg as Clinical and Research Fellow in Dermatology, beginning July 1;
Dr. Lee Jackson as Clinical Assistant in Psychiatry at McLean Hospital, beginning July 1;
Dr. Peter G. Kimball as Intern on the Dental Service for one year, beginning July 1;
Dr. Jacques Y. Lambrechts as Clinical Fellow in Anesthesia, for a period of six months, beginning July 1;
Dr. A. David McGugan as Resident in Dermatology for one year, beginning July 1;
Dr. Roger H. Morris as Assistant Resident in Anesthesia, beginning July 8, 1961;
Dr. Barbara Gurd Mueller as Clinical Assistant in Psychiatry at McLean Hospital, beginning July 1;
Dr. Egbert H. J. Mueller as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;
Dr. José A. Pángaro as Clinical Fellow in Medicine, for the period April 1, 1960 through June 30, 1961;
Dr. Jalna A. Perry as Clinical Assistant in Psychiatry at McLean Hospital, beginning July 1;
Dr. Leonard B. Shulman as Intern on the Dental Service for one year, beginning July 1.

At their meetings during April, the General Executive Committee voted:

To promote:

Dr. Donavin A. Baumgartner, Jr. from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;
Dr. Mortimer J. Buckley, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Willard M. Daggett, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Arthur L. Herbst from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. Dale G. Johnson from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;
Dr. Nelson R. Lampert from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. Lucian L. Leape from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. Raphael H. Levey from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. John W. Madden from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. Ronald A. Malt from the position of Second Assistant Resident to that of First Assistant Resident in Surgery, beginning July 1;
Dr. Eldred D. Mundth from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. Anthony S. Patton from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. John T. Porvaznik, Jr. from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, beginning July 1;
Dr. David B. Skinner from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. James H. Stempien from the position of Intern to that of Resident on the Dental Service for one year, beginning July 1;
Dr. William G. Stewart, Jr. from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. John Urquhart, III, from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1;
Dr. Richard H. Wohl from the position of Intern to that of Third Assistant Resident in Surgery, beginning July 1.

To reappoint:

Dr. Fernando A. Cardenal as Clinical Fellow in Orthopedic Surgery, with the privilege of assisting Dr. Otto E. Aufranc in the care of his private patients, for the period April 1 through May 31;
Dr. Abdollah Gashgai as Second Assistant Resident in Surgery, beginning July 1;
Dr. Donald J. Glotzer as First Assistant Resident in Surgery, retroactive to April 1;
Dr. John B. Herrmann as Second Assistant Resident in Surgery, beginning July 1;
Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning April 28;
Dr. Eugene R. Nobles, Jr. as First Assistant Resident in Surgery, beginning July 1;
Anne M. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning May 13;
Dr. Harold C. Urschel, Jr. as Second Assistant Resident in Surgery, beginning July 1;
Dr. C. Gene Wheeler as Second Assistant Resident in Surgery, beginning July 1.

To appoint:

Neil Baggett, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1;
Dr. Joseph H. Dimon, III, as Clinical Assistant in Orthopedic Surgery, with the privilege of assisting Dr. Otto E. Aufranc in the care of his private patients, for the period April 1 through May 31;
Dr. Goro Irie as Research Fellow in Radiology for one year, beginning July 1;
J. Veronica King, Ph.D. as Research Fellow in Medicine for one year, beginning September 12;
Leslie Parker, B.Sc. as Research Fellow in Medicine (Physics) for one year, beginning September 1;
Dr. Shizuko Takahashi as Research Fellow in Medicine for one year, beginning July 1.

The General Executive Committee also voted:

To change the starting date of the appointment of Dr. James P. Bell as Clinical Assistant in Orthopedic Surgery from November 1, 1959 to November 23, 1959;
To extend the appointment of Dr. Alejandro H. Villegas as Clinical and Research Fellow in Surgery for an additional two months, ending May 31.

On April 20, McLean Hospital announced the following:

That the appointment of Dr. William Kornfeld had been changed from Clinical Assistant in Psychiatry to Assistant Attending Psychiatrist, effective April 1;
That Dr. Emmett Wilson, Jr. had been appointed Resident in Psychiatry for one year, beginning July 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Smith, G. M., and Beecher, H. K.
Amphetamine, secobarbital, and athletic performance: II. Subjective evaluations of performances, mood states, and physical states.
J.A.M.A. 172:1502.

Endoscopy

Benedict, E. B., and Nardi, G. L.
Esophageal varices.
G.P. 21:111.

General Medicine

Calkins, E., and Cohen, A. S.
Diagnosis of amyloidosis.
Bull. Rheumatic Dis. 10:215.

General Surgery

Cope, O.
Hyperparathyroidism: Diagnosis and management.
Am. J. Surg. 99:394.

Neurosurgery

White, J. C., Schwab, R. S., and Sahinalp, I.
Parasagittal meningiomas of the longitudinal sinus and falx.
J. Neurosurg. 17:197.
White, J. C., Sweet, W. H., and Hackett, T. P.
Radiofrequency leukotomy for relief of pain: Coagulation of medial frontal white fibers in stages by means of inlying electrodes.
A.M.A. Arch. Neurol. 2:317.

Physiology

Blank, I. H.
Percutaneous absorption: Methods of study and factors which influence absorption.
J. Occupational Med. 2:6.

Radiology

Bartlett, M. K., and Dreyfuss, J. R.
Residual common duct stones.
Surgery 47:202.
Petersen, J. A.
Recognition of infrapulmonary pleural effusion.
Radiology 74:34.
Phillips, R. I.
Radiological monitoring for technicians.
Cincinnati, Ohio, The American Society of X-ray Technicians.
Potsaid, M. S., and Maruyama, Y.
Effect of AET and MEG on rat thyroid I^{131} uptake.
Radiology 74:74.
Robbins, L. L.
The future of Radiology. President's Address, Radiological Society of North America
Radiology 74:485.
Robbins, L. L.
Radiologic features of myasthenia gravis.
In Thymectomy for myasthenia gravis, Henry R. Viets and Robert S. Schwab, with chapters by Drs. Benjamin Castleman, Laurence L. Robbins, Richard H. Sweet, and James L. Vanderveen, Springfield, Ill., Charles C. Thomas, chap. V.
Schulz, M. D.
On the choice of modality in the treatment of cancer. President's Address, American Radium Society.
Am. J. Roentgenol. 83:1.

Miscellaneous

Cole, G.
Career in special libraries.
Science News, vol. 6, no. 3:2.

Books

Webster, E. W.
A basic radio-isotopes course.
Boston, New England Roentgen Ray Society.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Ariel, I. M., and Pack, G. T.
Cancer and allied diseases in infancy and childhood.
Boston, Little, Brown and Company, 1960.
(13V)
Bernard, J., and Mathé, G.
La chimiothérapie des cancers et des leucémies.
Paris, Centre Nationale de la Recherche Scientifique, 1958.
(13V)
Bluefarb, S. M.
Cutaneous manifestations of the malignant lymphomas.
Springfield, Ill., Charles C. Thomas, 1959.
(14L)
Bogaert, L. van (Editor)
International Congress of Neurological Sciences, 1st., Brussels, 1957.
Neurology, vol. 1.
New York, Pergamon Press, 1959.
(19A)
Brockbank, W.
Portrait of a hospital.
London, William Heinemann Ltd., 1952.
(1Fh)
Burton, B. T. (Editor)
The Heinz handbook of nutrition: A comprehensive treatise on nutrition in health and disease.
New York, McGraw-Hill Book Company, Inc., 1959.
(5M)
Christensen, H. N.
Diagnostic biochemistry.
New York, Oxford University Press, 1959.
(5A)
Ciba Foundation Study Group No. 4.
Virus virulence and pathogenicity.
Boston, Little, Brown and Company, 1960.
(11A)
Dawson, R. M. C., Elliott, D. C., Elliott, W. H., and Jones, K. M. (Editors)
Data for biochemical research.
London, Oxford University Press, 1959.
(5As)
Faxon, N. W.
The Massachusetts General Hospital, 1935-1955.
Cambridge, Mass., Harvard University Press, 1959.
(362) Cabot Room
Hall, V. E. (Editor)
Annual review of physiology, vol. 22.
Palo Alto, Annual Reviews, Inc., 1960.
(4A)
Hayashi, T. (Editor)
Subcellular particles. A symposium held during the meeting of the Society of General Physiologists at the Marine Biological Laboratory, Woods Hole, Massachusetts, June 9-11, 1958.
New York, The Ronald Press Company, 1959.
(2Am)
Marshall, R.
Fifty years on the Grosvenor Road.
Belfast, W. & G. Baird Ltd., 1953.
(1Fh)
Martin, J. H. (Editor)
Radiation biology. Proceedings of the 2d Australasian Conference.
New York, Academic Press, Inc., 1959.
(36Jn)
Morris, M. L.
Nutrition and diet in small animal medicine.
Denver, Mark Morris Association, 1960.
(2B)
Nachmansohn, D.
Molecular biology. A symposium held at The Rockefeller Institute from September 25-30, 1958.
New York, Academic Press, Inc., 1960.
(5Am)
Pack, G. T., and Ariel, I. M.
Tumors of soft somatic tissues.
New York, Paul B. Hoeber, Inc., 1958.
(13V)
Smith, H. W.
From fish to philosopher.
Boston, Little, Brown and Company, 1959.
(2Am)
Sobotka, H., and Stewart, C. P. (Editors)
Advances in clinical chemistry, vol. 1.
New York, Academic Press, Inc., 1958.
(7D)
Viets, H. R., and Schwab, R. S. (Editors)
Thymectomy for myasthenia gravis.
Springfield, Ill., Charles C. Thomas, 1960.
(19E)
Wansker, B. A.
X-ray and radium dermatology.
Springfield, Ill., Charles C. Thomas, 1959.
(27D)
Weinstein, L.
The practice of infectious diseases.
New York, McGraw-Hill Book Company, Inc., 1958.
(11A)
Welt, L. G.
Clinical disorders of hydration and acid-base equilibrium, ed. 2.
Boston, Little, Brown and Company, 1959.
(14J)
Williams, R. H. (Editor)
Diabetes.
New York, Paul B. Hoeber, Inc., 1960.
(13D)
Who's who in America, vol. 31, 1960-61.
Chicago, Marquis—Who's Who, Inc., 1960.
(1A)

* * *

VOLUNTEER GROUPS

MGH Staff Wives Association

The annual meeting of the Staff Wives Association of Massachusetts General Hospital was held on May 10. Since this date coincided with the observance of National Hospital Week, the first part of the meeting was devoted to a viewing of "A watch in the night" — the new MGH 150th Anniversary motion picture film.

This was followed by a coffee in Bartlett Hall. The speaker for the occasion was Mr. David C. Crockett, Associate Director for Resources and Development, who reported on the MGH 150th Anniversary Program — its progress to date and its plans for the future.

Mr. Crockett's speech was followed by the business meeting, which included the report of the outgoing president, Mrs. Alfred Kranes, under whose leadership for the past two years the activities of the Staff Wives have continued to expand in many areas.

In her report, Mrs. Kranes emphasized that the Staff Wives Association is open to *all* interested women, not only to the wives of staff members. She then spoke of the Reception Center at M.G.H., where more than 200 visitors from more than 50 countries have been received and welcomed during the past year. Massachusetts General has the largest number of foreign visitors of any hospital in the Boston area. Numerous inquiries about this center have been received from hospitals across the country.

Activities in the Reception Center this past year have included the finding of living quarters for 100 visitors and their families, the furniture exchange (which has loaned more than 300 items to our visitors from other lands), the distribution of 250 tickets to concerts and theatre performances (donated by friends of

M.G.H.), and the entertaining of all visitors in private homes, especially during the winter holidays.

The Staff Wives Association also arranges for the Chapel Concerts, given twice a month by professional musicians from October to May, for the enjoyment of the patients in our Hospital. A large and active committee, under the direction of Mrs. Milford D. Schulz, has been responsible for this much appreciated activity.

The following officers were elected for the coming year:

President — Mrs. Vincent P. Perlo
Vice-President — Mrs. H. Dunster Howe
Treasurer — Mrs. Avery D. Weisman
Corresponding Secretary — Mrs. Alexander Leaf
Recording Secretary — Mrs. Philip R. Dodge

BIOGLETS

Dr. J. Richard Baringer, Intern in Medicine — born in Columbus, Ohio, January 19, 1935; B.Sc., Ohio State University, 1955; M.D., Western Reserve University School of Medicine, Cleveland, Ohio, 1959; married.

Dr. William E. Wilson, Assistant Resident in Orthopedic Surgery — born in Montreal, Canada, November 7, 1927; military service: Canadian Army, 1942-46; premedical education: senior matriculation, Glebe Collegiate, Ottawa, 1945, and B.Sc., McGill University, Montreal, 1949; M.D.C.M., McGill University Medical School, 1953; intern, rotating, Montreal General Hospital, 1953-54; Junior Assistant Resident in General Surgery, Montreal General Hospital, 1954-55; Assistant Resident in Surgery, Hospital for Sick Children, Toronto, 1955-56; Research Assistant in Experimental Surgery and Demonstrator in Anatomy, McGill University Medical School, 1956-57; M.Sc., McGill University, 1957; Assistant Resident in General Surgery, Queen Mary Veterans Hospital, 1957; Assistant Resident in General Surgery, Royal Victoria Hospital, Montreal, 1958; Fellow of the Royal College of Surgeons (Canada) in General Surgery, 1958; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1958-59; married.

The following notes are taken from a recent *McLean Newsletter*:

Dr. Anne Parsons, Assistant Social Anthropologist at McLean, has returned from a stay of 18 months in Naples, where she studied cultural aspects of schizophrenia, on her grant from the National Institutes of Health. Dr. Parsons gives this report of her work in Italy:

> Since I have been lucky enough to travel on my job, I have been looking at McLean through a slightly different lens, comparing it with the psychiatric hospitals in Naples, where I was for a year and a half. In the short time I have been back, I have had a few thoughts which I would like to pass on to the rest of the staff. One is that, seen comparatively, the amount of effort and moral concern that McLean staff members put into their jobs is very impressive. From this I would not want to conclude that all Neapolitans spend all of their time in the sun, but certainly the average hospital work load is much lighter, for the simple reason that a number of things we take for granted have not occurred to them as essential; for example, keeping daily nursing notes or making the case history such an extensive document. This is because the ideal of patient care with them is a far more limited one; their goal is to keep patients from being a disturbance to society, not to help them become happier integrated individuals.
>
> But I also think our very high level of expectations brings new problems of a sort which one does not find in Naples. For one thing, because we are much more aware of and know more about the social and psycho-dynamics of human behavior, we sometimes become self-conscious in actual relationships in ways I doubt that a Neapolitan could. Besides, our culture is very sadly deficient in non-verbal means of communication and sometimes I think we have a compulsion to translate emotions into words. Another consequence of our high level of knowledge and standards is that when anything goes wrong it is apt to be considered as personal failure. Thus it has the potentiality of setting in motion a vicious circle of guilt, anxiety, and withdrawal; or else an atmosphere in which everyone assumes that "if only we could change something" we could avoid any problems in the future. Perhaps the lack of long-drawn-out periods of tensions in Neapolitan hospitals relates to an attitude which assumes that there are no perfect solutions to human problems.
>
> Anthropologists enjoy fantasying about the ideal culture which is made up of only the best aspects of those which they know. My private fantasy for the moment is of a hospital which would combine the high capacity for participation in immediate interpersonal relationships and for dealing with tension (which I found in Naples) with the high level of optimism, responsibility, and respect for the individual that is so conspicuous here. It's only a fantasy, but one worth thinking about.

* * *

GRADUATION OF DIETETIC INTERNS

Graduation exercises for our Postgraduate Dietetic Interns were held in the Bigelow Amphitheatre on March 25. The two interns who had completed the course were Miss Alice Kapsner and Miss Louise Cudd — both graduates of the University of Minnesota.

Miss Louise Hatch, Director of the Dietary Department and School of Dietetics, extended greetings from the dietary staff and interns to the guests, who included directors of dietary departments from other hospitals in the area and representatives of the American Dietetic Association, among whom were Mrs. Quindara Dodge, a past president of the American Association.

Miss Hatch then introduced Dr. Doris Johnson, Director of the Dietary Department of the Grace-New Haven Hospital and the 42nd president of the American Dietetic Association — the guest speaker of the afternoon. Dr. Johnson gave an inspiring talk, in which she emphasized the privileges and responsibilities of the internship. She explained that this training serves to introduce the intern to all the different phases of the dietitian's profession, namely, (1) diet therapy, (2) administration, (3) teaching, and (4) community nutrition. She stressed the point that the internship teaches professional ethics, which include responsibility to the profession, to the Association, to related organizations, to the community, to employers, and also helps to mold the intern's own personal ethics. She also reminded her listeners that the standards in dietary performance depend upon the personal conduct of each member of the profession. In addition, high standards are of direct benefit to the intern, she said, for it is through her profession that she will make her livelihood and, at the same time, be of service to her fellow men.

Miss Hatch next introduced the candidates to Dr. Clark, who presented them with certificates in recognition of the satisfactory completion of their course. In his remarks, Dr. Clark spoke of the many educational programs offered at the Hospital and concluded with an expression of the pride which the Hospital feels in these graduates who go out into their various fields as representatives not only of their profession but of the Hospital.

New addresses:

Dr. David W. Allen (*M.* 1955), Massachusetts General Hospital, Boston 14, Mass.
Dr. Bob Bullwinkel (*S.* 1957), 131 Bellevue Ave., Summit, N. J.
Mr. Frederick D. Foster (past a. dir.), Wells Television, 52 Vanderbilt Ave., New York, N. Y.
Dr. Charles S. Kubik (*Bd. of Cons.*), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. K. Jack Momose (clin. fel. *R.* 1956), Dept. of Radiology, Ottawa General Hospital, Ottawa 2, Ont., Canada
Dr. William A. Tisdale (*M.* 1952), Massachusetts General Hospital, Boston 14, Mass.
Dr. George W. Van Gorder (hon. s.), 36 Regent St., West Newton 65, Mass.
Dr. Edward L. Voke (j.r.p. *R.* 1931), Ohio Bldg., Akron 8, Ohio
Capt. G. Melville Williams, MC, USAR (*S.* 1958), Fort Sam Houston, Tex. (home address: c/o Mr. M. O. Williams, 45 Jewett Ave., Tenafly, N. J.

Brief bits:

Dr. Benjamin Castleman was named President-elect of the International Academy of Pathology, at their 49th Annual Meeting, held in Memphis, Tennessee, in April. He plans to attend the coming meeting of the Academy, to be held at the Royal College of Surgeons in London, England, this June. Dr. Castleman was elected Fellow of the American Academy of Arts and Sciences, at the meeting of the Academy held on May 11.

Dr. Edwin F. Cave delivered the Fourth Alan DeForest Smith Lecture, sponsored by the New York Orthopaedic Hospital Alumni Association, at the College of Physicians and Surgeons at Columbia University, New York City, on April 22. His subject was "The chronically disabling knee joint".

Miss Genevieve Cole, Librarian of Treadwell Library, spoke on "Communication and motivation", during a panel discussion of "The supervisor and the supervised", at a meeting of the Hospital Libraries Group of the Medical Library Association, held in Kansas City, Missouri, on May 17.

Dr. Thomas B. Fitzpatrick delivered two lectures at the Divisional Meeting of the American Cancer Society last January, was Visiting Physician at Yale Medical School during April, and will act as Chairman of the Symposium on Cancer of the Skin, which will be part of the Fourth National Cancer Conference, to be held in Minneapolis in Sep-

Dr. Benjamin Ziv, Fellow in Ophthalmology, Massachusetts Eye and Ear Infirmary — in charge of the Electroretinography Laboratory

tember.

Dr. John Gergely presided at the Inter-Society Session on Muscle, at the meeting of the Federation of American Societies for Experimental Biology, held in Chicago on April 11. He also gave, by invitation, a paper on "Biological aspects of organic semi-conductors" at a recent conference on Electronic Conduction in Organic Materials, held at Duke University, Durham, North Carolina. On May 9 he participated in a Symposium of the Radiation Research Society on Energy Transfer in Photobiological Processes and gave a paper entitled "Energy and electron transport in macromolecular systems" in San Francisco.

Dr. Sven M. Gundersen (*E.M.* 1931) has been elected Chairman of the Board of Directors of the Hitchcock Clinic, Hanover, New Hampshire. Dr. Gundersen is also President of the New Hampshire chapter of the American College of Physicians.

Mr. John W. Webb, Director of our Pharmacy, was installed as President of the Massachusetts Society of Hospital Pharmacists on April 27.

Dr. James C. White gave the William Snow Miller Lecture at the University of Wisconsin, in Madison, on April 11. His subject was "Problems in interrupting the pathways of pain in post-traumatic neuralgia, and visceral and malignant disease".

We were very glad to receive this note from Dr. Charles W. Peabody (*E.S.* 1917 and *Or.* 1920), our "singleton" in Barrington, R. I.:

I retired from private practice in Detroit just two years ago, and established a home (and a sail-cruising yacht) at this site. Professionally, I am inactive, save for weekly consulting work at the U.S. Veterans Administration Hospital in Providence.

This nice letter has come from Dr. Donald B. Steenburg (*E.S.* 1915):

Here is a condensation of the life of a "singleton" in the Far West.

Following a brief tour of duty at Dannes-Camiers, France, in World War I with the 2nd Harvard Unit (Massachusetts General Hospital), I joined my father here in Aurora, Nebraska, in the conduct of a general surgical practice. My brother, Dr. Edmund K. Steenburg (*E.S.* 1919) joined us in 1920, remaining until October 1958 when he removed to Washington, D.C., bringing on my "singleton status".

Presently my two sons, Dr. E. A. and Dr. Houtz G. Steenburg, are working with me in a general practice based in our 30-bed private hospital which we plan to replace soon with a Foundation-financed hospital with Hill-Burton aid. At this time a new clinic building is contemplated.

Dairy farming has been my avocation during the 44 years of my residence here and still is an interesting and demanding activity. My sons are doing their share of it also.

Blue Shield executive board work has been an interesting and useful activity for me since its inception in Nebraska.

We have a fairly active chapter of the American College of Surgeons in Nebraska, and this has required time and effort through the years to attain its present stature.

Following my year as president of the Nebraska State Medical Association, I became chairman of the Medical Education Committee, to which has been added the duty of collecting for A.M.E.F. as its chairman in Nebraska, and also the duty of attending the Executive Faculty meetings of the University of Nebraska School of Medicine, in Omaha, as a liaison member from the Nebraska State Medical Association.

My daughter, Mrs. George Engler, resides with her family in Chicago. Mrs. Steenburg is hale and hearty and busies herself with our 14 grandchildren, when the opportunity affords.

The economic conditions here in the middle of the great plains are reflected, I think, by the increasing number of young farmers who are selling out to enter industrial pursuits on the coasts. These fine people have been caught in the price squeeze between falling prices of hogs, cattle, and grains, and the increased (highly unionized) prices for the machinery they must have to operate their farms and ranches. Quite an effort is being made to bring industry into this area, especially for the utilization of surplus products of the farm.

Snowfall has been very heavy this winter and will recharge our ground storage, which is very important to this highly irrigated, intensively farmed area.

We are always happy to return to Boston and the M.G.H.

We were very glad to receive this letter from Dr. Désiré J. A. Rebello (a.r.p. *D.* 1954):

I left the U.S.A. in July of 1959 and came over to England en route to India. Since September of last year I have been working at this hospital — the full name and address of which is the Manchester and Salford Hospital for Skin Diseases, Quay Street, Manchester 3, England. I shall be here till the end of September.

I shall be grateful if you could mail my copies of The News to this hospital until the beginning of September. I am afraid that by the time I reach India I will have missed out on a lot of things that are happening at that "Mecca" of medical learning and research — I mean the Massachusetts General Hospital.

Britain is very prosperous at this time. The standards of medical care, medical teaching, and research are very advanced. However, the British still use old-fashioned equipment, e.g., X-ray machines in some of their medical institutions, and the buildings themselves are very old.

Kind regards to my friends at M.G.H.

* * *

IMPORTANT NOTICE

Will every member of the House Staff who will be leaving M.G.H. at the end of June (or at any other time, for that matter) please see that your future address reaches Cora F. Holbrook, Archivist and Editor of The News, and that any subsequent address — particularly your future office address — is sent to her.

The Directory section of our *Annual Report* is prepared each year in the Archives Department, and this information is essential in keeping the Directory up to date. Each new address also appears in The News as soon as it is received.

Your cooperation in this matter will be much appreciated.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 197 Boston, Mass. October 1960

SOME THOUGHTS ON THE COLOR PROBLEM AND INTEGRATION OF DERMATOLOGY AND MEDICINE

Presidential Address, The Society for Investigative Dermatology, Miami, Florida, June 13, 1960

Presidential addresses are often avoided at meetings and seldom read after publication, even when given by men with much grayer hair than mine! I was elected President of this distinguished Society while I was in England on a fellowship last year, and I could not therefore at the time protest my youth and my ineptitude for such responsibility.

My topic might be called integration and the color problem. I refer to the integration of Dermatology and Medicine. And the color problem of which I shall speak is better stated as the problem of color. What I mean to convey is that my interest in the problem of color aided appreciably in integrating the Department of Dermatology in a large general hospital [Massachusetts General] and medical school [Harvard Medical] to which I have recently moved. Let me explain further. Shortly after I went to my new position last fall, I was invited by the Medical Service to speak on melanin (a clinical discussion of various melanin pigmentations), by the Metabolic Unit on the tyrosine-melanin metabolic pathway, by the Department of Ophthalmology on melanin pigment in the eye, et cetera. Having spent the past fourteen years on the problem of melanin, I was able to present the results of some original investigation and a panoramic view of a subject of interest to physicians in diverse specialties and to biologists and biochemists. These meetings resulted in new interdepartmental projects and a *rapprochement* of the Department of Dermatology and the Hospital and Medical School.

This rather egotistical introduction brings me to what should have been my topic sentence: The barriers of the various specialties are collapsing, and although special clinical interests and problems still exist, we are all engaged in a vast common enterprise, namely, the study of biology. To solve the problems of biology in so far as they concern Man, workers in the various segregated areas are beginning to be interested in the same basic concepts and to use the same or very similar research methods. Some of the papers recently given at the Federation Meetings in Chicago or the meeting of the American Society for Clinical Investigation could have been given here with the same impact, or vice versa.

The future of Dermatology in a medical school is intimately linked with the quality of research. In a decade, the question of integration of Dermatology will not be discussed if we continue to expand the scope and increase the quality of basic research. I must hasten to add that the Dermatology Department must, however, not only match the standard of the other specialties in research, but must also provide the same excellence in patient care and the teaching of the specialty. To achieve a balance of the triad of patient care, teaching, and research, we need to develop individuals with imaginative leadership and critical judgment; we need to provide them with opportunity for training and experience in Clinical Dermatology, and a two-year service "at the bench" in a basic science laboratory. In other words, the future of Dermatology depends on individuals. As Emerson so aptly put it, "An institution is the lengthened shadow of one man." Competition for space and for research funds is becoming increasingly fierce, but the simple truth is that space and funds follow a good man like a shadow. Let me give you an illustration. If you ask a medical student, an intern, or a professor of biochemistry from the University of Chicago Medical School for his view of the specialty of Dermatology, he will describe the superb and stimulating teaching, and the high caliber of research. To them, the specialty of Dermatology is represented by men with critical judgment, teachers who integrate basic science and clinical problems, individuals who are making an honest effort to understand normal and diseased skin with the most recent research and clinical tools. Compare this with the opinion of interns from certain of our other excellent medical schools. They will state that to them Dermatology represents an esoteric field in which instruction was given by residents whose presentation aroused little interest and in which research seemed to consist in the evaluation of "salves" or in the nuances of rarely encountered cutaneous disorders such as acrodermatitis atrophicans chronica. For these unfortunates, Dermatology has been segregated from the rest of medicine as a waif, undeserving of serious scientific recognition.

Turning to the more scientific aspects of the color problem, I would like to point out the integrative possibilities inherent in biochemical genetics. This subject is of interest to dermatologists and also to investigators in various other fields of Medicine. This is an approach to disease which relates the clinical and laboratory findings to altered metabolism. Thus we speak of "biochemical lesions". This concept of disease places it at the molecular level and the biochemical lesion may then be the consequence of a gene defect, or possibly the alteration of the gene by environmental factors (radiation, infections, stress, immune and autoimmune responses). These gene mutations then bring about the formation of altered protein molecules, including altered enzymes. When the gene is altered a new protein is made which may or may not be functionally defective, with different physical properties or decreased or absent enzymatic activities. These abnormal enzyme proteins lead to blocks in the normal metabolic pathway.

Today I would like to consider briefly the genetic condition known as albinism as a prototype. Some of you may consider that this is a rather unimaginative subject to discuss on this occasion, but atopic dermatitis and psoriasis, two hereditary dermatoses, will in my opinion ultimately prove to be gene defects with resulting abnormal biochemical consequences.

Albinism is an example of one type of metabolic block in which the enzymatic defect leads to a deficiency of the product, melanin. I will also mention later a disease with a different type of metabolic block, phenylketonuria. In phenylketonuria, decrease in melanin occurs, not from a defect of the melanin-forming enzyme, tyrosinase, but from the reversible inhibition of this enzyme by the enormously increased amounts of phenylalanine in the serum and extracellular fluids.

I have for some time been especially interested in albinism as evidence of a relationship between the genes and biochemical lesions. Let me define albinism, for present purposes, as an hereditary and congenital deficiency of melanin caused by a characteristic defect of metabolism in the melanocyte.

You are probably all aware that albinism occurs throughout the animal kingdom. It may be seen in vertebrates ranging from brook trout to whales and man. The incidence in man is reported to be one in twenty-five thousand. Noah—the Noah who embarked in the Ark—was an albino, and so also was W. A. Spooner—that famous Warden of New College, Oxford, for whom are named Spoonerisms—those accidental transpositions of the initial letters of words. Were he here today he might tell you that many of my experimental data have been obtained from the tissues of pickens and chigs. It was in 1660, after seeing negroes with white skin on the African coast, that Balthazar Tellez, a Portuguese, using the

Latin adjective, *albus,* coined the Portuguese term, *albino.* The condition has been the subject of speculation for centuries. For many years, albinos were considered to stand between apes and man in the evolutionary scale. Linnaeus, the Swedish naturalist, grouped them with the cave dwellers known as troglodytes, and certain Central American Indians even today consider that albinos are set apart from normal man as being more intelligent, freer from sin, and altogether nearer to God.

Types of albinism

The metabolic defect of the melanocyte in albinism may be present throughout the entire melanocyte system or be limited to the melanocytes of one region of the body. In the past, clinical nomenclature has not been such that one could easily specify with clarity either the extent or the site of involvement. For my own use, therefore, I have come to employ a more functional system of terminology which seems to me to have many advantages over the traditional system. I present it here for what it may be worth. The term "oculo-cutaneous albinism" indicates succinctly the simultaneous existence of the two major visible manifestations of albinotic abnormality of the melanocyte system and gives proper emphasis to ocular involvement which is an inherent part of the syndrome. The term "ocular albinism", as I use it and as it has been used in the past, adequately describes the condition to which it is applied. "Localized cutaneous albinism" is the term I have come to employ when the pigmentary deficiency appears only in localized areas of the skin.

Ocular changes (hypopigmented fundus oculi, translucent irides, and nystagmus) are the most reliable criteria for the diagnosis of oculo-cutaneous albinism because the color of the hair, eyes, and skin of patients with this disorder may be indistinguishable from that of normal blond Caucasians. Localized cutaneous albinism (LCA) may closely resemble segmental vitiligo, especially when it appears on one side of the face. The two diseases may be differentiated, however, by five distinguishing features:

1. The depigmentation of LCA is present at birth.
2. Physical trauma of the normal skin usually evokes depigmentation of the traumatized area in vitiliginous subjects, but does not do so in patients with localized cutaneous albinism.
3. LCA is present in the family history of more than fifty percent of these patients. The family names Whitlock (Whitelock), Horlock (from hoar), Silverlock, Blaylock, and Bianconini (literally, Whitelock) were given to the original holders of the name because of the presence of a white forelock. The Italian family—the Bianconinis—bear a white forelock to the present day.
4. The depigmented lesions of LCA are usually on the abdomen and ventral thorax, whereas those of vitiligo are characteristically found around the eyes, in the axillae, over bony prominences, and at sites of repeated trauma.
5. A tuft of depigmented hair (the white forelock) is present in the midfrontal area of the majority of patients with LCA. The similar depigmentation of hair which may be associated with vitiligo is almost invariably accompanied by depigmentation of parts of the skin on the face and other regions of the body.

Nature of the biochemical lesion of albinism

In a monumental study of albinism, Karl Pearson, the English geneticist, concluded that the deficiency of melanin, characteristic of albinism, results from a structural defect or an absence of melanocytes. His findings were published in 1911, only a few years after Sir Archibald Garrod, in his Croonian Lectures, had listed albinism among "inborn errors of metabolism". The conflict between these two points of view could not be resolved until modern cytological, histochemical, and biochemical techniques made it possible to determine whether melanocytes are present in the skin, hair, and eyes of albinos, and whether there is evidence of a biochemical lesion in albinism.

That melanocytes are present in the skin of albinos was suspected when it became known that pigmented melanocytic nevi and non-pigmented melanomas occur in albinotic skin. Only after the advent of the electron microscope, however, could the presence of melanocytes in such skin be unequivocally demonstrated. These cells can be identified by their dendritic processes and by the presence of numerous ovoid or rod-shaped bodies which are presumed to be amelanic melanin granules. No evidence has been found to support Pearson's interpretation of oculo-cutaneous albinism as the consequence of a structural defect of melanocytes.

Data obtained in biochemical and histochemical studies of skin from chicken, guinea pig, and man have proved that albinism is due to a defect of metabolism. In amelanic granules isolated from the feather papillae of the albino chick, tyrosinase activity has not been detectable, but in melanic granules isolated from the feather papillae of the black Leghorn chick, it has been found to be abundant. Following injection of radioactively labelled tyrosine into the yolk sacs of black Leghorn and albino chicks, significant amounts of radioactivity have been found in the feathers of the black species, and virtually none in the albino mutants.

Manometric measurement has revealed that tyrosinase activity is almost completely absent from the skin of the albino guinea pig fetus and that hydroxylation of tyrosine to dopa does not take place. It has not been possible with manometric techniques to demonstrate that tyrosinase activity is absent in the skin and hair bulbs of human albinos. However, with histochemical, radioautographic techniques, utilizing tyrosine-2-C^{14} as a substrate, tyrosinase activity has not been found in the melanocytes of the hair bulb of the human albino.

Failure of melanin to form in albino melanocytes from melanogenic substrates (tyrosine and dopa) could be the result of a lack in the melanocyte of genes for 1) tyrosinase synthesis, 2) synthesis of the protein matrix (melanosome), or 3) polymerization of the monomer, indole-5, 6-quinone, to the melanin polymer. Viewed under the electron microscope, the melanic melanosomes (melanin granules) of the human albino hair bulb appear to be exactly like the melanic melanosomes present in the normal pigmented hair bulb. It would seem, therefore, that the defect in albinism must be either a failure of tyrosinase synthesis or of melanin polymerization. The latter possibility is unlikely, since there is no hydroxylation by homogenates of the fetal skin of albino guinea pigs. If the defect in albinism were a failure of melanin polymerization, then hydroxylation of tyrosine would be required to provide the precursor, dopa, which ultimately leads to the formation of indole-5, 6-quinone, the monomer that polymerizes to melanin. All available evidence indicates, therefore, that the biochemical lesion of albinism results from absence in the melanocyte of the gene which is required for the synthesis of tyrosinase.

Effect on tyrosine metabolism of a "block" in the tyrosine-melanin pathway

One might expect that the marked decrease or absence of tyrosinase in the melanocytes of albinos would act as a metabolic "block" behind which tyrosine would accumulate as do phenylalanine and related metabolites in the extracellular fluids of patients with phenylketonuria when L-phenylalanine oxidase is absent from the liver or present only in reduced amounts. We have not been able to obtain biochemical evidence that there is such an accumulation of tyrosine in albinism. No decrease in the urinary excretion of adrenalin and nor-adrenalin was observed in six albino patients, and study of serum protein-bound iodine and I^{131} uptake in human albinos suggests that the other major pathway of tyrosine, to thyroxin, is unchanged in these subjects. It would appear, therefore, that the albino can metabolize tyrosine which may accumulate as the result of a block in the tyrosine-melanin pathway. In phenylketonuria, by way of contrast, the characteristic decrease in melanin results not from a defect of the melanin-forming enzyme, tyrosinase, but from the reversible inhibition of this enzyme, by large amounts of phenylalanine which accumulate in the serum and extracellular fluids. Phenylalanine and its degradation products act as competitive inhibitors not only of tyrosinase, with resulting decrease in melanin formation, but also of adrenalin formation, as evidenced by decreased excretion of adrenalin and nor-adrenalin in the urine.

It has been stated previously that two types of evidence are required for conclusive proof of the existence of a specific enzymatic deficiency in any given metabolic disorder: 1) *in vitro* demonstration of a decrease or absence of the enzyme which is known not to result from the effect of inhibitors; and 2) *in vivo* demonstration of biochemical changes in body fluids or tissues and of changes in metabolism, under experimental conditions, which can be attributed to the diminution or absence of a reaction which is normally catalyzed by the enzyme in question. The biochemical and histochemical studies I have just outlined appear to satisfy the first requirement: i.e., tyrosinase is lacking in the melanocyte of the albino. Existing data do not, however, entirely satisfy the second requirement, although absence of melanin in albinotic skin is proof that the block of the tyrosine-melanin pathway is attributable to the absence of tyrosinase.

I have attempted to sketch with the broadest strokes the genetic condition known as albinism and to emphasize its significance as a prototype of a disorder in which the clinical findings can be related to a biochemical lesion. Similar information is needed on some of the more important and disabling cutaneous disorders, such as atopic dermatitis and psoriasis.

We are living in an era in which the expansion of scientific knowledge has already assumed astronomical proportions. Each successive discovery seems to lead the way to still further discoveries and to draw increasing numbers of investigators into the field of research. Techniques of investigation are now available which surpass in accuracy and ingenuity anything previously conceived of. Like all other sub-specialties of medicine, Dermatology has been caught up in this movement. Dermatologists are being challenged to think in terms of the most advanced scientific knowledge. To meet this challenge, we must be able to integrate basic science with clinical skill and to train students to do likewise. Nosology is no longer sufficient. In much of our past research effort, there has been too much fervor and too little measure. This does not mean that we should retreat to the laboratory and substitute the bench for the bed. It means, rather, that we must maintain an even balance of the triad of patient care, teaching, and research. We cannot meet the challenge without insisting upon the highest possible standards of work and developing a tradition of excellence.

Thomas B. Fitzpatrick, M.D.,
Chief of Dermatology Service

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Mary A. B. Brazier, D.Sc. has been awarded the degree of Doctor of Science by the University of London. The University awards this degree on the basis of published work.

On his departure from Beirut in May, Dr. Edward D. Churchill received the decoration of "Officier de l'Ordre du Cèdre" from the President of the Lebanese Republic. While on leave of absence from Harvard Medical School and Massachusetts General Hospital, Dr. Churchill served as Visiting Professor of Surgery at the American University of Beirut and Acting Director of the Department of Surgery in the American University Hospital.

A new $500,000 Chair in Psychiatry "and the sciences basic to it", honoring Dr. Stanley Cobb, a member of the Harvard 50-year Class, was announced by Harvard's President Nathan M. Pusey last June.

At their meeting on May 27, the Trustees voted to grant a Dalton Scholarship to Dr. Robert S. Lees for a period of four months, beginning July 1.

Dr. James Howard Means has been elected an Honorary Fellow of the Royal Society of Medicine in London, England.

At their meeting on June 10, the Trustees voted to grant a Dalton Scholarship to Dr. Robert H. Schapiro, at the rate of $1,000 per year.

Bishop Henry Knox Sherrill, who resigned as President of our Board of Trustees in 1946 to become Presiding Bishop of the Protestant Episcopal Church in the United States of America, was decorated with the National Order of the Legion of Honor last May, for "distinguished service to the cause of Franco-American friendship". The honor was conferred by Baron Charles de Pampelonne, Consul General of France to the United States.

The 1960 award of the Massachusetts Division of the American Cancer Society has been awarded to Dr. Grantley W. Taylor "in recognition of his outstanding contribution to the control of cancer".

* * *

The Board of Trustees, at their meetings held during May, June, July, and August, voted:

To accept with regret the resignation of Dr. John P. Bunker from the position of Anesthetist, effective as of August 31;

To accept with regret the resignation of Dr. Mahlon B. Hoagland from the position of Associate Biochemist (Medicine), effective as of June 30;

To accept with regret the resignation of Dr. Paul S. Russell from the position of Assistant in Surgery, effective as of June 30;

To accept the resignation of Leonard B. Spector, Ph.D. from the position of Assistant Biochemist (Medicine), effective as of August 31.

To grant leave of absence to:

Dr. Ramond D. Adams, through September 30;
Dr. Walter Bauer, for a period of from four to six weeks;
Mudlagiri K. Gaitonde, Ph.D., Assistant Biochemist at McLean Hospital, from March 27, 1960 until July 1, 1962;
Dr. Morton N. Swartz, for a period of one year, beginning July 1.

To promote:

Dr. Lloyd M. Caplan from Resident in Psychiatry to Clinical Fellow in Psychiatry at McLean Hospital, beginning October 8;
Dr. Jacob Christ from Assistant Psychiatrist to Assistant Attending Psychiatrist at McLean Hospital, beginning July 1;
Dr. Henry U. Grunebaum from Resident in Psychiatry to Clinical Assistant in Psychiatry at McLean Hospital, beginning September 1;
George P. Hauser, Ph.D. from Assistant Biochemist to Associate Biochemist at McLean Hospital, beginning July 1;
Dr. Robert L. Kelley to the position of Clinical Assistant in Psychiatry, beginning July 1;
Dr. Harry S. Olin from Resident in Psychiatry to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;
Dr. Maurice M. Pechet from the position of Clinical and Research Fellow in Medicine to Assistant in Medicine, beginning August 1;
Dr. Phelps M. Robinson from Resident in Psychiatry to Assistant Psychiatrist at McLean Hospital, beginning July 1.

To reappoint:

Dr. Mahmoud Sadrieh, with a change of title from Consultant in Surgery pro tempore to Clinical and Research Fellow in Surgery, for one year, beginning July 1;
Dr. Makoto Seiji as Clinical and Research Fellow in Dermatology for one year, beginning August 1.

To extend the appointment of:

Dr. Richard J. Stenger as Assistant in Pathology from July 1 through August 31.

To change the appointments of:

Dr. Elroy E. Anderson from O.P.D. Resident in Children's Medicine to that of Clinical Assistant in Children's Medicine, effective as of July 13;
Dr. Norris B. Finlayson from First Assistant Resident in Pathology to Clinical Fellow and Acting First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Juan F. Sotos from Assistant to the Children's Medical Service to Clinical Fellow on the Children's Medical Service, as of February 19.

To appoint:

Dr. Khalil Abi-Torbey as Assistant Resident in Urology for one year, beginning July 1;
Dr. Joseph Albert as Clinical Associate in Dermatology, beginning July 1;
Dr. Karl-Eric Aström as Research Neuropathologist in the Department of Neurosurgery, for a period of two months, beginning approximately October 15;
Dr. Dudley M. Baker as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. Jane M. Berman as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;
Dr. Peter H. Berman as Clinical Fellow in Neurology for one year, beginning July 1;
Dr. William A. Binstock as Assistant Attending Psychiatrist at McLean Hospital, beginning July 1;
Dr. Robert L. Bragg as Assistant in Psychiatry, beginning July 1;
Dr. Rosalie A. Burns (Mrs. Herbert I. Goldberg) as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Dr. Ronald Cable as Clinical Fellow in Radiology, acting as Assistant in Radiology, beginning September 1;
Dr. Lloyd M. Caplan as Clinical and Research Fellow in Psychiatry for one year, beginning October 1;
Dr. James J. A. Cavanaugh as Assistant Physician to the Children's Medical Service, beginning July 1;
Dr. Peter T. Choras as Assistant Resident in Psychiatry for one year, beginning July 1;
Donald G. Comb, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning September 1;

Dr. Sheldon Cooperman as First Assistant Resident in Pathology for one year, beginning July 1;
Dr. Wellington B. Cu as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. David C. Dean as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. Edward C. Defoe, Jr. as Clinical and Research Fellow on the Children's Medical Service, for the period September 1, 1960 through June 30, 1961;
Dr. Jacob de Graeff as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Luis L. de Mola as Clinical Fellow in Pathology, for the period July 1 through December 31;
Dr. Patrick J. Donegan as Clinical Fellow in Anesthesia for one year, beginning February 1, 1961;
Dr. John Q. Durfey as Clinical Fellow in Anesthesia, beginning August 15, with the understanding that when he obtains a permanent Massachusetts license he will become Assistant in Anesthesia;
Dr. Richard G. Eaton as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;
Dr. Daniel S. Ellis as a Member-at-Large on the General Executive Committee for one year, beginning July 1;
Dr. Eric Engel as Clinical and Research Fellow in Neurology for one year, beginning October 1;
Dr. Donald J. Fern as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Arnold D. Fiascone as Assistant to the Children's Medical Service, beginning July 1;
Dr. Robert E. Flynn as Assistant in Neurology, beginning July 1;
Dr. Howard S. Frazier as Assistant in Medicine, beginning May 1;
Dr. Hans Hacker as Clinical and Research Fellow in Neurosurgery for one year, beginning August 1;
Dr. Peter M. Hacking as Clinical Fellow in Radiology for one year, beginning June 1, 1961;
Dr. Reginald Hall as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Dr. Earle I. Hammer as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. William H. Harris as Assistant in Orthopedic Surgery, beginning July 1;
Dr. Robert W. Jackson as Clinical and Research Fellow in Orthopedic Surgery for one year, beginning July 1;
Dr. A. Myron Johnson as Exchange Assistant Resident on the Children's Medical Service, for the period August 11 through September 20;
Dr. James W. Lance as Clinical and Research Fellow in Neurology for one year, beginning October 1;
Dr. Myron B. Laver as Clinical Fellow in Anesthesia, beginning July 1, with the understanding that when he obtains a permanent Massachusetts license he will become Assistant in Anesthesia;
Dr. Robert S. Lees as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Edward Lewin as Research Fellow in Neuropathology at McLean Hospital, beginning September 15;
Dr. Austra Likais as Clinical Fellow in Medicine, assigned to Allergy, for one year, beginning June 1;
Dr. S. Bert Litwin as Clinical and Research Fellow in Surgery, beginning July 1;
Dr. Tecla O. Lovina as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Donald McCaughan as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Ramon L. Marquez as Assistant Resident on the Children's Medical Service, for the period July 5 through December 31;
Makoto Matsumoto, Ph.D. as Research Fellow in Biochemistry at McLean Hospital, beginning September 15;
Dr. Edward Messner as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Abbott R. Miller as Second Assistant Resident in Radiology for one year, beginning July 1, 1961;
Dr. John A. Mills as Clinical and Research Fellow in Medicine, beginning June 24;
Lewis C. Mokrasch, Ph.D. as Assistant Biochemist at McLean Hospital, beginning September 1;
Dr. David R. Moloney as Clinical and Research Fellow in Dermatology for one year, beginning July 1;
Dr. Robert A. Nebesar as Second Assistant Resident in Radiology, beginning January 1, 1961;
Dr. Joe R. Norman as Clinical and Research Fellow in Medicine, beginning July 1;
Joseph C. Oakley, D.M.D. as Assistant Dental Surgeon, beginning May 13;
Dr. Harry S. Olin as Clinical and Research Fellow in Psychiatry and Acting Assistant Resident for one year, beginning July 1;
Dr. George W. Rever as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Jack O. Rice as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. J. David Robertson as Associate Biophysicist at McLean Hospital, beginning June 1;
Earle H. Rosenberg, D.M.D. as Dental Surgeon, beginning July 1;
Dr. Ammon Rosenthal as Exchange Assistant Resident on the Children's Medical Service, for the period July 1 through August 10;
Dr. John J. Ross as Clinical Fellow in Neurology for one year, beginning July 1;
Dr. Jordan S. Ruboy as Assistant to the Children's Medical Service, beginning July 1;
Dr. Justus S. Saurbrey as Clinical and Research Fellow in Surgery for one year, beginning October 1;
Dr. Krishna M. Saxena as Clinical and Research Fellow on the Children's Medical Service, for the period September 1, 1960 through June 30, 1961;
Dr. Robert H. Schapiro as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Ronald A. Seltzer as Second Assistant Resident in Radiology for one year, beginning July 1, 1961;
Dr. Boris Senior as Clinical and Research Fellow on the Children's Medical Service, beginning November 1;
Dr. Louis Solomon as Clinical Fellow in Orthopedic Surgery for one year, beginning August 10;
Homer J. Squires, D.S.C. as Assistant Podiatrist on the Orthopedic Service, beginning May 1;
Dr. Richard H. Sweet as a Member-at-Large on the General Executive Committee for one year, beginning July 1;
Dr. Martin Terplan as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Captane P. Thomson as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
William H. Tingey, Jr., D.M.D. as Assistant Dental Surgeon, beginning May 13;
Dr. Rudolf Toch as Clinical Associate in Children's Medicine for one year, beginning July 1;
Dr. Louis Wener as Assistant in Radiology, beginning January 1, 1961;
Dr. Walther T. Weylman as Assistant in Radiology, beginning January 1, 1961;
Dr. Harold W. Williams, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Nicholas T. Zervas as Clinical and Research Fellow in Neurosurgery, for a period of eight months, beginning September 1.

The Trustees also voted to approve having Dr. Kiyoshi Inokuchi give a Richardson Lecture at the Hospital.

At their meetings during May, June, July, and August, the General Executive Committee voted:

To change the appointment of Dr. John E. Adams as Second Assistant Resident in Pathology from July 1 to September 15;
To rescind the promotion of Dr. Alan M. Bornstein from Third to Second Assistant Resident in Pathology, as of July 1;
To accept the resignation of Dr. James J. A. Cavanaugh from the position of Clinical and Research Fellow in Medicine, effective June 30;
To accept the resignation of Dr. Adolfo C. Coussirat from the position of Clinical Fellow in Anesthesia, effective as of June 24.

To promote:

Dr. George E. Battit to the position of Chief Resident in Anesthesia, beginning July 1;
Dr. Murray L. Janower to the position of First Assistant Resident in Radiology, beginning July 1;
Dr. William T. McCoy to the position of Resident in Radiology for one year, beginning July 1;
Dr. Robert G. Ojemann to the position of Resident in Neurosurgery, for the period September 1, 1960 through April 30, 1961;
Dr. Stuart E. Price, Jr. to the position of Resident in Urology for one year, beginning July 1;
Dr. Oscar E. Starobin from the position of Clinical Fellow in Medicine to that of Clinical Assistant in Medicine, beginning July 1;
Dr. Karl H. Wegner to the position of Second Assistant Resident rather than Third Assistant Resident in Pathology for one year, beginning July 1.

To reappoint:

Dr. Harry S. Abram as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Maurice J. Boivin as Assistant Resident in Anesthesia for one year, beginning July 6;
Dr. John A. Bolzan as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Bob Bullwinkel as Third Assistant Resident in Surgery, beginning August 1;
Dr. Sidney R. Cooperband as Research Fellow in Medicine for one year, beginning July 1;
Dr. Jean R. Crabbe as Clinical and Research Fellow in Medicine, for the period July 1 through December 31;
Dr. Gianfranco Dal Santo as Clinical Fellow in Anesthesia, beginning June 23;
Dr. Frederick J. Duhl as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Michael H. M. Dykes as Clinical Fellow in Anesthesia for one year, beginning January 1, 1961;
Dr. Alvin Essig as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Martin H. Flax as Clinical and Research Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;
Dr. Robert G. Frost as Assistant Resident in Anesthesia for one year, beginning September 1;
Dr. Lamont W. Gaston as Clinical and Research Fellow in Medicine, for the period July 1 through October 31;
Dr. Jack J. Greenberg as Second Assistant Resident in Surgery, beginning August 1;
Dr. William A. Hall as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Manuel Hernandez as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Peter R. Holt as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Robert E. Kahn as Clinical and Research Fellow in Medicine, assigned to Allergy, for one year, beginning November 1;
Shelby Kashket, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Dr. Leo T. Kelly as Assistant Resident in

Anesthesia for one year, beginning July 1;
Marvin R. Lamborg, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Dr. Melvin Lederman as Clinical and Research Fellow in Surgery for one year, beginning July 1;
Dr. William F. McCourt as Clinical and Research Fellow in Psychiatry for one year, beginning July 1, provided he passes the special examination of the Educational Council for Foreign Medical Graduates;
Dr. Charles F. McKhann, III, as Second Assistant Resident in Surgery, beginning August 1;
Dr. John A. Mannick as First Assistant Resident in Surgery, beginning September 1;
Dr. Perry F. Mullinax, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Bagepalli S. Narasinga Rao, Ph.D. as Research Fellow in Physics (Medicine) for one year, beginning November 1;
Emery Nyilas, Ch.E. as Assistant Physicist (Medicine) for one year, beginning August 5;
Dr. George M. Perrin as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Alphonse M. Prus as Assistant Resident in Anesthesia for one year, beginning July 1;
Dr. Hugues Ryser as Clinical and Research Fellow in Medicine for one year, beginning September 15;
Dr. John R. Senior as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Nathan T. Sidley as Clinical and Research Fellow in Psychiatry for one year, beginning September 1;
Dr. Eliot M. Slater as Assistant Resident in Anesthesia, for six months, beginning June 1;
Mary J. Spiro, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Dr. Robert G. Spiro as Research Fellow in Medicine for one year, beginning July 1;
Mary L. Stephenson, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;
Dr. Quentin R. Stiles as Second Assistant Resident in Surgery, beginning August 1;
Dr. Philip R. Sullivan as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Herbert C. Wimberger as Clinical and Research Fellow in Psychiatry for one year, beginning July 1.

To extend the appointments of:

Dr. James P. Bell as Clinical Assistant in Orthopedic Surgery, through May 15;
Dr. Fernando A. Cardenal as Clinical Fellow in Orthopedic Surgery, from June 16 through October 31;
Dr. Sophus H. Johansen as Clinical Fellow in Anesthesia, from August 9 through September 30;
Dr. George F. Kwass as Clinical Fellow and Acting Assistant Resident in Pathology, from July 1 through September 30;
Dr. Richard C. Packert as Clinical Fellow in Radiology, from July 1 through December 31;
Dr. Gilberto Rebouças as Clinical and Research Fellow in Medicine, from June 1 through September 15;
Dr. C. Norman Shealy as Assistant Resident in Neurosurgery but assigned to private service, from September 1, 1960 through April 30, 1961;
Dr. Dorothy A. Westcott as Clinical Fellow in Anesthesia, through July 14, 1961;
Dr. R. Lewis Wright as Assistant Resident in Neurosurgery, assigned to Neuroradiology, from September 1, 1960 through April 30, 1961;
Dr. Irving Zieper as Clinical and Research Fellow in Neuropathology for the months of July and August.

To change the titles of:

Dr. Padmakar P. Lele from that of Consultant in Neurophysiology to Assistant Neurophysiologist in the Department of Neurosurgery for one year, beginning May 4;
Dr. Harilaos T. Sakellarides from that of Clinical Fellow to Clinical and Research Fellow in Orthopedic Surgery for one year, beginning July 1.

To appoint:

Dr. Leroy D. Aaronson as Clinical Assistant in Dermatology, beginning July 1;
Dr. Donnell W. Boardman as Clinical Assistant in Medicine, assigned to Allergy, for one year, beginning May 1;
Dr. William T. Butler as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Edwin L. Carter as Clinical Assistant in Surgery, with the privilege of assisting Drs. Bartlett and Hamlin in the care of their patients in the Baker Memorial and Phillips House, beginning July 1;
Dr. M. Robert Coles as Clinical Assistant in Psychiatry, to work primarily in the Alcoholism program with Dr. Chafetz, beginning July 1;
Dr. Witold Drabikowski as Research Fellow in Medicine, beginning October 1;
Samuel R. Kamhi, Ph.D. as Research Fellow on the Orthopedic Service for one year, beginning October 1;
Roger J. B. King, Ph.D. as Research Fellow in Medicine for one year, beginning October 1;
Dr. Rodolfo R. Llinás as Research Fellow in Neurophysiology in the Department of Neurosurgery for one year, beginning September 1;
Dr. Alice Lowell as Clinical Assistant in Medicine, assigned to Allergy, beginning May 1;
Dr. James E. McKittrick as Clinical Assistant in Surgery, with the privilege of caring for the patients of Dr. Leland S. McKittrick in the Baker Memorial and Phillips House, beginning July 1;
Dr. Peter J. Mozden as Clinical Assistant in Surgery, with the privilege of assisting Dr. Langdon Parsons in the care of his patients in the Baker Memorial and Phillips House, beginning July 1;
Dr. Edward A. Nalebuff as Clinical Assistant in Orthopedic Surgery for one year, beginning October 1;
Haruhiko Noda, D.Sc. as Research Fellow in Medicine, for a period of six months, beginning July 15;
Dr. Nobuhiko Okabe as Research Fellow in Pathology for one year, beginning September 1;
Dr. Rafael J. Romay as Graduate Student Assistant on the Orthopedic Service for one year, beginning August 1;
Dr. Perla B. Salama as Research Fellow in Neurology, assigned to the Electroencephalography Laboratory, for a period of three months, beginning September 1;
Dr. Nobuaki Sasano as Research Fellow in Pathology for one year, beginning September 1, 1961;
George Szabó, Ph.D. as Assistant Biologist (Dermatology), beginning August 1, 1959;
Dorothy F. Travis, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning October 1;
Dr. Weiert M. Velle as Research Fellow in Medicine for one year, beginning October 1.

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MYASTHENIA GRAVIS AND QUININE TONIC

Since a large number of patients with myasthenia gravis come to the Massachusetts General Hospital Out-Patient Clinic, through private physicians, and are admitted to the wards, Baker Memorial, or Phillips House, and have thymectomy here under various members of the staff, Dr. Henry R. Viets and I thought it might be worth while to inform all staff members about the possible risks if such patients were given a popular beverage known as quinine tonic.

It has long been known that quinine salts have a curare-like effect and this makes the symptoms of myasthenia gravis worse. Indeed, the use of a 5 gr. tablet (300 mg.) of quinine sulfate, used to diagnose certain forms of the disease, is one of the diagnostic procedures. This amount of quinine would make a mild or moderate myasthenic a bit worse and would have no effect on a non-myasthenic or otherwise normal person.

Since this is so, we have recently investigated, through the American Medical Association Council on Foods and Nutrition, the problem of quinine content in the beverages available in this country. A letter of warning about this matter to all physicians appeared on page 932 in the June 25 issue of the *Journal of the American Medical Association*. Five distributors of this quinine beverage, including one overseas company, were extraordinarily cooperative in getting this information to us and in sending one of their chemists and a supervisor to Boston to clear up some puzzling difficulties in the measurement of quinine salts in the presence of an alkaline carbonated drink containing some flavoring and essential oils.

All of the five beverages tested had quinine salts under 3 mg. per 32 cc. (one ounce). This would mean that it would take 10 bottles of beverage to equal a 5 gr. or 300 mg. test tablet. However, since the severe forms of myasthenia may be sensitive to this salt—10 to 20 times that of a normal person—even one bottle of this beverage might produce a dangerous exacerbation in a severely ill patient. These products are becoming increasingly popular throughout the United States and it seems wise to ask all members of the staff of this Hospital to tell their myasthenic patients to avoid quinine water, even if their cases are mild, or, if they like the beverage, to take as small an amount as possible—not more than one-half a bottle. In hot weather, with carbonated drinks available in the Hospital, it is conceivable that this type of beverage might be offered to patients as an alternative to ginger ale or some other similar drink. This warning should prevent any nurse, Gray Lady, physician, or relative from giving a myasthenia gravis patient a drink of quinine water.

Incidentally, the calorie content of the various available quinine waters varies between 90 and 100 calories per bottle, therefore the ordinary form of this beverage has to be considered for such patients as diabetics, who are on measured or low calorie intake. Several of the firms do make, on special request, tonic water sweetened with non-calorie materials, such as Sucaryl.

Robert S. Schwab, M.D.,
Neurologist,
in charge of Myasthenia Gravis Research

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MEDICAL ILLUSTRATION DEPARTMENT

Mr. Thomas Stebbins has recently been appointed Director of the Massachusetts General Hospital School of Medical Illustration and the Medical Art Department to succeed Mrs. Muriel McLatchie Miller, who retired on June 30.

Mr. Stebbins, who was Director of the Medical Art Department at the Henry Ford Hospital in Detroit, was the final unanimous choice of our Staff Committee on Medical Art and Photography. Mr. Stebbins is a graduate of Deerfield Academy, Amherst College, and the Department of Medical Illustration of the Johns Hopkins University Medical School. He attended the Pennsylvania Academy of Fine Arts, and has been Consultant to the University of Maryland Medical School and Research Assistant at Johns Hopkins Hospital. He is a past Vice-President of the Association of Medical Illustrators and is currently chairman of the Association's Finance Committee and a member of its Board of Governors.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Beecher, H. K., and Ford, C.
Nathan P. Rice's *Trials of a Public Benefactor*: A commentary.
J. Hist. Med. & Allied Sc. 15:170.
Smith, G. M., and Beecher, H. K.
Amphetamine, secobarbital, and athletic performance. III. Quantitative effects on judgment.
J.A.M.A. 172:1623.

Arthritis and Rheumatism

Calkins, E., Black, R. L., Clark, G. M., Hollander, J. L., Mainland, D., Mikkelsen, W. M., Ragan, C., and Short, C. L.
Therapeutic evaluation in rheumatoid arthritis.
Arthritis & Rheumatism 3:101.

Biochemistry Research

Gergely, J., Gouvea, M. A., and Martonosi, A
Studies on actin. II. Partially polymerized actin solutions.
J. Biol. Chem. 235:1704.
Martonosi, A., Gouvea, M. A., and Gergely, J.
Studies on actin. III. G-F transformation of actin and muscular contraction (Experiments *in vivo*).
J. Biol. Chem. 235:1707.
Martonosi, A., Gouvea, M. A., and Gergely, J.
Studies on actin. I. The interaction of C^{14}-labeled adenine nucleotides with actin.
J. Biol. Chem. 235:1700.

Cardiology

Bland, E. F.
Declining severity of rheumatic fever: A comparative study of the past four decades.
New England J. Med. 262:597.
Currens, J. H.
Cor pulmonale & atrial fibrillation.
Newton-Wellesley Med. Bull. 12:12.
Littmann, D., Starobin, O. E., Hall, J. H., Matthews, R. J., and Williams, J. A.
A new method of left ventricular catheterization.
Circulation 21:1150.
Rowe, J. C., Bland, E. F., Sprague, H. B., and White, P. D.
The course of mitral stenosis without surgery: Ten- and twenty-year perspectives.
Ann. Int. Med. 52:741.

General Medicine

Harwood, R.
Insulin-binding antibodies and "spontaneous" hypoglycemia.
New England J. Med. 262:978.

General Surgery

Churchill, E. D.
Surgery, the amanuensis of science.
In Disease and the advancement of basic science, Henry K. Beecher, Editor, Cambridge, Mass., Harvard University Press, p. 364.
McDermott, W. V., Jr.
The ammonium tolerance test in the diagnosis of disease of the liver and portal hypertension.
Surg. Forum 10:282.
McDermott, W. V., Jr.
The double portacaval shunt in the treatment of cirrhotic ascites.
Surg., Gynec. & Obst. 110:457.
Nardi, G. L.
Technique of sphincteroplasty in recurrent pancreatitis.
Surg., Gynec. & Obst. 110:639.
Raker, J. W., and Friedsam, H. J.
Disaster-scale medical care problems: A study of medical management of casualties resulting from a tornado in Dallas, Texas.
J.A.M.A. 173:1239.
Waddell, W. R., Zuidema, G. D., and Smith, G. M.
Catechol amine excretion by duodenal ulcer patients.
J. Clin. Investigation 39:834.

Laboratory Science

Leskowitz, S., and Waksman, B. H.
Studies in immunization. I. The effect of route of injection of bovine serum albumin in freund adjuvant on production of circulating antibody and delayed hypersensitivity.
J. Immunol. 84:58.

Medical History

Churchill, E. D.
Foreword.
In Thoracic surgery before the 20th century, Lew A. Hochberg, M.D., New York, Washington, Hollywood, Vantage Press.

Neurology

Brown, M. R.
The inheritance of progressive muscular atrophy as a dominant trait in two New England families.
New England J. Med. 262:1280.
Majno, G., Waksman, B. H., and Karnovsky, M. L.
Experimental study of diphtheritic polyneuritis in the rabbit and guinea pig. II. The effect of diphtheria toxin on lipide biosynthesis by guinea pig nerve.
J. Neuropath. & Exper. Neurol. 19:7.

Neurophysiology

Brazier, M. A. B.
Some uses of computers in experimental neurology.
Exper. Neurol. 2:123.
Dunlop, C. W., Adey, W. R., Killam, K. F., and Brazier, M. A. B.
Mechanism of action of thiosemicarbazide and Metrazol on cerebellar and cerebral activity in the cat.
Am. J. Physiol. 198:399.

Neurosurgery

Bakay, L.
Studies in sodium exchange: Experiments with plasma, cerebrospinal fluid, and normal, injured, and embryonic brain tissue.
Neurol. 10:564.

Otolaryngology

Lewis, D. K.
Some unsolved problems of stapes mobilization.
Ann. Otol., Rhin. & Laryng. 69:222.

Psychiatry

Benda, C. E.
The existential approach in psychiatry.
J. Existential Psychiatry 1:24.
Benda, C. E.
Language, consciousness, and problems of existential analysis (Daseinsanalyse).
Am. J. Psychotherapy 14:259.
Sifneos, P. E.
A concept of "emotional crisis".
Ment. Hyg. 44:169.

Rhino-Neurosurgery

Hirsch, O.
Operation of a hypophyseal duct tumor by transsphenoidal method in a 3½ year old child with spongy sphenoid. (In German)
Acta-oto-laryng. 51:561.

Miscellaneous

Churchill, E. D.
The standards of military medicine in the Army.
Med. Bull. of the U.S. Army, Europe, 17:127.
Farnsworth, D. L.
Emotional obstacles to health programs.
J. School Health 30:49.
Farnsworth, D. L.
Motivation for learning — The community's responsibility.
Rhode Island Coll. J. 1:55.

Books

Beecher, H. K., Editor.
Disease and the advancement of basic science.
Cambridge, Mass., Harvard University Press.
Page, L. B., and Culver, P. J., Editors.
A syllabus of laboratory examinations in clinical diagnosis: Critical evaluation of laboratory procedures in the study of the patient. Revised edition.
Cambridge, Mass., Harvard University Press.
Viets, H. R., and Schwab, R. S.
Thymectomy for myasthenia gravis.
Springfield, Ill., Charles C. Thomas.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Academy of Religion and Mental Health.
Religion, science, and mental health.
New York, New York University Press, 1959.
(24O) Cabot Room
Academy of Sciences of the U.S.S.R.
Works of the Institute of Higher Nervous Activity. Pathophysiological series, vol. 2.
Moscow, The Academy of Sciences of the U.S.S.R., 1956.
(19A)
Academy of Sciences of the U.S.S.R.
Works of the Institute of Higher Nervous Activity. Pathophysiological series. vol. 3.
Moscow, The Academy of Sciences of the U.S.S.R., 1957.
(35M)
Ackerman, N. W.
The psychodynamics of family life.
New York, Basic Books, Inc., 1958.
(19O) Cabot Room

American College of Hospital Administrators. 1960 directory.
Chicago, American College of Hospital Administrators, 1960.
(1E)
American College of Surgeons.
A catalogue of the H. Winnett Orr historical collection.
Chicago, American College of Surgeons, 1960.
(1F)
American Library Association.
Membership directory, 1959.
Chicago, American Library Association, 1960.
(38C)
American library directory.
New York, R. R. Bowker, 1960.
(1C)
American men of science, ed. 10, vol. 1.
Tempe, Arizona, The Jaques Cattell Press, Inc., 1960.
(1E)
Antibiotics annual, 1959-60.
New York, Antibiotica, Inc., 1960.
(22Yc)
Austin Riggs Center, vol. 1.
Knight, R. P., and Friedman, C. R. (Editors)
Psychoanalytic psychiatry and psychology; clinical and theoretical papers.
New York, International Universities Press, Inc., 1954.
(19Op) Cabot Room
Bartter, F. C. (Editor)
The clinical use of aldosterone antagonists.
Springfield, Ill., Charles C. Thomas, 1960.
(5K)
Benedict, R.
Patterns of culture.
Boston and New York, Houghton Mifflin Company, 1934.
(13O) Cabot Room
Bliss, E. L., and Hardin Branch, C. H.
Anorexia nervosa.
New York, Paul B. Hoeber, Inc., 1960.
(19O)
Bogaert, L. van, and Radermecker, J. (Editors)
International Congress of Neurological Sciences, 1st., Brussels, 1957. Neurological surgery, vol. 2.
New York, Pergamon Press, 1959.
(19A)
Bourne, G. H. (Editor)
The structure and function of muscle, vols. 1-2.
New York, Academic Press, 1960.
(18A)
British pharmaceutical codex, 1959.
London, The Pharmaceutical Press, 1959.
(22G)
Brody, S.
Patterns of mothering.
New York, International Universities Press, Inc., 1956.
(19O) Cabot Room
Cardwell, V. E.
Cerebral palsy: Advances in understanding and care.
New York, Association for the Aid of Crippled Children, 1956.
(19E)
Carson, R.
Your child may be a gifted child.
New York, Public Affairs Committee, Inc., December 1959.
(136.765) Cabot Room
Ciba Foundation.
Symposium on the cellular aspects of immunity.
Boston, Little, Brown and Company, 1960.
(8G)
Clark, R. L., and Cumley, R. W. (Editors)
Yearbook of cancer, 1959-1960 series.
Chicago, The Year Book Publishers, Inc., 1960.
(13V)
Coley, B. L.
Neoplasms of bone, ed. 2.
New York, Paul B. Hoeber, Inc., 1960.
(18H)
The collected statistics of malignant disease seen at University College Hospital, London, during the period 1946-1950. Compiled by the Cancer Follow-up Department, University College Hospital, London.
Shrewsbury, England, Wilding & Son Limited, 1958.
(13V)
Council for International Organizations of Medical Sciences.
Biological problems of grafting: A symposium.
Oxford, England, Blackwell Scientific Publications, 1959.
(23M)
Council on Social Work Education.
Seminar on the aging, Aspen, Colorado, September 8-13, 1958, vols. 1 & 2.
New York, Council on Social Work Education, 1959.
(331.25) Cabot Room
Dargeon, H. W.
Tumors of childhood.
New York, Paul B. Hoeber, Inc., 1960.
(23K)
Davson, H.
A textbook of general physiology, ed. 2.
Boston, Little, Brown and Company, 1959.
(4A)
Dean, V. M.
New patterns of democracy in India.
Cambridge, Mass., Harvard University Press, 1959.
(321.09) Cabot Room
Edsall, J. T. (Editor)
Amino acids, proteins, and cancer biochemistry.
New York, Academic Press, Inc., 1960.
(5B)
Edsall, J. T. (Editor)
Enzymes and enzyme systems: Their state in nature.
Cambridge, Mass., Harvard University Press, 1951.
(5C)
Emerson, R.
From empire to nation; the rise to self-assertion of Asian and African peoples.
Cambridge, Mass., Harvard University Press, 1960.
(321.09) Cabot Room
Field, J. B., and others. (Editors)
Handbook of physiology, Sec. I. Neurophysiology, vol. 2.
Washington, D.C., American Physiological Society, 1960.
(19C)
Fraiberg, S. H.
The magic years; understanding and handling the problems of early childhood.
New York, Charles Scribner's Sons, 1959.
(19L) Cabot Room
Freud, S.
Collected papers, vol. 3.
New York, Basic Books, Inc., 1959.
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Freud, S.
Standard edition of complete psychological works, vol. 8.
London, The Hogarth Press, 1960.
(19Op)
Glasser, O. (Editor)
Medical physics, vol. 3.
Chicago, The Year Book Publishers, Inc., 1960.
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Glick, D. (Editor)
Methods of biochemical analysis, vol. 8.
New York, Interscience Publishers, Inc., 1960.
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Grotjahn, M.
Beyond laughter.
New York, McGraw-Hill Book Company, Inc., 1957.
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Hayek, H. von
The human lung.
New York, Hafner Publishing Co., 1960.
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Hill, L. B.
Psychotherapeutic intervention in schizophrenia.
Chicago, The University of Chicago Press, 1955.
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The International Atomic Energy Agency and the World Health Organization.
Proceedings of a seminar, Vienna, February 25-27, 1959. Medical radioisotope scanning.
Vienna, The International Atomic Energy Agency, 1959.
(7R)
International Congress of Biochemistry, 4th, Vienna, 1958, vols. 1-14.
New York, Pergamon Press, 1959-1960.
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Jessner, L., and Parenstedt, E. (Editors)
Dynamic psychopathology in childhood.
New York, Grune & Stratton, 1959.
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Kahn, A. J. (Editor)
Issues in American social work.
New York, Columbia University Press, 1959.
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Knee, R. I. (Editor)
Better social services for mentally ill patients. (Proceedings of Institute on Social Work in Psychiatric Hospitals)
New York, American Association of Psychiatric Social Workers, Inc., 1955.
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Lardy, H. A. (Editor)
Biochemical preparations, vol. 7.
New York, John Wiley & Sons, Inc., 1960.
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Lederer, M. (Editor)
Chromatographic reviews, vol. 2.
New York, Elsevier Publishing Company, 1960.
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Levine, S. Z. (Editor)
Advances in pediatrics, vol. 11.
Chicago, The Year Book Publishers, Inc., 1960.
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Lombard, H. L.
The Massachusetts cancer program: An autobiographical record.
Boston, [no publisher], 1959.
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Luck, J. M. (Editor)
Annual review of biochemistry, vol. 29.
Palo Alto, Annual Reviews, Inc., 1960.
(5A)
Luisada, A. A. (Editor)
Encyclopedia of cardiology, 4 vols.
New York, The Blakiston Company, 1960.
(15A)
McElroy, W. D., and Glass, B. (Editors)
The chemical basis of heredity.
Baltimore, The Johns Hopkins University Press, 1957.
(2Am)
Merritt, H. H.
A textbook of neurology, ed. 2.
Philadelphia, Lea & Febiger, 1959.
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Merton, R. K., and others. (Editors)
The student physician.
Cambridge, Mass., Harvard University Press, 1957.
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Mitskevich, M. S.
Glands of internal secretion in the embryonic development of birds and mammals.
Moscow, The Academy of Sciences of the U.S.S.R., 1957.
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Oncley, J. L., and others.
Biophysical science: A study program.
New York, John Wiley & Sons, Inc., 1959.
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Pearson, G. H. J.
Adolescence and the conflict of generations.
New York, W. W. Norton & Company, 1958.
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Pfeiffer, C. C., and Smythies, J. R. (Editors)
International review of neurobiology, vol. 2.
New York, Academic Press, Inc., 1960.
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Pincus, G. (Editor)
Recent progress in hormone research, vol. 16.
New York, Academic Press, Inc., 1960
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Popjak, G. (Editor)
Fifth international conference on biochemical problems of lipids.
New York, Pergamon Press, 1960.
(5D)
The psychoanalytic study of the child, vols. 12-14.
New York, The International Universities Press, Inc., 1957 and 1959.
(19Op) Cabot Room
Pullen, R. L. (Editor)
Communicable diseases.
Philadelphia, Lea & Febiger, 1950.
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Putnam, F. W. (Editor)
The plasma proteins, 2 vols.
New York, Academic Press, Inc., 1960.
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Ruch, T. C., and Fulton, J. F. (Editors)
Medical physiology and biophysics. Ed. 18 of Howell's textbook of physiology.
Philadelphia, W. B. Saunders Company, 1960.
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Rytand, D. A. (Editor)
Annual review of medicine, vol. 11.
Palo Alto, Annual Reviews, Inc., 1960.
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Sanazaro, P. J. (Editor)
Current medical references.
Los Altos, Calif., Lange Medical Publications, 1959.
(1Rh)
Sobotka, H., and Stewart, C. P. (Editors)
Advances in clinical chemistry, vol. 3.
New York, Academic Press, Inc., 1960.
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Society for Research in Child Development, Inc.
Iowa child welfare research station, State University of Iowa.
Lafayette, Ind., Child Development Publi-

cations, 1959.
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Spiegel, E. A. (Editor)
Progress in neurology and psychiatry, vol. 14.
New York, Grune & Stratton, 1959.
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Stanton, A. H., and Schwartz, M. S.
The mental hospital.
New York, Basic Books, Inc., 1954.
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Stuart, H. C., and Prugh, D. G. (Editors)
The healthy child.
Cambridge, Mass., Harvard University Press, 1960.
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Tobias, C. A., and Lawrence, J. H.
Advances in biological and medical physics, vol. 7.
New York, Academic Press, Inc., 1960.
(5Am)
Umbreit, W. W. (Editor)
Advances in applied microbiology.
New York, Academic Press, Inc., 1960.
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Umbreit, W. W.
Metabolic maps, 2 vols.
Minneapolis, Burgess Publishing Company, 1960.
(5M)
U. S. Senate Committee on Labor and Public Welfare.
The aged and aging in the United States: A national problem. A report by the subcommittee on problems of the aged and aging.
Washington, D.C., United States Government Printing Office, 1960.
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A history of the Massachusetts Hospital Life Insurance Company.
Cambridge, Mass., Harvard University Press, 1955.
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Wiles, P.
Essentials of orthopaedics, ed. 2.
Boston, Little, Brown and Company, 1955.
(18D)
Williams, G.
Virus hunters.
New York, Alfred A. Knopf, Inc., 1959.
(1Ea)
Williams, R. T.
Detoxication mechanisms, ed. 2.
New York, John Wiley & Sons, Inc., 1960.
(5A)
Woods, R. A. (Editor)
Americans in process. A settlement study by residents and associates of the South End House. North and West Ends, Boston.
Boston and New York, Houghton Mifflin Company, 1902.
(352) Cabot Room

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CONSULTING STAFF

A member of our group of Consultants has expressed the conviction that several members of our Consulting Staff are doing especially valuable work and would be glad to send reports of such work to THE NEWS if they were invited to do so. THE NEWS is always glad to receive at any time material suitable for publication in its pages; but, because of the above suggestion, the Editor of THE NEWS herewith extends a special invitation to all members of the Consulting Staff to contribute reports of any of their activities which they feel would be of interest to our readers.

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PODIATRY SERVICE

For a good many years Dr. John F. Kelly, Podiatrist attached to our Orthopedic Service, has held a weekly clinic in the Out-Patient Department for referred podiatry patients and has answered consultation requests on the wards and private services of the Hospital.

The volume of this work has increased to the point where we now have four podiatrists—Dr. John F. Kelly, Podiatrist, and three Assistant Podiatrists: Drs. John D. McLean, Hugh J. O'Rourke, and Homer J. Squires—on the staff of the Hospital. Any of these men may be called for consultation in the Baker Memorial and Phillips House. Billing for professional fees will be on the same basis as for other professional services.

* * *

Over three hundred friends of Mr. William J. MacNair attended an informal reception last July, honoring him on the occasion of his retirement from the Hospital after many years of service as Head of Orderlies and more recently as Director of the Building Service Department.

The Administration presented Mr. MacNair with a very attractively framed Novak colored block print of the Bulfinch and White Buildings, as seen from the Lawn, and a handsome check. Quite as much appreciated by Mr. MacNair was the gift of a guest book, in which were the signatures of scores and scores of his past and present associates and friends at M.G.H.

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Mr. Maurice H. Richardson (Jr.) is working on a biography of his well-known father, who became a member of our Visiting Staff in 1882 and rose to the position of Surgeon-in-Chief in 1911, which position he held at the time of his death in 1912. Mr. Richardson would greatly appreciate receiving any items of interest which concern his father's life and work. Such items will be acknowledged and returned, and due credit given to the contributors if the material is published. Mr. Richardson's address is 1623 Centre Street, Roslindale 31, Massachusetts. His telephone number is FA 5-2423.

* * *

VOLUNTEER GROUPS
MGH STAFF WIVES ASSOCIATION

The sun shone brightly on June 11, when Dr. and Mrs. Bradford Cannon, gave their annual family picnic for our MGH visitors from other lands, as well as for the Staff Wives and their families. Two hundred people—nearly half of them children— arrived by bus and private transportation at the Cannon home on Weston Road in Lincoln. Friends and strangers grouped and regrouped to have picnic lunch on the lawn, while ice cream and soft drinks were dispensed with pleasant informality in front of the Cannon house. After this, the picnickers played tennis, badminton, or baseball, walked in the woods or went swimming. There was much coming and going, much conversation, and much varied activity, from eleven in the morning until four in the afternoon.

An added feature of this year's picnic was a side trip by bus to the nearby de Cordova Museum (also in Lincoln) which was holding its annual festival—the theme being the Arabian Nights. Everyone, therefore, had the opportunity of exploring the museum, seeing its permanent exhibits, and could also wander about the grounds near the lake and view the colorful festival.

For many days after the picnic, our visitors from other countries stopped by at the Staff Wives' desk in the Hospital to express thanks and pleasure. Many of the visitors from Norway, Pakistan, Japan, Poland, or elsewhere, had had, on June 11, their first introduction to Boston's lovely country surroundings and to informal American hospitality. They had enjoyed the day, were grateful for the good will expressed, and were most gracious in their thanks.

The following letter from Dr. Edgardo G. Carrasco (clin. and res. fel. *M.* 1960) and Mrs. Carrasco, whose present address is Los Diamelos 2948, Santiago, Chile, was addressed to the Staff Wives' Desk, and reads:

> Dr. and Mrs. Edgardo Carrasco, for one and a half years in Boston, want deeply to thank all members of that Desk for the many attentions we received while we lived in your city. It is difficult, when you are not a native of the United States, to express how grateful we are, but if the words look short, we want to let you know that always we will keep in our hearts, as an example of kindness, the beautiful job you are doing at the Hospital for the foreign visitors.
>
> Please receive again our thanks and best wishes for the future.

New addresses:

Dr. Joseph Albert (r.p. *D.* 1960), 95 Lincoln St., Framingham, Mass.
Dr. Ransom J. Arthur (*C.M.* 1952), U.S. Naval Hospital, Oakland, Calif.
Dr. Richard H. Aster (*M.* 1958), 8707 Grant St., Bethesda 14, Md.
Dr. Charles G. Barnett (*M.* 1954), 384 Post St., San Francisco 8, Calif.
Dr. Theodore P. Barss (a.r.p. *An* 1950), 332 Windsor Ave., Medford, Oreg.
Dr. Tucker A. Barth (a.r.s. *Or.* 1957), 2420 N. California St., Stockton, Calif.
Dr. Theodore C. Barton (a.r.s. 1960), Boston Lying-in Hospital, 221 Longwood Ave., Boston, Mass.
Dr. John F. Bell (*Or.* 1941), 115 Colchester Ave., Burlington, Vt.
Dr. Otto L. Bendheim (*W.M.* 1938), 5051 N. 34th St., Phoenix, Ariz.
Dr. Bernard Bihari (clin. fel. *N.* 1960), National Institutes of Health, Bethesda, Md.
Dr. H. Irving Bixby (*W.S.* 1924), 78 Bank St., Attleboro, Mass., and Sippewissett Rd., Falmouth, Mass.
Dr. Alan M. Bornstein (a.r.p. *Path.* 1960), 2319 Woodford Place, Louisville, Ky.
Dr. Niels E. Brandstrup (a.r.p. *C.M.* 1959). 9 Juliane Mariesves, Copenhagen, Denmark
Dr. Robert N. Buchanan, Jr. (r.p. *D.* 1941), 1111 Belle Meade Blvd., Nashville, Tenn.
Dr. John P. Bunker (*E.S.* 1946), Stanford Medical Center, 300 Pasteur Drive, Palo Alto, Calif.
Dr. William T. Butler (*M.* 1959), c/o Dr. Albert H. Coons, Harvard Medical School, Boston, Mass.
Dr. James R. Callison (a.r.s.), U.S. Army Hospital, Fort Jackson, S. C.
Dr. Estela O. Ching (clin. fel. *C.M.* 1960). Mount Sinai Hospital, Chicago, Ill.
Dr. Jaime Cortázar (gr. stud. a. *M.* 1951). Apartado Aéreo 5100, Bogotá D.E., Colombia
Dr. Adolfo C. Coussirat (clin. fel. *An.* 1960).

St. Mary's Hospital, Lewiston, Maine
Dr. Sylvia Davies Diehl (a.r.p. *C.M.* 1958), 33 Maple Ave., Madison, N. J.
Dr. E. Grey Dimond (clin. fel. *M.* 1949), Scripps Clinic & Research Foundation, La Jolla, Calif.
Dr. David A. Drachman (r.p. *N.* 1960), National Institutes of Health, Bethesda, Md.
Dr. Christopher J. Duncan (a. obst. 1959), 32 Cumberland Ave., Brookline, Mass.
Dr. James H. Duxbury (r.s. *U.* 1960), 3441 Mayfair Drive, Victoria, B. C., Canada
Dr. Arthur F. G. Edgelow (*W.S.* 1921), 130 Maple St., Springfield, Mass.
Capt. David W. Florence, MC, USAR (r.s. *Or.* 1960), U.S. Army Hospital, Fort Huachuca, Ariz.
Dr. William J. Foley (clin. fel. *Path.* 1960), Dept. of Surgery, University Hospital, Ann Arbor, Mich.
Dr. M. Judah Folkman (a.r.s.), National Institutes of Health, Bethesda, Md.
Dr. Alan H. Goldberg (a.r.p. *An.* 1960), Dept. of Anesthesia, Clinic Center, National Institutes of Health, Bethesda 14, Md.
Dr. Theodore S. Golden (clin. assoc. *C.M.*), 250 Franklin St., Framingham, Mass.
Dr. Basil C. Gray (a. *D.*), 3 Seaward Rd., Wellesley Hills 82, Mass.
Dr. Maurice H. Greenhill (r.p. *Psychiat.* 1939), 233 E. 69th St., New York 21, N. Y.
Dr. Firmon E. Hardenbergh (r. *Oph.* 1960), 45 Badger Rd., Annapolis, Md.
Dr. Hans J. Harder (a.r.p. *An.* 1952), Schwabinger Krankenhaus, München 23, Germany
Dr. Paul W. Harrison (*E.S.* 1909 and h.s. *U.* 1915), Penney Farms, Fla.
Dr. Timothy S. Harrison (a.r.s. 1959), Yale University School of Medicine, 333 Cedar St., New Haven, Conn.
Dr. Richard M. Hays (clin. & res. fel. *M.* 1960), Albert Einstein College of Medicine, New York 61, N. Y.
Dr. Henry L. Heyl (r.s. *N.S.* 1940), Dartmouth Medical School, Hanover, N. H.
Dr. Joan Kazanjian Hiett (r.p. *C.M.* 1959), 1101 E. Pecan St., Altus, Okla.
Dr. Nancy Davis Hoffman (a.r.p. *An.* 1960), Base Hospital, Fort Carlson, Colorado Springs, Colo.
Dr. Edwin C. Hoodless (a.r.s. *Or.* 1952), Kaiser Hospital, Honolulu, Hawaii
Dr. W. Fenn Hoyt (*W.S.* 1932), 130 Maple St., Springfield, Mass.
Dr. Justin R. Hüppe (r.p. *R.* 1957), Goethe Str. 45, München 15, Germany
Dr. Frederic W. Ilfeld (*Or.* 1937), 436 N. Roxbury Drive, Beverly Hills, Calif.
Dr. Lee Jackson (r.p. *Psychiat.* (*McL.*) 1959), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. George A. Jacoby, Jr. (*M.* 1959), National Institutes of Health, Bethesda, Md.
Dr. Samuel Kaplan (a. psychiat.), 23 Bay State Rd., Boston, Mass.
Dr. Arnold M. Katz (*M.* 1957), National Heart Hospital, 35 Wimpole St., London W. 1, England
Dr. Arthur S. Keats (a.r.p. *An.* 1951), Jefferson Davis Hospital, 1801 Buffalo Drive, Houston 3, Tex.
Dr. Borge Larsen (res. fel. *M.* 1960), 5 B Langhoivej, Copenhagen, Denmark
Dr. G. Hugh Lawrence (*W.S.* 1947), Mason Clinic, 1118 9th Ave., Seattle 1, Wash.
Dr. Cavin P. Leeman (*M.* 1960), Massachusetts Mental Health Center, 74 Fenwood Rd., Boston, Mass.
Dr. Vasilios G. Letsou (a.r.p. *D.* 1956), 170 Merrimack St., Lowell, Mass.
Dr. Craig S. Lichtenwalner (*M.* 1950), School of Medicine, American University of Beirut, Beirut, Lebanon
Dr. Ching T. Liu (r.s. *N.S.* 1946), 1429 Nursery Lane, Walnut Creek, Calif.
Dr. Frederick S. McAlpine (c.r.p. *An.* 1957), Lahey Clinic, 605 Commonwealth Ave., Boston 15, Mass.
Dr. Betty J. McClellan (*Path.* 1958), Johns Hopkins Hospital, Baltimore, Md.
Dr. Kilmer S. McCully (*M.* 1960), National Institutes of Health, Bethesda, Md.
Dr. Richard B. McGovney (*Or.* 1930), P.O. Box 30, Waiakoa, Maui, Hawaii
Dr. William J. McIlroy (a.r.p. *Path.* 1960), 2 Caroline Place Mews, London W. 2, England
Dr. Edwin J. Madden (a.r.s. *Or.* 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. John A. Malcolm (*S.* 1953), U.S. Veterans Administration Hospital, 408 1st Ave., New York 10, N. Y.
Dr. Alfonso Mangoni (a.r.p. *Psychiat.* 1960), c/o American Express, London, England
Dr. Frank A. Mantz, Jr. (res. fel. *Path.* 1950), St. Joseph Hospital, Kansas City, Mo.
Dr. Richard A. Mayo (sr. r.s. *Or.* 1956), 412 Beacon St., Boston, Mass.
Dr. John E. Mazuzan, Jr. (c.r.p. *An.* 1959), Mary Fletcher Hospital, Burlington, Vt.
Dr. John Mealey, Jr. (r.s. *N.S.* 1960), Indiana University Medical Center, 1100 W. Michigan St., Indianapolis, Ind.
Dr. Jost J. Michelsen (a.r.s. *N.S.* 1938), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. D. Glyn Millard (r.p. *R.* 1960), Monadnock Community Hospital, Peterborough, N. H.
Dr. John A. Mills (r.p. 1958), Massachusetts General Hospital, Boston 14, Mass.
Dr. Clarence L. Morgan (a.r.p. *C.M.* 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Teruyuki Nakashima (res. fel. *Path.* 1960), Yawata Seitetsu Byoin, Yawata-shi, Japan
Dr. Herbert A. Newman (a.r.p. *C.M.* 1960), 112 Pomona Ave., Newark 12, N. J.
Dr. Joseph C. Oakley (*Dn.* 1959), 507 Main St., Worcester, Mass.
Dr. Milton R. Okun (a.r.p. *D.* 1960), 1683 Beacon St., Brookline, Mass.
Dr. Harry S. Olin (a.r.p. *Psychiat.* 1959 and r.p. *Psychiat.* (*McL.*) 1960), Massachusetts General Hospital, Boston 14, Mass.
Dr. Renée B. O'Sullivan (a.r.p. *C.M.* 1957), Veterans Administration Hospital, 130 W. Kingsbridge Rd., Bronx, N. Y.
Dr. Clement E. Papazian (a.r.p. *C.M.* 1960), Permanente Medical Group, Fontana, Calif.
Dr. Don C. Pearl, Jr. (*S.* 1959), Massachusetts Institute of Technology, Cambridge, Mass.
Dr. Jack O. Rice (r.p. *Psychiat.* (*McL.*) 1959), Massachusetts General Hospital, Boston 14, Mass.
Dr. Daniel M. Rogers (*C.M.* 1938), 2 Cherry St., Wenham, Mass.
Dr. Earle H. Rosenberg (*Dn.* 1958), 84 Leonard St., Belmont, Mass.
Capt. Sanford I. Roth, MC, USAR (*Path.* 1957), Armed Forces Institute of Pathology, Washington 25, D. C.
Dr. Hugh Grant Rowell (*W.S.* 1921), 483 Munroe Ave., N. Tarrytown, N. Y.
Dr. Jordan S. Ruboy (a.r.p. *C.M.* 1960), Concord Medical Center, Concord, Mass.
Dr. Paul S. Russell (*S.* 1949), Columbia University College of Physicians and Surgeons, 630 W. 168th St., New York, N. Y.
Dr. George M. Saunders (*E.S.* 1928), Socony Mobil Oil Co., Inc., 150 E. 42nd St., New York, N. Y.
Dr. Stefan C. Schatzki (r.p. *R.* 1960), Dept of Radiology, Walter Reed Army Medical Center, Washington, D. C.
Dr. Robert T. Schimke (*M.* 1959), U.S.P.H.S., Bethesda, Md.
Dr. Robert A. Schmidt (a.r.p. *An.* 1959), 201 E. Bradley Rd., Milwaukee 17, Wis.
Dr. Boris Senior (*C.M.* 1950), Massachusetts General Hospital, Boston 14, Mass.
Dr. N. Ty Smith (a.r.p. *An.* 1960), U.S. Naval Hospital, Portsmouth, Va.
Dr. Snorri P. Snorrason (gr. stud. a. *M.* 1955), Hvassaleiti 24, Reykjavik, Iceland
Lt. Rodman D. Starke, MC, USNR, (*M.* 1959), U.S. Navy School of Aviation Medicine, U.S. Navy Aviation Medical Center, Pensacola, Fla.
Dr. Oscar E. Starobin (*M.* 1955), Memorial Hospital, 119 Belmont St., Worcester, Mass.
Dr. Richard J. Stenger (a.r.p. *Path.* 1958), Cincinnati General Hospital, Cincinnati, Ohio
Dr. John E. Stewart (a.r.s. *Or.* 1947), 1012 Summit Ave., Seattle 4, Wash.
Dr. William E. Strole, Jr. (*M.* 1959), 202 69th St., Virginia Beach, Va.
Dr. William H. Tingey, Jr. (*Dn.* 1959), 363 Marlborough St., Boston, Mass.
Dr. Giles D. Toll (*S.* 1952), Colorado General Hospital, Denver, Colo.
Dr. James H. Townsend (*W.M.* 1923), Massachusetts Institute of Technology, Cambridge. Mass.
Dr. Elliot S. Vesell (*C.M.* 1960), Rockefeller Institute for Medical Research, 66th St. and York Ave., New York, N. Y.
Dr. Katharine Spreng Waldmann (*M.* 1955), 3910 Rickover Rd., Silver Spring, Md.
Dr. Thomas A. Waldmann (*M.* 1956), 3910 Rickover Rd., Silver Spring, Md.
Dr. Weldon W. West (*S.* 1948), 2420 N. California St., Stockton 4, Calif.
Dr. Hibbard E. Williams (*M.* 1959), National Institutes of Health, Bethesda, Md.
Dr. Joyce K. Wong (*O.P.D.* r.p. *C.M.* 1960), 36-50 206th St., Bayside, Queens, N. Y.

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Brief bits:

At the Pan-American Medical Congress, held in Mexico City last May, a day was devoted to a program on Clinical Electroencephalography. Dr. Mary A. B. Brazier was the North American Chairman.

Dr. John P. Bunker has been appointed Professor of Anesthesia at Stanford University School of Medicine, effective in September.

Dr. Benjamin Castleman presented a paper, including the showing of a film, on the "Dynamics of aortic valve disease" before the International Congress of Clinical Pathology in Madrid and the International Academy of Pathology in London during the latter part of June. During a two-week stay in Israel. he conducted a Slide Seminar on "Lesions of the mediastinum and lung" before the Israeli Pathology Society (about 40 pathologists) in Jerusalem, a lecture on "Hyperparathyroidism" and a C.P.C. at the Hebrew University-Hadassah Medical School, and a C.P.C. at the Tel Hashomer Hospital in Tel Aviv.

Dr. Dean A. Clark has been elected an Alumni-Trustee-at-Large of Princeton University. Dr. Clark will serve a four-year term.

Dr. Perry J. Culver has succeeded Dr. Kendall Emerson (*E.S.* 1902) as Assistant Dean for Admissions and Chairman of the Committee of Faculty Admissions at Harvard Medical School.

Dr. Louis K. Diamond is travelling in many countries in his study of a nutritional disease among children, called kwashiorkor. He will visit hospitals and clinics in the Middle East, Central Africa, South America, Central America, and Mexico — areas in which the disease is prevalent.

Dr. Allan L. Friedlich has been re-elected Vice-President of the Massachusetts Heart Association's Greater Boston Chapter.

Dr. Frederick T. Hatch has been appointed Chief of the Arteriosclerosis Study Unit at the Hospital.

Capt. Stephen E. Hedberg, on leave of absence from his Residency in Surgery for active service in the U.S. Army, is assigned to Walter Reed Army Institute of Research. He was recently sent on temporary duty to Chile, to carry on observations on clostridial infections in earthquake victims.

Dr. Oscar Hirsch has been awarded a grant by the American Cancer Society (Massachusetts Division) for the continuation of his study of malignancy in pituitary tumors.

Dr. William V. McDermott, Jr. returned in May from a six-week European trip which included brief visits to Manchester, Birmingham, and Paris; a visit to the University of Louvain with Professor Morelle and Dr. Charles G. DeMuylder; participation in a panel on "Hepatic coma" at the International Congress of Gastroenterology, Leyden, Holland; and a talk on "The surgical treatment of cirrhotic ascites" at the first meeting of the International Association for the Study of Diseases of the Liver. The last two weeks in England were spent at the King's College

No. 91 in a series of Staff photographs

Dr. Thomas B. Fitzpatrick—Chief of Dermatology Service

Hospital and Medical School, where Dr. McDermott served as Associate Director of Surgery pro tempore, at the invitation of Mr. Harold Edwards. On the return trip via New York, Dr. McDermott spoke on "Portal hypertension" in a panel at the spring meeting of the New York Academy of Medicine.

Dr. Alex F. Müller (a.r.p. 1953) has been made a full Professor of Medicine at the University of Geneva, Switzerland.

Dr. George L. Nardi spoke on "Hyperparathyroidism and multiple endocrine tumors" at the Holyoke Hospital on May 15, at the invitation of Dr. Edward L. Ferguson (*S.* 1954). On May 17, he addressed the staff of the Centro Medico in Guatemala City, Central America, and showed a motion picture on "The surgical management of chronic pancreatitis" as a guest of Dr. Rodolfo E. Herrera (*E.S.* 1943). From May 23 through May 25, he participated in a symposium on the pancreas, sponsored by the Mallinckrodt Foundation, at Endicott House in Dedham.

Dr. Oglesby Paul (*W.M.* 1943), President-elect of the American Heart Association, was the principal speaker at the dinner which followed the 11th annual meeting of the Massachusetts Heart Association, held in Boston last May.

Dr. Carter R. Rowe and Dr. J. Drennan Lowell read a paper on "Prognosis of fractures of the acetabulum" at the American Orthopaedic Association meeting, held at Hot Springs, Virginia, on June 1.

Dr. Paul S. Russell, who resigned as Assistant in Surgery at M.G.H. on June 30, assumed his new duties as Associate Professor of Surgery at Columbia University College of Physicians and Surgeons, and Associate Attending Surgeon at the Presbyterian Hospital, New York City, on July 1.

Dr. Joseph Stokes, III, presented a paper on "Genetic factors in the pathogenesis of coronary atherosclerosis" at the 2nd Asian-Pacific Congress of Cardiology, held in Melbourne, Australia, last June.

Dr. David W. Wallwork (*E.S.* 1932) was named President-elect of the Massachusetts Medical Society at the Annual Meeting of the Society, held in Boston last May.

The prize for the best paper presented at the 36th Annual Meeting of the American Association of Neuropathologists was awarded to Drs. Henry deF. Webster, David Spiro, Byron H. Waksman, and Raymond D. Adams for their paper on "Phase and electron microscope study of experimental diphtheritic neuritis in guinea pig sciatic nerves".

Dr. Edwin O. Wheeler has been elected Secretary of the Massachusetts Heart Association's Greater Boston Chapter.

At the annual meeting of the Greater Boston Council, Directors of Hospital Volunteers, Miss Mary Ruth Wolf, Director of our Volunteer Unit, was elected Chairman for 1960-1962.

MASSACHUSETTS EYE & EAR INFIRMARY

The following appointments were made at the meetings of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held during May, June, July, and August:

Dr. Mary Ampil — Fellow in Anesthesiology for one year, beginning July 1;

Dr. Joel Contreras — reappointed as Fellow in Ophthalmology, attached to the Retina Service, for one year;

Dr. Geza Jako — reappointed as Fellow in Otolaryngology for one year, beginning July 1;

Dr. David L. Knox — Fellow in Ophthalmology, assigned to the Howe Laboratory, for one year, beginning July 1, 1961;

Dr. Dominic Lim — Fellow in Anesthesiology for one year, beginning September 1;

Dr. Eeva-Liisa M. Martola — Fellow in Ophthalmology, assigned to the Glaucoma Consultation Service, for one year, beginning July 1;

Dr. Calbert I. Phillips — Fellow in Ophthalmology, assigned to the Glaucoma Consultation Service, for one year, beginning October 1;

Dr. Ronald Pinkerton — Fellow in Ophthalmology, assigned to the Howe Laboratory, for four months, beginning September 1;

Dr. Mendell Robinson — Assistant in Otolaryngology;

Dr. Uthai Rutnin — reappointed as Fellow in Ophthalmology, attached to the Retina Service, for one year;

Dr. Felix Sabates — reappointed as Fellow in Ophthalmology, attached to the Retina Service, for one year;

Dr. Silvio von Pirquet — reappointed as Fellow in Ophthalmology, assigned to the Retina Service, through December 31;

Dr. Takeshi Watanabe — Fellow in Otolaryngology, attached to the Eaton-Peabody Laboratory, for one year, beginning September 1;

Ernst G. Wolf, Ph.D. — Fellow in Ophthalmology, assigned to Retina Physiology, for one year, beginning July 1.

At the meeting of the Board of Managers, held on July 20, Dr. Garrett L. Sullivan's title was changed to that of Surgeon in Ophthalmology, and the following were made Associate Surgeons in Ophthalmology:

Dr. Henry F. Allen
Dr. W. Morton Grant
Dr. Sumner D. Liebman
Dr. Abraham Pollen
Dr. Charles L. Schepens

* * *

150th ANNIVERSARY PROGRAM

Massachusetts General has received a gift of 50,000 pounds sterling ($140,000) from the Wellcome Trust Fund in London. The money will be used to establish the Henry S. Wellcome Fund for Research in Medical Science at the Hospital.

The Wellcome Trust was created by the will of the late Wisconsin-born Sir Henry S. Wellcome, co-founder and later sole owner of Burroughs Wellcome and Company, a world-wide pharmaceutical enterprise. Under the terms of the will, all the distributed profits of the business are used to promote research in human and animal medicine, or in the history of medicine anywhere in the world.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
1811

No. 198 Boston, Mass. November 1960

THE ALLERGY UNIT

The Allergy Unit currently consists of a group of Research Laboratories on the fourth floor of the Bulfinch Building and an Allergy Clinic on the third floor of the Out-Patient Department.

Since the illnesses with which the Unit is concerned are not ordinarily of a nature to require admission to the Hospital, the great preponderance of patients are seen in the Allergy Clinic. We hope ultimately to bridge the existing gap between basic research in the laboratory on the one hand and allergic disease as it presents itself in the patient with an "allergy" on the other. The gap exists today, as it has in the past, because the techniques which have been so productive in the fields of immunology and the prevention of infectious disease are either inapplicable or only indirectly applicable to the elucidation of questions regarding allergic disease in man, even though some type of immunological response is assumed to be responsible. We see as our immediate task, therefore, the fusing of these two relatively independent activities, of which the Allergy Clinic has, from the standpoint of investigation, always been much the weaker. This is not said in criticism of the patient care provided in the Clinic, because this is quite a different problem and one which, of course, must always come first. But the remark that patient care of the future depends on the quality of clinical investigation today is no less true for being a platitude; and among the diseases of immediate concern to us, investigation can hardly begin elsewhere than in the Clinic. We hope, therefore, to modify the Clinic so as to provide the kind of information needed to make it possible to reach this objective — an effort which has led to a number of changes and innovations. We foresee, therefore, an increasingly close association between those who work in the Clinic and those who are doing laboratory research exclusively.

The major investigative effort in the Allergy Clinic at the present time is an attempt, now in its second year, to assess the value of injections or "shots" in hay fever, with careful experimental control. It may come as a surprise that this has never been done in a manner to confirm or deny the prevailing opinion among allergists that injections are indeed effective. We feel that adoption of the much-touted repository ("one shot") method will be premature until it has been clearly established whether or not the conventional procedure is effective, and if effective, to what degree.

The subspecialty of allergy has suffered from a misunderstanding, both within and without, as to what constitutes its concern — mainly, I think, because the word "allergy" is used to denote two very different things. Clinically, it is a subspecialty within the specialty of internal medicine, preoccupied almost exclusively with hay fever (allergic rhinitis and sinusitis) and bronchial asthma (allergic obstructive bronchitis) and a few other closely related conditions. This constitutes a narrow spectrum of disease — a fact which has unfortunately also tended to narrow the medical horizon of clinical allergists. Used in its other sense, a "physiological" one, allergy is an integral aspect of the means by which higher organisms become adjusted to life on earth, and apparently is the basis on which their capacity to withstand the onslaughts of bacteria, viruses, and parasites largely rests. It has been generally assumed that, like immunity, allergic reactions are mediated by antibody, which may be described as a globulin (usually a gamma globulin) produced as a response to invasion of the "internal milieu" of one or more substances harmful or perhaps only foreign to the organism, and capable of acting in a manner either to render a subsequent encounter with these substances harmless (immunity), or seemingly to stir up an "alert" of such intensity as to be damaging or, at times, even fatal (allergy). In this sense the terms "immunology" and "allergy" embrace a wide variety of tissue reactions as seen in infections and infestations, induced resistance to disease and a host of clinical states including serum disease, many forms of reactions to drugs, certain hematologic disorders, and some or all of the so-called "collagen" diseases. An allergic mechanism may perhaps underlie such familiar chronic processes as rheumatic fever and rheumatoid arthritis. The available means of studying these conditions as allergic reactions are so meager and so poorly suited to advance our understanding that what little progress has been made has come very slowly. Perhaps the recent intense interest in experimentally induced delayed type allergy will alter this unfortunate state of affairs. In any case, this difficult field, which is too far-flung for any single Unit to encompass, offers numerous opportunities to those who wish to engage in research.

The history of the Allergy Unit has been closely tied to the history of the Allergy Clinic in the Out-Patient Department. The Clinic was started in 1919 by Dr. Francis M. Rackemann, under whose enthusiastic and expert guidance it thrived and grew. At that time, Dr. Rackemann had laboratory space on the fourth floor of Bulfinch, where work on various aspects of allergy was carried on until 1942, when the laboratory was moved to the basement of the Bulfinch. Upon Dr. Rackemann's retirement in 1948, Dr. Walter S. Burrage became Chief — a position he held until 1956. The great preponderance of investigation into the diseases treated in allergy clinics had been carried on here and elsewhere at the clinical level. The need for research into the mechanisms underlying these disease processes — a need which had been clearly recognized by Dr. Rackemann when the Allergy Clinic was first established in 1919 — had become increasingly apparent. Dr. Burrage, with Dr. John W. Irwin, who began his association with the Allergy Clinic in 1950, established a new research laboratory on the fifth floor of the Domestic Building, and carried out studies in anaphylaxis which were to develop in the direction of a much broader study of the behavior of small blood vessels — studies which led ultimately to the creation of the Microcirculatory Laboratory in the Eye and Ear Infirmary, under Dr. Irwin's direction. They also followed a group of asthmatic patients under treatment with the adrenocorticosteroid drugs, and were active in other phases of clinical investigation as well.

In 1956, Dr. Robert L. Berg was appointed Chief, and at the same time the Unit was assigned excellent laboratory space on the fourth floor of Bulfinch. Thus, research activities in allergy returned to a point very close to the home they had occupied before 1942 under Dr. Rackemann. Dr. Sidney Leskowitz joined the Unit in 1956, having been associated during the previous two years with the research laboratories in the Vincent Memorial. In 1958, Dr. Berg was offered the position of Professor of Preventive Medicine at the University of Rochester, which he accepted. It was the empty post that Dr. Berg left behind him that the present incumbent filled in the same year, leaving an Allergy Unit at the Massachusetts Memorial Hospitals which was very similar in organization to the one described herein. Dr. E. Mildred Follensby and Dr. William Franklin were members of that Unit and, with Dr. Robert E. Kahn, a Research Fellow in the Unit, made the short trip across town, encumbered with the files, books, and bottles that somehow come to be an extension of the very "self" of all of us. We were joined on arrival by Dr. Edgardo G. Carrasco, from Santiago, Chile, who had been appointed to the Allergy Unit at the Massachusetts Memorial Hospitals as a Research Fellow.

Those interested in pursuing this history further will find articles in past issues of The News: one by Dr. Rackemann in October 1947; two by Dr. Burrage in February and December 1952; and one by Dr. Irwin in November 1956.

Dr. Follensby had a long association with Dr. Sanford B. Hooker at Boston University School of Medicine before joining the Allergy Unit at the Massachusetts Memorial Hospitals. Her primary interest at present is the identification and characterization of allergenic substances in pollen extracts and the development of *in vitro* methods for detecting antibody to them. To date, no entirely *in vitro* method exists which will detect with certainty antibody responsible for the allergic peculiarities of patients with hay fever and asthma. A close approach to such a procedure was achieved four years ago when Dr. Follensby showed that a precipitate formed by reacting rabbit antibody for human gamma globulin with serum from a patient who had been treated with injections of pollen extract for pollenosis, would specifically remove the allergenic activity of solutions prepared from ragweed pollen extract. This procedure is applicable in some antigen-antibody systems where conventional immunologic procedures fail. An outgrowth of this procedure has been a study by Dr. Kahn of the behavior of unreacted antibody contained within a precipitate toward antigens of varying molecular size. He has also been studying other means of precipitating "non-precipitating" antigen-antibody complexes.

Dr. Leskowitz has been primarily interested in the nature of the immune response and some aspects of delayed type hypersensitivity. In the course of injecting rabbits with immune precipitates, he uncovered differences in some animals in the immunologic specificity of gamma globulins. Working with Dr. James J. A. Cavanaugh, then a Research Fellow in the Unit, it was shown that, when a second antigen is injected into a rabbit which is already responding maximally to a first, no decrease in the intensity of the response to the second is observed. This finding indicates that "competition" of antigens does not occur under these circumstances. Dr. Leskowitz, in collaboration with Dr. Mary Amdur in the School of Public Health, is also studying the role of hypersensitivity in the production of respiratory airway obstruction ("asthma") in the guinea pig. As mentioned earlier in this article, the Unit is undertaking a "double-blind" study to assess the efficacy of conventional injections or "shots" for the treatment of hay fever and seasonal asthma. This study, which has proved to be a major undertaking, is the chief concern of Dr. Franklin. He is assisted in this by two Clinical Fellows — Dr. Louis F. Scribner and Dr. Charles H. Banov — who joined the Unit in July 1960. An attempt to carry out such a study was made in 1957 and, though unsuccessful, the experience gained was very valuable. The current study began in March 1959. Although final analysis of the data obtained to date will require considerable time and effort, it is already clear that the means of assessing the progress of patients is such as to delineate the ragweed season with striking clarity.

Francis C. Lowell, M D.,
Physician
and *Chief of the Allergy Unit*

* * *

Dr. Madelaine R. Brown (past neurologist at Massachusetts General) received a citation at the 75th anniversary convocation of Bryn Mawr College last June. This is the first time that Bryn Mawr has ever given citations.

Dr. Dean A. Clark was one of five new Council chairmen to be appointed by Frank S. Groner, President of the American Hospital Association, at the meeting of the AHA Board of Trustees held in San Francisco last August. As chairman of the Council on Research and Education, Dr. Clark will also serve as a member of AHA's Coordinating Council.

Dr. Daniel H. Hiebert of Provincetown has been named General Practitioner of the Year by the Massachusetts Medical Society. Although Dr. Hiebert is not an alumnus of M.G.H., he attended courses in cardiology here at the Hospital in years past and is well known to many physicians in this area and otherwhere for his 41 years of outstanding work in medicine. He is much beloved by scores of friends and patients on the Cape.

Dr. Robert F. Loeb (*W.M.* 1920) was elected an Honorary Fellow of the Royal Society of Medicine in London, England, last summer.

After Dr. James Howard Means had been elected an Honorary Fellow of the Royal Society of Medicine and had participated in the International Goitre Conference, in London, England, last summer, this poem appeared in the August 6 issue of *The Lancet:*

IV INTERNATIONAL GOITRE CONFERENCE
July 1960

(With apologies to Kipling)

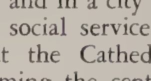
The tumult and the talking die:
The Profs and Lecturers depart:
To Moss go back tail coat, white tie,
The robes of medicine, science, or art.
We will remember some we met,
But what they said we'll soon forget.

Of chromatography we heard,
And lots of iodotyrosines.
We didn't understand a word,
But pinned our faith to Dr. Means.
And thus with our accustomed ease
We'll go on curing Graves' disease.

While we all bemoan the departure of Rev. William B. Spofford, Jr., our Supervisory Chaplain for the past four years, we cannot but wish him a happy and rewarding experience in his new post. He has been elected Dean of St. Michael's Cathedral, Boise, Idaho, and will assume his new duties on November 1.

Located directly across from the Idaho State Capitol and in a city featuring many medical and social service agencies, it is planned that the Cathedral will work toward becoming the central educational unit in the diocese of Idaho, under the direction of Mr. Spofford, and toward relating to the on-going training of seminarians and clergy of the Protestant Episcopal Church, as well as carrying on the normal functions of a cathedral-parish.

Mr. Spofford's new address will be 2003 North 23rd Street, Boise, Idaho.



The Board of Trustees, at their meetings held on September 9 and 23, voted:

To approve an invitation to Professor Philip R. Allison of Radcliffe Infirmary, Oxford, England, to give a Richardson Lecture at the Hospital;

To set the retirement date for Dr. Joseph S. Barr as June 30th following his sixty-sixth birthday;

That Dr. Winfield S. Morgan, who has been on leave of absence for two years, be reinstated as Assistant Pathologist, as of September 12;

To accept the resignation of Dr. John T. Sharp from the position of Assistant in Medicine, effective August 31;

To accept with regret the resignation of Reverend William B. Spofford as Protestant Chaplain at the Hospital, effective October 15.

To appoint:

Dr. Luciano Basauri as Clinical and Research Fellow in Neurosurgery for one year, retroactive to July 1;

Dr. Allan M. Butler to the Board of Consultation, effective as of July 1;

Dr. William P. Castelli as Clinical Fellow in Medicine for one year, beginning October 1;

Dr. John P. Connelly as Chief Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Dr. Prafulchandra M. Dalal as Clinical and Research Fellow in Neurology for one year, beginning September 1;

Dr. Peter A. Del Giudice as Assistant Resident in Anesthesia for one year, beginning August 1, 1961;

Dr. Derrick Felix-Davies as Clinical and Research Fellow in Medicine for one year, beginning October 15;

Dr. Gerald Kenner as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Professor Alan C. Lendrum of Scotland as Visiting Pathologist pro tempore for one week, beginning October 17;

Dr. J. Philip Lythgoe as Clinical and Research Fellow in ~~Neurology~~ for one year, beginning October 15; Surgery (mistake li

Dr. David C. Mitchell as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Dr. Paul F. J. New as Associate Radiologist, beginning September 23;

Dr. Nathan B. Talbot as Acting Chief of the Children's Medical Service until a permanent Chief is selected and has assumed office;

Dr. Marvin L. Tanzer as Clinical and Research Fellow in Medicine for one year, beginning July 1, 1961;

Dr. Howard A. Trachtenberg as Assistant Resident in Anesthesia, beginning July 1, 1961.

At their meetings on September 7, 14, and 21, the General Executive Committee voted:

To accept the resignation of:

Dr. Herbert Schunk from the position of Clinical Fellow in Radiology, effective September 21.

To promote:

Dr. Robert E. Dinsmore to the position of First Assistant Resident in Radiology, beginning October 1:

Dr. Elwin W. Donnelly to the position of Resident in Radiology, beginning October 1;

Dr. Leonard I. Kleinman to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Dr. Brigid P. Nesburn to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Dr. Murray K. Rosenthal to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Dr. John T. Truman to the position of Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961.

To extend the appointment of:

Dr. José L. Barzelatto as Clinical and Research Fellow in Medicine, through October 31.

To ~~reappoint~~:

James E. Anliker, Ph.D. as Research Fellow in Anesthesia for one year, beginning July 15;

Dr. John A. Baldwin as Clinical and Research Fellow in Psychiatry for one year, beginning October 1;

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Albert Damon as Clinical Fellow in Medicine for one year, beginning September 1;

William H. Ellett, B.Sc. as Assistant Physicist (Medicine) for one year, beginning September 24;

Dr. Sigetosi Kamiyama as Research Fellow in Medicine for one year, beginning September 1;

Koscak Maruyama, D.Sc. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Serge Orloff as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Mr. James L. Pinter as Research Fellow in Physics (Medicine) for one year, beginning September 1;

Gene M. Smith, Ph.D. as Research Fellow in Anesthesia for one year, beginning September 1;

Pierre J. J. Stoffyn, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;

Dr. Hirsh W. Sulkowitch as Research Fellow in Chemistry, assigned to Urology, retroactive to April 1 when his previous appointment expired.

To appoint:

Dr. Robert G. Ojemann as Clinical Assistant in Neurosurgery, with the privilege of caring for patients in the Neurosurgery Group, for a period of eight months, beginning September 1. This appointment is to run concurrently with his appointment as Resident on the Neurosurgical Service.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Beecher, H. K.
Control of suffering in severe trauma: Usefulness of a quantitative approach.
J.A.M.A. 173 : 534.

Beecher, H. K.
Increased stress and effectiveness of placebos and "active" drugs.
Science 132 : 91.

General Surgery

McDermott, W. V., Jr.
Portal hypertension secondary to pancreatic disease.
Ann. Surg. 152 : 147

Neurology

Schwab, R. S.
Progression and prognosis in Parkinson's disease.
J. Nerv. & Ment. Dis. 130:556.

Neurophysiology

Brazier, M. A. B.
The EEG in epilepsy: A historical note.
Epilepsia 1 : 328.

Brazier, M. A. B.
Investigations of the action of thiosemicarbazide on the cerebellar cortex of the cat. (With Adey, Dunlop, and Killam)
In Inhibition in the nervous system and gamma amino-butyric acid, E. Roberts, Editor, New York, Pergamon Press, pp. 317-323.

Brazier, M. A. B.
Long-persisting electrical traces in the brain of man and their possible relationship to higher nervous activity.
EEG & Clin. Neurophysiol., suppl. 13, 347.

Brazier, M. A. B.
Some actions of anesthetics on the nervous system.
Federation Proc. 19 : 626.

Neurosurgery

Bakay, L.
The blood-brain barrier with special regard to the use of radioactive isotopes. (Japanese edition)
Tokyo, Ishiyaku Publishers, Inc.

Nursing

Sleeper, R.
Hospital School of Nursing? Nurse educator: Its survival depends on new methods and new facilities.
Hospitals 34 : 37.

Books

Brazier, M. A. B.
The electrical activity of the nervous system, ed. 2.
London, Pitman Medical Publishing Co., Ltd., and New York, Pitman Publishing Corporation.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American men of science, ed. 10, vol. 2.
Tempe, Arizona, The Jaques Cattell Press, Inc., 1960.
(1E)

Bourne, G. H., and Danielli, J. F. (Editors)
International review of cytology, vol. 9.
New York, Academic Press, Inc., 1960.
(2Am)

Boyer, P. D., Lardy, H., and Myrbäck, K. (Editors)
The enzymes, ed. 2, vols. 2A and 3B.
New York, Academic Press, Inc., 1960.
(5C)

Dock, W., and Snapper, I. (Editors)
Advances in internal medicine, vol. 10.
Chicago, The Year Book Publishers, Inc., 1960.
(6G)

Eyring, H. (Editor)
Annual review of physical chemistry, vol. 11.
Palo Alto, Annual Reviews, Inc., 1960.
(5A)

Gunsalus, I. C., and Stanier, R. Y. (Editors)
The bacteria, vol. 1.
New York, Academic Press, Inc., 1960.
(11A)

Harris, E. J.
Transport and accumulation in biological systems, ed. 2.
London, Butterworths Publications Ltd., 1960.
(5M)

Holman, R. T., Lundberg, W. C., and Malkin, T. (Editors)
Progress in the chemistry of fats and other lipids, vols. 1-5.
New York, Academic Press, Inc.. 1952-58.
(5D)

Nord, F. F. (Editor)
Advances in enzymology, vol. 22.
New York, Interscience Publishers, Inc., 1960.
(5C)

Pack, G. I., and Ariel, I. M. (Editors)
Treatment of cancer and allied diseases, ed. 2, vol. 4.
Tumors of the breast, chest, and esophagus.
New York, Paul B. Hoeber, Inc., 1960.
(13V)

Schulz, H.
The submicroscopic anatomy and pathology of the lung.
Berlin, Springer-Verlag, 1959.
(20M)

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WILLIAM OXNARD MOSELEY, Jr., M.D.

Last summer Dr. J. Monroe Thorington of Philadelphia sent Dr. Churchill a reprint of an illustrated article, written by Dr. Thorington, which had recently appeared in the *American Alpine Journal*. The article, entitled "The first American accident on the Matterhorn", gives a graphic and detailed account of how Dr. William O. Moseley, Jr. met his death during his descent from the mountain in 1879. After reading the article, Dr. Churchill was prompted to ask a few of our house staff if they knew for whom the Moseley Building was named, and why. Discovering that they knew nothing about the tragic story, Dr. Churchill procured permission from Dr. Thorington for us to use his Moseley material in any way we might wish.

Dr. Thorington is an Ophthalmologist (Princeton, 1915; University of Pennsylvania, 1919), a former President of the American Alpine Club, and an honorary member of the Alpine Club (London) and of the Appalachian Mountain Club.

Dr. Moseley was born in Boston in 1848, entered the Public Latin School in 1859, matriculated at Harvard College in 1865, and received his A.B. in 1869. From here on, we quote directly from Dr. Thorington's article in the *American Alpine Journal:*

". . . Soon after graduation he [Moseley] went abroad for a short time, and, after coming back to this country, again sailed and remained for a period of five years, making extensive journeys in Europe and the East. Several summers from the beginning of June to the end of September were spent in the mountains. Probably he was in the Alps in 1870 and heard of the new catastrophe on Mont Blanc, which for the first time involved Americans, when Dr. Bean and Mr.

Randall, their companion, three guides and five porters were lost in a raging blizzard. Certainly he knew the history of the Matterhorn."

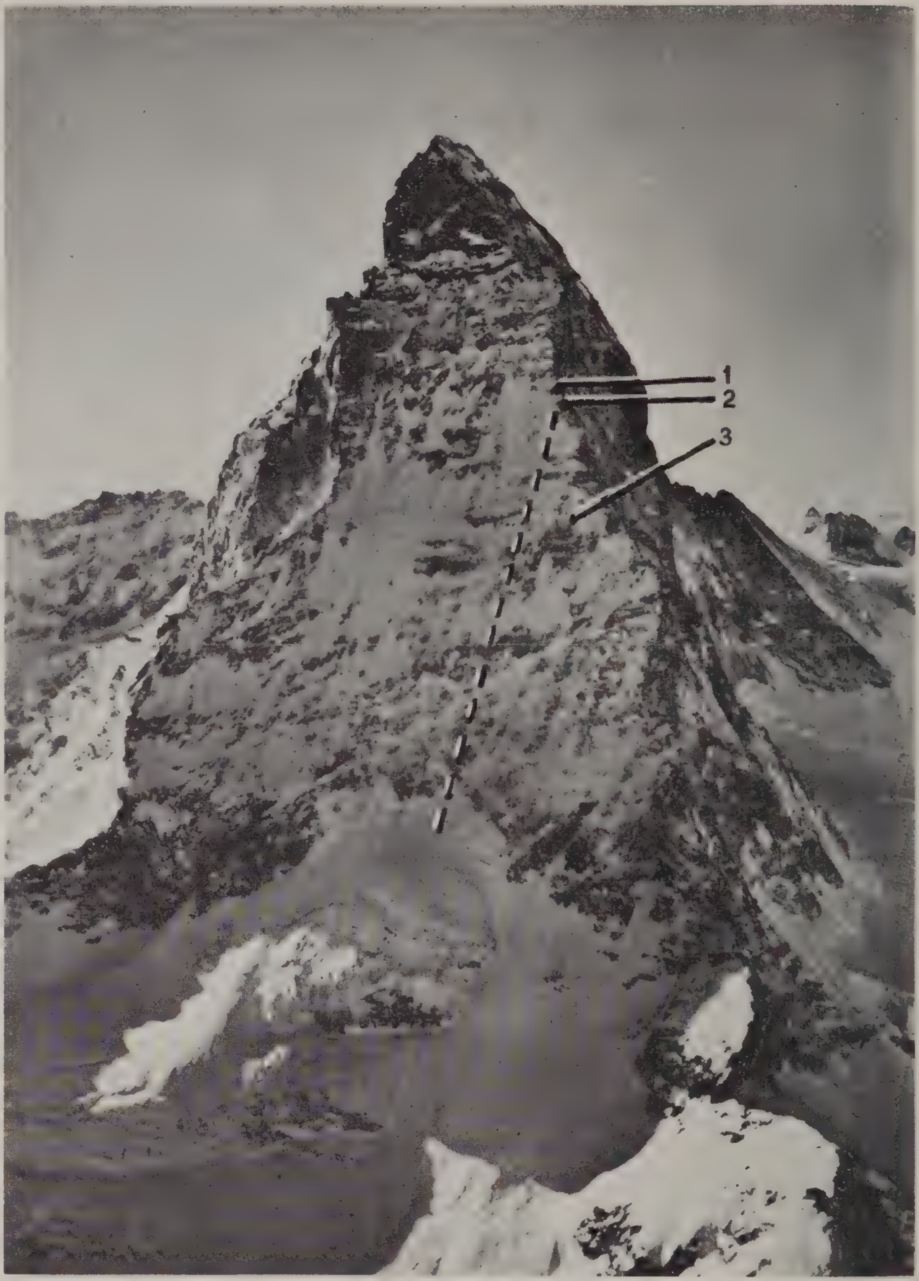
[In 1874 and 1876 Moseley was again in the Alps, and conquered such heights as Mont Blanc, Hintere Schwärze, Kleinleitenjoch, Hochwilde, and the Untergabelhorn.]

"Moseley became House Officer in the Massachusetts General Hospital in August, 1877, and was unable to visit the Alps that summer, this being partially compensated for by his election to the Alpine Club (London).

"He acquired his M.D. from Harvard in 1878 and immediately left for Europe. His companion in the Oberland was Emil Burckhardt, a member of the Basel Section of the Swiss Alpine Club, with whom he climbed the Blumlisalphorn and the Bietschorn. His list for this season also includes Zermatt climbs: Monte Rosa from Lysjoch, Triftjoch and Col Durand. Moseley spent the winter in Vienna, with additional medical study.

"1879 was a year of greater ambition and also a fateful one. In the last three days of July Moseley added to his record Eigerjoch, Jungfraujoch and the Jungfrau from Wengenalp. Then, with Craven [A. E. (A.C.), an English friend with whom he had climbed several of the aforementioned mountains] he made the first traverse from the Gross to the Klein Doldenhorn, and the second passage (north to south) of the Viescherjoch. Continuing to Zermatt, they took with them two of the ablest Oberland guides, Peter Rubi and Christian Inäbnit, both of Grindelwald. It was a strong party of four that left Zermatt on the evening of August 13, intending to ascend the Matterhorn and return in one day, thereby avoiding a night in the dilapidated hut on the northeast ridge. They arrived at the summit at nine o'clock on the morning of the 14th and began the descent after 20 minutes. Moseley had complained more than once that the rope was more of a hindrance than an advantage. Crossing the shoulder, they descended the difficult rocks where an iron chain was stretched, which Moseley scorned. The party then reached a point about 45 minutes above the hut.

"As the major difficulties were now behind them, Moseley asked that the rope be taken off, but Rubi and Craven urged him to keep it on until the hut was reached. In a few minutes, however, Moseley untied from the rope, saying that he could do better without it. Rubi yielded, the others unroped as well and all proceeded rapidly downward. Twenty minutes from the hut they had to cross a projecting rock with a smooth surface. Rubi went over first, planting his axe to give Moseley, who followed, a firm foothold. Moseley declined this aid and, placing one hand on the rock, attempted to vault over it. His foot slipped, his axe flew out of his hand and he fell from the rock onto snow, down which he slid on his back. He nearly succeeded in stopping himself with his elbows, but the snow was solidly frozen and he fell to the rocks beneath. Twisting with great effort, he tried to grasp these, but his velocity was too great and he hurtled from rock to rock until he disappeared from view. Three days later his broken body was found immediately above the bergschrund of the Furggen glacier, 2000 feet below the point of the accident. He was brought down to Zermatt by three guides and several British climbers, Craven among them. Moseley's remains were interred below the south wall of the English church, but subsequently his body was brought back to this country and buried at Mount Auburn, Cambridge, Massachusetts.



THE MATTERHORN. AIR VIEW SHOWING LINE OF MOSELEY'S FALL
1. SOLVAY HUT; 2. MOSELEY-PLATTE; 3. SITE OF OLD HUT

"Mr. C. E. Mathews, then president of the Alpine Club, who was at Zermatt, presented the foregoing information in a letter to *The Times,* and added: 'I was shocked to find, on examining the remains, that Mr. Moseley had hardly any nails in one of his boots, and all rock-climbers know how impossible it is to ensure steadiness under such conditions, and it is quite clear that if the rope had not unhappily been removed, I would not have had to trouble you with this letter.'

"The site of the accident is still known as the 'Moseley-platte.' [*See* THE NEWS for December 1956 for a short piece by Dr. Walter F. Lever, which describes the Moseley Platten.] In the Zermatt museum is a photo-portrait of Moseley, as well as one of his boots and the punctured metal canteen he was carrying at the time. [A picture of the boot and canteen, from the *American Alpine Journal* article, is on the bulletin board near the foot of Treadwell stairs.] His name is perpetuated in the Moseley Professorship of Surgery, Harvard Medical School, and in the Moseley Memorial Building (1916), Massachusetts General Hospital. . . .

"Although Moseley was an experienced climber, his death must be attributed to over-confidence, premature unroping, and footgear that was inadequate even by the standard of the time. He had not sufficiently heeded Whymper's warning: 'Climb if you will, but remember that courage and strength are naught without prudence, and that a momentary negligence may destroy the happiness of a lifetime. Do nothing in haste; look well to each step; and from the beginning think what may be the end.' "

A picture of Dr. Moseley and a bronze plaque hang on the south wall, just inside the entrance to the Moseley Building.

* * *

VOLUNTEER GROUPS

Distaff Club

The Distaff Club started the year off on July 14 with a tea, to welcome the new house staff and their wives. The tea was given in the lobby of the Warren Building.

The first meeting of the year was held on September 21 in the Penthouse. The speakers were Miss Mary Ruth Wolf, Director of our Volunteer Unit, and Mr. Francis W. Hatch, Co-Chairman of the MGH 150th Anniversary Committee. They spoke on "The role of the Massachusetts General Hospital — past, present, and future."

At our October 19 meeting, Dr. Paul Tillich of the Harvard Divinity School, spoke to both husbands and wives on "Science and religion".

On October 28, our annual barn dance was held in Mr. Vincent Hoagland's barn, on Sunset Road in Weston.

We are looking forward to hearing Dr. Churchill comment on his trip to Lebanon at our November 15 meeting. Husbands, also, are invited to this meeting.

Distaff Club officers this year are:

President — Mrs. Harold C. Urschel, Jr.
Vice-President — Mrs. Willard M. Daggett, Jr.
Corresponding Secretary — Mrs. Anthony S. Patton
Directory Secretary — Mrs. John T. Porvaznik, Jr.
Treasurer — Mrs. Roman W. DeSanctis
Publicity Chairman — Mrs. Raphael F. Smith
Projects Chairman — Mrs. William G. Stewart, Jr.
Housing Chairman — Mrs. Dwight R. Robinson
Newsletter Editor — Mrs. John W. Madden
Area Coordinator — Mrs. Richard H. Wohl

MASSACHUSETTS EYE & EAR INFIRMARY

At their meeting on September 19, the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary voted:

To change the title of Dr. George Kelemen to Research Consultant in Otolaryngology;
To accept with regret the resignation of Dr. Maurice R. Ruben from the position of Assistant Surgeon in Otolaryngology.

To appoint:

Dr. Richard R. Gacek — Resident in Otolaryngology, beginning July 1, 1961;
Dr. John B. Roberts—Resident in Otolaryngology, beginning July 1, 1961.

To reappoint:

Dr. Sotiria S. Mourkidou — Fellow in Anesthesiology for another year, beginning October 1.

New addresses:

Dr. H. Clarke Anderson (*Path.* 1959), Memorial Hospital, 444 E. 68th St., New York, N.Y.
Dr. Robert E. Ball (r.p. *Psychiat.* (*McL.*) 1960), Toronto Psychiatric Hospital, 2 Surrey Place, Toronto 5, Ontario, Canada
Dr. Norman K. Brown (*M.* 1957), Dept. of Medicine, King County Hospital, Seattle 4, Wash.
Dr. Allan M. Butler (*Bd. of Cons.*), Director, Metropolitan Hospital, 1800 Tuxedo Ave., Detroit, Mich.
Dr. Lloyd M. Caplan (r.p. *Psychiat.* (*McL.*) 1960), Massachusetts General Hospital, Boston 14, Mass.
Dr. James J. A. Cavanaugh (a.p. *C.M.*), 12 W. Central St., Natick, Mass.
Dr. Zanvil A. Cohn (*M.* 1954), Rockefeller Institute, 66th St. and York Ave., New York 21, N.Y.
Dr. Garth R. Drewry (*M.* 1953), 1 Davis Blvd., Tampa 6, Fla.
Dr. Stanford B. Friedman (*C.M.* 1958), Room 3 N-212 Clinical Center, National Institutes of Health, Bethesda, Md.
Dr. Murray L. Janower (a.r.p. *R.*), Div. of Radiological Health, c/o Bureau of State Services, Dept. of Health, Education, and Welfare, Washington 25, D.C.
Dr. Robert J. Kinney (a.r.p. 1943), Box 669, Fort Bayard, N.M.
Dr. Kenneth E. Liffmann (*Dn.* 1956), 811th Medical Group, Loring AFB, Maine
Dr. Bernard F. Mach (*M.* 1959), Rockefeller Institute for Medical Research, 66th St. and York Ave., New York 21, N.Y.
Dr. Eugene J. Morrissey (a.r.s. *Or.*), U.S. Naval Academy, Annapolis, Md.
Dr. Herbert A. Newman (a.r.p. *C.M.* 1960), U.S.A.F. Hospital MATS, Box 451, Travis AFB, Calif.
Dr. Herman A. Osgood (h.p. *R.* 1919), 139 Bellevue Ave., Melrose 76, Mass.
Dr. Savitri Ramcharan (*C.M.* 1954), Metabolic Research Unit, Dept. of Medicine, Stanford University School of Medicine, Palo Alto, Calif.
Dr. Edward H. Risley (*E.S.* 1908), P.O. Box 143, Prides Crossing, Mass.
Dr. Richard L. Sallade (a.r.s. *U.* 1959), 838 Stuart Ave., Boardman, Ohio
Dr. John T. Sharp (a.*M.* 1960), Henry Ford Hospital, 2799 W. Grand Blvd., Detroit, Mich.
Dr. Robert T. Spalding (clin. & res. fel. *Psychiat.* (*McL.*) 1960), Chattanooga Guidance Clinic, 1020 E. 9th St., Chattanooga, Tenn.
Lt. William E. Strole, Jr., MC, USNR (*M.* 1959), 3rd Battalion, 5th Marines, 3rd MAR Div., FMF, PAC, c/o FPO, San Francisco, Calif.

Brief bits:

Dr. Edwin F. Cave has deposited in the Archives Room, for safe keeping while he is away, a kangaroo foot trophy which was presented to the American Orthopedic Association by the Australian Orthopedic Association at the last joint meeting in 1958. It is to be kept by Dr. Cave during this year of his Presidency of the A.O.A. and will be passed on by him to the next President in May 1961. It would be worth your while to come to the Archives Room to see the trophy with its attached inscribed silver torch.

Dr. Roger W. Jeanloz spent the summer abroad. The purpose of his trip was to study methods of isolation and structure determination of complex glycolipids and lipo-glycoproteins from animal tissues and from bacteria. He gave many lectures in Germany, France, Switzerland, Poland, Sweden, and Israel, and was presented with the Medal of the Société de Chimie Biologique de France.

Dr. Lewis W. Kane has been elected President of the Boston Tuberculosis Association. Dr. Kane served as Vice-President of the Association for three years and as Chairman of the Education and Case-Finding Committee for two years. He is also a member of the Board of Directors of the Massachusetts Tuberculosis and Health League.

Here are some excerpts from an interesting article which appeared in the *Cleveland Plain Dealer* of August 24. They concern Dr. Fiorindo A. Simeone (*W.S.* 1936).

The first two open-heart operations performed in the Middle East were directed by a Clevelander — Dr. Fiorindo A. Simeone, Chief of Surgery at Cleveland Metropolitan General Hospital.

The operating surgeon was a former student of his, Dr. Ibrahim Dagher, former resident in thoracic surgery at the hospital here.

Dr. Simeone is back at his Cleveland post after spending three months in Lebanon where he served as professor of surgery and head of the department at the American University of Beirut. He left Cleveland late in April to attend the annual Middle East medical meeting in Lebanon, May 6-8.

"Both operations were successful and they had a terrific impact upon the public," he said in an interview. "The Lebanese government was pleased."

The patients were a boy of 6 and a woman in her early 30s. Dr. Simeone said most of the equipment used in the operations was homemade, but it "functioned very well."

The American University is a private institution chartered in New York. According to Dr. Simeone, about half of its graduates come to America for their graduate training, a considerable number go to England.

Just before his departure [for home] Dr. Simeone was called upon to treat Pierre Gemayl, Lebanese minister of health and education, who had been seriously injured by a runaway truck. Dr. Simeone was whisked away to the hospital at the French medical center, where the patient had been taken with multiple fractures of ribs on both sides.

"The shock was brought under control and eventually the patient came through in good shape," recalled the surgeon. "Had the outcome been different, it might have had unpleasant political repercussions in Lebanon. Gemayl is an important person. He is leader of the Christian block and looked upon as the one man who has been able to keep it together."

According to Mrs. Simeone, Dr. Henri LeBrigand (Research Fellow in Surgery, Harvard Medical School and Massachusetts General Hospital, 1946-47) who worked with Dr. Simeone during his sojourn in Boston, arrived in Beirut at the request of the Lebanese to see Mr. Gemayl in consultation, Dr. LeBrigand being a prominent thoracic surgeon in Paris at the present time. Mrs. Simeone added that the Lebanese were quite impressed by this international reunion and friendly cooperation.

This letter has come from Dr. Paulo F. Albuquerque (r.s. *U.* 1944), our "singleton" in Rio de Janeiro, Brasil:

I am afraid I am redundant by answering your note of February 8, as during my frequent visits at the General I have kept most of my colleagues well informed as to my wanderings around.

Although I am the only former resident located in Rio, there are several men in town who have benefited from the Hospital teaching programs as fellows or other forms of apprenticeships.

Urological surgery in its various aspects takes all of my professional time. Besides the practise of it, there is a residency here patterned after the one at the General, which not only is the first serious attempt at such a program among us but is also unquestionably the best

No. 92 in a series of Staff photographs
Dr. Francis C. Lowell, Physician — Chief of the Allergy Unit

one available south of the border.

My special interests have always been multiple. Among the ones that can be confessed to, I believe that sports take most of my spare time, as I try to keep fit with some tennis, horse riding, motor boating, and skin diving — all undertaken in a rather leisurely manner.

Thank you for the thoughtfulness of your inquiry.

This letter has come from Dr. Harvey E. Billig, Jr. (*Or.* 1935), Medical Director of the Billig Clinic in Los Angeles:

Congratulations to Dr. Lloyd H. Smith, Jr. and The News for the very erudite summary of "Activities of the Endocrine Unit" in your May issue.

I was at Massachusetts General Hospital in earlier days of the pioneering work of Doctors Aub, Albright, and Bauer, and I feel that I was infected with the endocrine modulated enzymatic chemical outlook on control of metabolism in all the tissues of all the people. I have tried to convey this thinking into my rehabilitation practice and have encountered the necessity, on numerous occasions, for explaining at length a number of the points of understanding, as to what "Metabolism" amounts to, and the importance of the continuity of its maintenance in balance for the sake of ALL the tissues of the body.

To illustrate: One of our findings directly resulting from this approach, which I was "sold on" during my stay at Massachusetts General Hospital, is reported in the two enclosed reprints entitled "Hyperinsulinism of menses" and "The role of premenstrual tension in industry". Nearly all of the patients mentioned in these articles had been to a dermatologist for their bruises, a gynocologist for their menstrual symptoms, an internist for their obesity, and an orthopedist for their backache, which I think illustrates the necessity for the type of work you are doing, in order that each individual in the various specialties can be aware of the associated ramifications of a metabolic disorder.

Sincere congratulations.

Dr. Schwab received a short letter from Dr. Paul E. Spangler (*W.S.* 1925), which has been passed on to us. Dr. Spangler is Senior Medical Officer on the S.S. *Hope.* The letter says, in part:

Since Djakarta is pretty well equipped from a medical training point of view, our appearance there will be very short, so I don't know how much we will be able to accomplish. Much of our time there is to be taken up with pomp and ceremony, which seems to loom large with the powers that be.

I must confess that I am pretty ignorant about the latest trends in the management of Parkinson's disease. I wonder if you might send me some literature to brighten me up.

Your letterhead struck a note of nostalgia.

The 85th Commencement Exercises of the Massachusetts General Hospital School of Nursing were held in John Hancock Hall on September 8. One hundred seventeen nurses joined the ranks of more than 5,000 alumnae of the MGH School of Nursing.

150th ANNIVERSARY NOTES

Mr. Ralph W. Burger, President of the John A. Hartford Foundation, Inc. of New York City, has announced the award of a new grant for $190,204 to the Massachusetts General Hospital from the Foundation, for investigative work on "The study of the mechanisms of fluid and electrolyte transport by living cells and tissues". This research is to be carried on under the direction of Dr. Alexander Leaf. The Foundation has supported Dr. Leaf in earlier studies, and since 1956 has awarded more than $660,000 to M.G.H. for research.

The Albert A. List Research Fellowship has been created by a gift of $200,000 from the Albert A. List Foundation in New York City. The recipient of this Fellowship will be named jointly with the Harvard Medical School or the Massachusetts Institute of Technology, in accordance with the usual practice followed in appointing basic scientists or clinical scientists at M.G.H.

A new $350,000 facility in which scientists will probe the basic workings of the human mind is being readied here at the Hospital. The new unit will be called the Stanley Cobb Laboratory for Research in Psychiatry.

A one-half-million-dollar laboratory for orthopedic research was dedicated on September 11, here at the Hospital. A team of scientists and doctors from M.G.H., Harvard Medical School, and the Massachusetts Institute of Technology will carry on basic studies of the skeleton and the way it is built, in order to gain new knowledge of a wide range of bone disorders. This is one of the first projects to be completed as part of the Hospital's observance of its 150th Anniversary in 1961.

* * *

Contributions to The News in the amount of $650, over and above the subscription fees, were received during the fiscal year 1959-1960.

A note of appreciation is always sent to each contributor, but The News takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

THE NEWS

MASSACHUSETTS GENERAL HOSPITAL
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CARDIORENAL UNIT OF THE CARDIOVASCULAR RESEARCH LABORATORIES

The last report from the Cardiovascular Research Laboratories appeared in THE NEWS of April 1953. This was two years after these Laboratories were created with the opening of the Research Building. Shortly after this first report, the then Chief Cardiovascular Investigator, Dr. Ivan D. Frantz, Jr., became the Research Professor of Medicine at the University of Minnesota School of Medicine, and the Cardiovascular Research Laboratories were temporarily closed down. For two years the space housed the Dermatology Laboratories, until their present quarters became available.

In 1956 the Laboratories were reopened to house the Research Laboratories of the Cardiorenal Unit of the Medical Services; and in July 1960 the newly created Arteriosclerosis Study Unit, under Dr. Frederick T. Hatch, also took up occupancy on Research 1. Because Dr. Hatch will undoubtedly report separately at some later date on the independent investigations of his Unit, this report will concern itself solely with the research activities of the Cardiorenal Unit.

First, let me explain why the study of kidney, electrolyte, and fluid problems should be included in a cardiovascular research unit. As is well known, the heart is the pump which circulates the extracellular fluids of the body, supplying oxygen and nutrients to the tissues and carrying away the waste products. It is not surprising, therefore, that heart disease in many instances manifests itself by disturbances in the body fluids. The occurrence of edema (or dropsy) is perhaps the most dramatic instance of this relationship. It is also now well appreciated that the major function of the kidneys is to adjust the volume and composition of the fluids which the heart circulates. Thus, it is fitting that the heart and kidneys, so closely related functionally, together with the fluid bridge which joins them, should be studied in the same unit. In fact, it was the enigmatic problem of how body fluid volumes and compositions were disturbed in heart failure that initially stimulated our interests in salt, water, and kidneys.

After studying these relations in patients for several years (before the Cardiorenal Unit was incorporated into the Cardiovascular Research Laboratories), it became apparent that until certain basic information was obtained regarding how water and salts are transported across cell membranes, our understanding of cardiorenal relations and disease would be incomplete. It is toward solving this central problem in renal physiology that our major laboratory effort is focused.

We know that the kidneys receive messages regarding the body's needs for water and salt from secretions of the neurohypophysis and adrenal cortex glands, respectively. Hence, our studies must eventually explain how vasopressin and aldosterone modify the renal handling of salt and water. Finally, the problem attains even more general interest in that all cells of the body are engaged in transporting water, salts, and nutrients across their cell membranes, and an elucidation of these mechanisms in any tissue may be expected to help our understanding of function and disease in other tissues as well as in the kidneys.

Not infrequently one's progress in studying a complicated problem in biology can be greatly aided by the good fortune of obtaining a simple system for study. The demonstration by Professor Hans H. Ussing of the University of Copenhagen that certain amphibian membranes can be utilized *in vitro* for the study of membrane phenomena has been of considerable help to us in our work. In fact, it was while working in his laboratory that we happened upon the urinary bladder of the toad as a useful preparation to study. This unique membrane, consisting essentially of a single layer of cells supported on a thin layer of connective tissue, performs many of the important activities of the mammalian renal tubules. It reabsorbs water and sodium selectively from the urine, and its permeability characteristics are specifically altered by the two mammalian hormones, vasopressin and aldosterone, which are so important in regulating kidney activity in man. The toad bladder can readily be studied *in vitro,* for example, as a sheet of cells separating two halves of a lucite chamber, thus allowing ready access to the two opposite surfaces for permeability studies.

The processes of reabsorption in the toad bladder — and also, as it is becoming apparent, in the mammalian renal tubule — center about the movement of the sodium ion. This ion is actively transported at the expense of energy provided from the metabolism of the single layer of cells. The movement of positively charged sodium ions from the mucosal to serosal sides renders the latter electrically positive to the former. Anions, such as chloride, are reabsorbed passively and secondarily to the electrical potential created by the primary active transport of sodium ions. Water is reabsorbed passively in response to the concentration gradients produced by the reabsorption of salts. Vasopressin, the mammalian antidiuretic hormone, markedly stimulates this reabsorption of water; aldosterone, the mammalian salt-retaining hormone, increases the active sodium reabsorption.

Much of our time has been spent obtaining quantitative measurements of these transport processes. The energy for the active sodium transport comes from the combustion of the glycogen stored in the mucosal cells. The energy requirements for transport have been determined. The site of action of vasopressin has been localized to one surface of the mucosal layer of cells, and the changes induced by the hormone in the cell membrane have been studied. The relationship of sodium transport to that of other ions has been examined.

Such information is basic to our understanding of reabsorptive processes in the toad bladder, the renal tubule, or elsewhere. In the past year, however, we have also sought explanations in this well-defined system for a few situations which arise clinically. The isolated toad bladder has given us reasonable replies regarding the mechanism of the polyuria seen in patients with potassium depletion, the resistance to the antidiuretic actions of vasopressin which develops upon its prolonged use in the overhydrated patient, and the mechanism of action of mercurial diuretics — to name a few. Of course, results obtained in such an isolated system as we use must await confirmation eventually in man. So far, however, the parallels which have been established give us encouragement. Thus, antidiuretic hormone in the bladder preparation affects specifically and markedly the reabsorption of water and urea and the active transport of sodium. In the mammal, until recently, only its effect on water reabsorption was known. Following the description of the striking effects of antidiuretic hormone on permeability to urea in the bladder, a similar effect in the mammalian renal tubule has been recently described. Likewise, an effect of this hormone on sodium reabsorption in the mammalian renal tubule has followed on the heels of its ready recognition in the bladder.

Progress in this Laboratory has depended upon the collaboration of several enthusiastic, gifted, and dedicated clinical and research fellows in Medicine: John Anderson (currently at King's College Medical School, London); LeRoy H. Maffly (now at the Cardiovascular Research Unit of the University of California); Richard M. Hays (Department of Medicine, Albert Einstein Medical College); Lot B. Page, now a member of our Visiting Staff, and Ezra Lamdin. Howard S. Frazier, Jean R. Crabbé, Alvin Essig, Earle I. Hammer, and Jacob de Graeff comprise the present team. Dr. Crabbé, who has found the action of aldosterone on sodium reabsorption in the bladder, soon will be returning to his native Belgium. Rex L. Jamison (an Intern in Medicine here at M.G.H.) examined the actions of mercurial diuretics on sodium transport while a medical student; and Albert Keller, who ably studied the histology and electron microscopic structure of the membrane, is now in his first year at Harvard Medical School.

In conclusion, it seems certain to us that improvement in our understanding of these basic membrane phenomena will aid our understanding of certain disease processes. From a better understanding of function has invariably followed better care for the sick patient. How successful such an approach as ours will prove to be remains to be seen. So far, only two things seem certain: 1) my associates and I feel that study of membrane phenomena has increased our perception into physiological factors operating in clinical problems, and 2) that the pursuit of these exciting matters leaves us never a dull moment.

Alexander Leaf, M.D.,
Associate Physician
and *Chief Cardiovascular Investigator*

* * *

IDA M. CANNON

Ida Cannon died on July 7, 1960, at the age of 83. Her service to the Massachusetts General Hospital, where she was Chief of the Social Service Department from 1914 to her retirement in 1945, was recognized by the Trustees when they adopted the following resolution, which reads, in part: ". . . For nearly four decades she has given devoted service to the Hospital in the hitherto neglected field of human relations; [with Dr. Richard C. Cabot] a large part of the credit for the development of medical social service here and in other hospitals is due to her. She was a true pioneer. As author, lecturer, consultant and trainer of social workers she made such an impress in the field of social work that she is looked upon as an acknowledged leader throughout the nation. Endowed by nature with a sympathetic and kindly disposition, Miss Cannon brought to her problems a deep human understanding and sound judgment. . . ."

Miss Cannon was born in Milwaukee on June 29, 1877, and had embarked on a successful career in nursing before she came to Boston. She graduated from the Minnesota City and County Training School for Nurses in 1896. Her first position after graduation was that of organizing and supervising a hospital at the Minnesota School for Feeble-minded at Faribault, Minnesota. She later served as visiting nurse for the St. Paul Associated Charities. She became increasingly interested in the social aspects of nursing, and in 1906 she came to Boston to attend the Boston School of Social Work (later, Simmons College School of Social Work) and made her home with the family of her brother, Dr. Walter B. Cannon, the eminent physiologist at Harvard.

During this period she met Dr. Richard C. Cabot, who had assembled in 1905 a staff of paid and volunteer social workers in the Out-Patient Clinics of the Massachusetts General Hospital, and until she completed her course at Simmons in 1907 she worked for him as a volunteer in her spare time. She joined his staff as a paid worker in 1907. The importance of social factors in medical care was increasingly recognized in other hospitals, and at about this time visiting nurses were added to the staffs of several hospitals. Miss Cannon's training in both nursing and social work enabled her to recognize that the kind of service needed for the practice of social work in a medical institution required the diagnostic and treatment skills of social casework rather than those of nursing. It was this differentiation which influenced the development of the Social Service Department at the Massachusetts General Hospital. Dr. Cabot's idealism and enthusiasm were well supplemented by Miss Cannon's ability to organize and interpret; and this Department, in spite of some administrative difficulties at first, became the forerunner and model of this work in the United States and abroad. In 1919 the Department became an official part of the MGH family.

Dr. Cabot, in 1930, in reviewing the early days of the Department, paid this tribute to Miss Cannon: "Two words seem to me to convey most of what Ida Cannon has done for us and for this movement: she has been a wonderful interpreter and a brave challenger. I have never seen anyone who so thoroughly understood both the ideals of the physician and the ideals of the social worker so that she could interpret each to each. She has defended the doctors to the social workers; she has defended the social workers to the doctors; and in both cases she has carried conviction. She is an ideal listener. She is a hearty laugher. She can be fair to many conflicting strands and interests at the same time. She is never content and never condemnatory. She has been the educator of her supposed bosses."

Miss Cannon held many important positions in the field of medical social work. In 1920 and 1921 she was elected President of the American Association of Hospital Social Workers, which association she had been active in establishing. She was a delegate to the White House Conference on Child Health and Protection in 1931; to the International Conference of Social Work in Frankfort in 1932 and the 1936 Conference in London.

Among her many activities, she was a lecturer on the faculties of Simmons College, Boston College, Boston University, and the New York School of Social Work. She served as a Trustee of the Cambridge City Hospital and of the Tewksbury State Hospital and Infirmary, and was a member of the Cambridge Board of Public Welfare. She was also a member of the Advisory Committee on the Medical Care Program of the Massachusetts Department of Public Welfare.

Countless articles and speeches by Miss Cannon throughout the years illustrate her activity in promoting the field of medical social work. She was the author of two books: *Social work in hospitals,* published by the Russell Sage Foundation in 1913 and revised in 1923, and *On the social frontier of Medicine,* published by the Harvard University Press in 1952.

Recognition of Miss Cannon's service in establishing and developing the field of medical social work is indicated by the fact that she was granted honorary degrees by the University of New Hampshire (1937), and Boston University (1950); that she was given the 1959 Lemuel Shattuck Award by the Massachusetts Public Health Association, "for distinguished service in public health"; and that in 1959 she was given honorary membership in the Institute of Almoners in England.

The tributes that meant the most to her, however, were from those who had been closely associated with her at the Massachusetts General Hospital. Dr. J. Howard Means, in his "Foreword" to *On the social frontier of Medicine,* describes Miss Cannon's part in the development of social work at the Hospital in these words:

"This department was the pioneer of all medical social service departments. It was a prototype from which a new professional activity spread throughout the world. Miss Cannon served in it longer, and carried more of its responsibilities, than any other person. . . .

"The early days of the department were tough going. It was a problem of 'selling' social service to the doctors — members of the most socially conservative of professions — and great was the sales resistance. . . .

"The evolution of attitude on the part of the medical staff toward the Social Service Department at the Massachusetts General Hospital, as Miss Cannon traces it, went through these phases — resistance, tolerance, partial recognition, and finally full acceptance and establishment as an official and necessary department of the Hospital, a responsibility of the Hospital Trustees to support."

No finer tribute to Miss Cannon could be written than that expressed so beautifully by Dr. Means in the opening paragraph of the "Foreword": "It is given to but few men or women to participate, vitally, in the birth and growth of a new profession. It is also rare to have the opportunity and the skill, in the rich autumn of life, after nearly five decades of selfless service, to write powerfully the saga of an adventure that has resulted in bringing comfort to millions of suffering people."

M. K. T. [Mar
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Wheaton College, at its One Hundred and Twenty-fifth Anniversary Convocation on October 15, conferred the honorary degree of Doctor of Science upon

Miss Ruth Sleeper, Director of our School of Nursing and Nursing Service.

Dr. Henry K. Beecher has been commissioned as a Kentucky Colonel by the Governor of Kentucky "in recognition of his work in medical education in that State".

The Board of Trustees, at their meetings on October 7 and 21, voted:

That the appointment of Dr. Peter H. Berman as Clinical Fellow in Neurology, to have begun July 1, be rescinded;

That Dr. J. Evarts Greene be reinstated as Clinical Associate in Medicine, retroactive to February 21, 1958;

That the appointment of Dr. John J. Ross as Clinical Fellow in Neurology, to have begun July 1, be rescinded.

To appoint:

Dr. Mark Abramowicz as Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Wesley Allinsmith, Ph.D. as Associate Psychologist, effective as of August 1;

Dr. Frank K. Austen as Chief Resident in Medicine for one year, beginning January 1, 1961;

Dr. Edward F. Balius as Assistant Resident in Anesthesia, beginning July 1, 1961;

Dr. Gerald S. Brickman as Clinical Associate in Orthopedic Surgery, effective as of October 1;

Dr. Stephen P. Clement, Jr. as Exchange Assistant Resident on the Children's Medical Service, for the term September 21 through October 31;

Dr. John D. Constable as Assistant in Surgery, effective as of October 1;

Dr. Leonard Garren as Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Edgar Haber as Resident in Medicine for one year, beginning July 1, 1961;

Dr. John B. Joseph as Assistant Resident on the Children's Medical Service for one year beginning July 1, 1961;

Dr. Mehmet N. Kalayci as Clinical and Research Fellow on the Children's Medical Service for one year, beginning January 1, 1961;

Dr. Myron B. Laver as Assistant in Anesthesia effective as of September 20;

Dr. Robert S. Lees as Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Gordon K. MacLeod as Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Felix S. Palubinskas as Clinical Fellow in Radiology, beginning July 1, 1961;

Dr. Stephen L. Reynolds as Junior Assistant Resident on the Children's Medical Service for one year, beginning July 1, 1961;

Dr. John W. Singleton as Resident in Medicine for one year, beginning July 1, 1961;

Dr. Arnold N. Weinberg as Resident in Medicine for one year, beginning October 1, 1961

At their meetings on September 28, and October 7 and 19, the General Executive Committee voted:

To accept the resignation of Dr. Rosalie A. Burns from the position of Clinical and Research Fellow in Neurology, effective as of August 31;

That the appointment of Dr. Mustafa L. Sipahi as Clinical Fellow in Radiology become effective as of November 7 rather than December 1.

To promote:

Dr. David H. Alpers to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Peter V. D. Barrett to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Oscar S. DePriest, III, to the position of First Assistant Resident in Surgery for one year, beginning October 1;

Dr. Stephen E. Goldfinger to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Rex L. Jamison to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Robert K. Osborne to the position of Resident in Medicine for one year, beginning July 1, 1961;

Dr. Raphael F. Smith to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. William B. Stason to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Samuel O. Thier to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. Richard J. Wurtman to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961;

Dr. William J. Yount to the position of Assistant Resident in Medicine for one year, beginning July 1, 1961.

To extend the appointments of:

Dr. Ingrid Gamstorp as Clinical and Research Fellow in Neurology and Pediatrics, from October 1 through December 31;

Dr. Jan Trabka as Research Fellow in Neurology, assigned to Neurophysiology, from July 9 through October 30.

To reappoint:

Dr. Ann B. Barnet as Clinical Fellow on the Children's Medical Service for one year, beginning September 26;

Dr. Arthur E. Baue as First Assistant Resident in Surgery for one year, beginning November 1;

Dr. David L. Collins, Jr. as First Assistant Resident in Surgery for one year, beginning November 1;

Dr. Franco R. Dinale as Clinical Fellow in Anesthesia for one year, beginning October 1;

Dr. Ulf A. Friberg as Research Fellow in Orthopedic Surgery for one year, beginning November 1;

Dr. Gilbert Hermann as First Assistant Resident in Surgery for one year, beginning November 1;

Dr. Walter E. Klingensmith as First Assistant Resident in Surgery for one year, beginning November 1;

Irving Weliky, Ph.D. as Research Fellow in Medicine for one year, beginning October 1.

To appoint:

Dr. Jacqueline Gauthier as Research Fellow in Psychiatry, effective as of September 28;

Dr. Anne F. Godley as Clinical Assistant in Medicine, effective as of October 1;

Dr. Rodrigo R. Santos as Graduate Student Assistant in Surgery, for the period September 1, 1960 through May 31, 1961.

At the meeting of the General Executive Committee, held on October 26, the following were appointed as Graduate Student Assistants in Medicine, assigned to Cardiology, for one year, beginning October 1:

Dr. Carl E. Agliozzo	Newark, N. J.
Dr. H. Michael Berger	Quito, Ecuador
Dr. Chi-wei Chen	Singapore, Malaya
Dr. Bertrand G. Dumais	Drummondville, Quebec
Dr. Alexander C. Houston	Sarnia, Ontario
Dr. Henri Larocque	Montreal, Quebec
Dr. Stanislaw Pasyk	Krakow, Poland
Dr. Rajeshwar Prasad	Jamshedpur, India
Dr. Duk S. Rhoe	Seoul, Korea
Dr. Sergio O. Rustia	Manila, Philippines
Dr. Arturo M. Singer	San Angel, Mexico
Dr. Nicos E. Tsanatos	Salonica, Greece
Dr. Ömer F. Turnaoglu	Istanbul, Turkey

ERRATUM

Due to a mistake in a report sent to the office of THE NEWS, Dr. J. Philip Lythgoe's title as it appeared last month among the Trustees' appointments was incorrect. Dr. Lythgoe has been appointed Clinical and Research Fellow in Surgery for one year, beginning October 15.

* * *

THE STANLEY COBB LABORATORIES FOR RESEARCH IN PSYCHIATRY

The dedication of the Stanley Cobb Laboratories for Research in Psychiatry and the observance of the Twenty-fifth Anniversary of the establishment of the Psychiatry Service at Massachusetts General Hospital took place on October 14 and 15.

Speakers at the Dedicatory Luncheon on Friday, at the Hospital, were: Mr. Phillips Ketchum, President of the Massachusetts General Hospital Corporation, who presided; Reverend William B. Spofford, until recently our Supervisory Chaplain; Dr. Seymour S. Kety, Research Director at the National Institute of Mental Health, Bethesda, Maryland, and a member of our Scientific Advisory Committee; Dr. George P. Berry, Dean of Harvard Medical School; Dr. Erich Lindemann, Chief of our Psychiatry Service; and Dr. Dean A. Clark, our General Director.

Dr. Alfred H. Stanton, Psychiatrist-in-Chief at McLean Hospital, presided at the Social and Community Psychiatry Luncheon on Friday, at the Boston Club. Dr. Stephen Fleck, Associate Professor of Psychiatry and Public Health, Yale University Medical School, was the speaker.

Dr. Carl A. L. Binger, Honorary Physician on our Staff, presided at the Anniversary Dinner on Friday night, at the Harvard Club. The speakers were: Dr. Robert B. Livingston, Director of Basic Research, National Institute of Mental Health, Bethesda, Maryland; Dr. Wilder Graves Penfield, Director of the Montreal Neurological Institute; and Dr. Erich Lindemann.

Scientific sessions for the dedication were held all day Friday at the Morse Auditorium of the Boston Museum of Science and on Saturday morning at the Hospital.

More than 300 alumni and guests attended these events, many traveling considerable distances to be present at the dedication.

Although we would like to include here transcriptions of all the speeches that were given at this dedication observance, space limitations make it impossible to carry out that desire. However, we give you two of the talks — those by Dr. Cobb and Dr. Kety. Here is Dr. Cobb's address:

At a time like this, one looks back over the years with some feelings of doubt. But, if I had my life to live over, I think I would make the same major decisions.

The question that colleagues most often ask me about my professional life is why I changed from neurology to psychiatry in 1934. Why did I leave research in cerebral circulation, EEG, and epilepsy to go into psychosomatic medicine? Why did I make the shift?

In the first place, I found it a great stimulus to change my work and environment in mid-life. It keeps one young.

Secondly, in order to lead a full life one must take part in the genius of his time. In those years of the early '30's, many lines of new knowledge in physiology, psychology, and medicine were converging to recreate an old point of view and give it substance. We were beginning to conceive of both health and disease as the reaction of the human organism to a complex environment, internal and external. At long last ecological thinking was entering Medicine, accepting as basic the proposition that causes of human reactions are complex, so the etiology of a disease must be multiple.

Finally, the change was not difficult. My interest has always been *to study how the brain works and why it often does not work.* To me, mind and brain are one: if you study the violin you must also study the music it makes.

At that time, the teaching and investigation of psychiatry in a general hospital gave me a unique opportunity. Psychosomatic medicine was an exciting and expanding field. My twenty years as chief of the Psychiatry Service at the M.G.H. were, for me, a great adventure. They were happy years because of the wonderful people who made up the Service—and that includes all of you here who worked with me as residents, fellows, and staff members; on the wards, in the out-patient, and in the laboratories; from John Abbott and Murray Burns, my first residents, to Norman Bernstein and Frederick Whiskin, my last. These great years have been made possible by the cordial and helpful cooperation of all the other services—medical, surgical, and special; we all owe much to Dr. J. Howard Means for originating the idea of a psychiatry ward in his medical division.

And now the service is taking on new expansion under Dr. Lindemann, who sees psychiatry with a broad and fresh vision. Problems I was never able to meet are being taken up. There is a remarkable new service for the alcoholic patient; important relationships with the community are being made; and, last but not least, there is this new laboratory for research in psychiatry, which is already an active and productive institute under the direction of Gardner Quarton. Here I am, fortunate in being generously given a warm nook in the sun for my old age.

Dr. William T. Councilman, my teacher in pathology, told me in 1923, "When you retire, the fun is to choose a small field and cultivate it intensely." That is what I am doing in studying the comparative neurology of birds. It is not, however, so narrow a field as one might think. It can become global in its scope, as this story will show you. The tale is entitled "Instead of the cross, the albatross around his neck was hung."

In April, at the end of a talk in Washington on comparative anatomy, I took the occasion to ask my cosmopolitan audience if they could help me fill out my collection of avian brains. I enumerated several desiderata, among them an albatross. A doctor connected with the Navy told me that at the Midway Islands albatrosses were so abundant that they were a hazard for the aeroplanes landing and taking off, and that there was a biologist there, working on the problem, who could easily get me a brain. So I wrote the biologist, asking him to preserve for me two albatross heads by fixing them in formalin solution; when hardened, he could wrap them in cellophane and send them to me by mail.

I heard nothing until Saturday, August 6. I was, as they say, "relaxing on Cape Cod" when the telephone rang at about noon, and the operator read me the following telegram:

> "NAVY OVERSEAS AIR CARGO TERMINAL, 010401Z YOUR ACTION, INFO: / BUREAU AERONAUTICS, WASH. D.C. / OFFICE NAVAL RESEARCH, WASH. D.C. / FISH AND WILD LIFE SERVICE, DEPT. INTERIOR WASH. D.C. / CITE SE-3 M.G.S. 231958Z x/ TWO CRATES LIVE ALBATROSS DEPT. SANFRANCISCO VIA AIRBORN FREIGHT THIS DAY / BY GOVERNMENT BILL LADING N-33007299 AIRBORN AIRBILL SFO 873981".

After a couple of repetitions of this cryptogram, it was borne in upon me that I was the possessor of two live albatrosses in "Wash. D.C." Action seemed imperative, for I feared these great birds did not travel well in crates. Moreover, the relaxed state of the people of the eastern seaboard on an August Saturday afternoon did not help communications; but I bravely started warming the telephone wires. An ornithological friend at Woods Hole (called in from the beach) told me to get in touch with the head of the Washington Zoo—that he loved albatrosses. Contact was fortunately made with him shortly after lunch, and he was eager to go right over to the Air Cargo Terminal and get the birds. He said they probably would not survive long in crates, so I urged him to take them to his Zoological Park and keep them.

Success seemed to have crowned my efforts. I heaved a sigh and took a short nap. An hour later, however, he called back from the airport, saying he could not find the crates and "Please repeat those numbers." Ten minutes later, I was summoned again to the telephone by a call from Boston. A voice with a rich Irish brogue said, "Say, Doc, this is the Air Freight Terminal at Logan. There's two crates of queer fowl just arrived here in your name. It's three-thirty and we close at four-thirty. What'll I do with 'em?" After some discussion, I said, "Load them in a taxi and send them to the Boston Zoo. I'll telephone the Director." Answer: "No taxi would hold one of 'em. There's two monstrous birds in each crate. I'll have to get a truck." More haggling. Finally, "All right, I'll pay the bill, but you get them there!" Then a search for the Director of the Zoo. When at last located, he agreed to wait and accept the gift. But the express did not deliver the goods until Sunday morning.

Monday I drove to Boston. The albatrosses seemed altogether too tame and a bit droopy. The Director was worried. He had had no experience with albatrosses, and although he had telephoned Washington for instructions and had given them salt water to drink, they looked sick. We decided to send them back to Washington, because the Director of the Zoo there wanted them and thought he could save them. . Off they went by air. Alas, if the poor birds had only been allowed to use their own wings they would have fared better!

Then I went down to my office in the M.G.H., and found a letter which was the payoff! It was from Washington, and read in part: "Since the personnel on the Island have neither the training nor equipment for preparing the specimens you requested, live albatrosses will be sent you. . . . You will be expected to bear the cost of shipment from the West Coast to Massachusetts."

Epilogue: Two of the birds died and I finally got their brains. As far as the bill is concerned, I am still two jumps ahead of the shore patrol.

And now the address by Dr. Seymour S. Kety:

We have gathered today, from many parts of the country, to help dedicate the new laboratories for research in psychiatry at the Massachusetts General Hospital—laboratories which honor a man and continue a concept which he developed. The laboratories are bright and new and well equipped. Much more important, they house creative minds and support their research. Dr. Cobb, the man whose name they honor, has a place in the history of American psychiatry and in the admiration and affection of those who know him, which I cannot embellish.

The concept which these laboratories fulfill was developed by him in the nutrient atmosphere and upon the precedents which have always characterized this hospital, its staff, and its trustees. As long ago as 1890, there were established at the McLean Asylum (the psychiatric branch of the Massachusetts General Hospital), three laboratories for psychiatric research—physiological, biochemical, and psychological. It is interesting and perhaps more than accidental that the first disciplines to become established in the Stanley Cobb Laboratories are physiology, biochemistry, and psychology. The concept of which I should like to speak, however, was that of establishing a department of psychiatry in the midst of an active general hospital and doing so at a time when "mind" and "body" were forcibly separated in medical thinking as were "organic" and "functional", and by this very act fulfilling a determination to weave them together in study as they were integrated in nature.

There was another aspect to this concept—the recognition that research was possible and necessary in a field which has too often been forced to depend upon clinical impressions, the development of insightful and plausible theories and their doctrinaire espousal, rather than their critical evaluation. In the first edition of his *Preface to nervous disease,* written nearly 25 years ago, Dr. Cobb discussed the gap which lies between the clinical phenomena of psychiatry and the fundamental mechanisms upon which they are based: "It is here that research must be carried on for many years in order that block after block of facts may be built up to explain the observations and to support satisfactorily the theories now promulgated in psychiatry and in psychology. Many of these theories are probably correct. Indeed, correct explanations are often discovered years before proof is available. Charcot, Freud, Janet, and Prince seem to have hit on truths, but at present their theories have little support in scientifically controlled observations. They can present little data that would be accepted by a physicist, or even by a physiologist, as sufficiently controlled; but at present the data of physics are so unlike those of psychiatry that similarity of method is not to be expected. This is no reason for saying, however, that accurate, controllable methods never can be applied to the observations of human behavior; it is because the science of psychiatry is young that it seems too complex for quantitative analysis. All sciences pass through an infancy in which qualitative analysis alone is possible."

There is yet another face of that concept which has characterized his work and the philosophy of his department—a true eclecticism which stems from the open-mindedness, the freedom from dogma and prejudice, and, above all, the humility, which appreciation of the complexity of the field and the inadequacy of present knowledge engenders.

Today, two decades later, one cannot overemphasize eclecticism. Psychiatry, in common with other disciplines which couple vast areas of ignorance with a profound and pressing need for knowledge, suffers from a tendency toward oversimplification. The principle that there is no division between psychiatry and the other branches of medicine carries with it the danger that the unique organizational complexity of the nervous system may be forgotten. The recognition that the brain is merely a physico-chemical system can lead to the attractive but erroneous conclusion that therefore physics and chemistry are the *real* sciences of behavior, while psychology and sociology are merely empirical, descriptive, and derivative, to be tolerated as a sort of first-aid manual—"What to do until the biochemist arrives".

I should like to illustrate the danger of such an attitude with a parable which I have told before but which seems a fitting way to close a postprandial peroration. It is entitled "The true nature of a book".

Somewhere in the South Pacific there is an island inhabited by a people of high intelligence and well-developed civilization, except that they had never seen a book—having developed other means for the transmission of knowledge. One day a ship laden with nearly a million books is wrecked near by and thousands of cases of these exotic objects are washed up on their shores. This arouses so much curiosity and consternation that the people decide to set up a scientific institute to study them. They set up this institute by scientific disciplines and establish a policy that each scientist may examine these objects only with the tools and techniques and concepts which are characteristic of his discipline. The first laboratory to be organized is the laboratory of anatomy. They study these strange objects for a while and their conclusion reads like this: "The specimen is a roughly rectangular block of material covered ventrally and dorsally with two coarse, fibrous, encapsulated laminae approximately 3 millimeters thick. Between these lie several hundred thin, white lamellae, a fraction of a millimeter thick, all fixed at one end and mobile at the other. On closer inspection of a few of these, they are found to contain a large number of black surface markings arranged in linear groupings in a highly complex manner."

By that time the chemists have appeared on the scene. The first chemist to get hold of a specimen burns it and satisfies himself that it obeys the law of the conservation of matter and is therefore in his province. Next comes the analytical chemist, who breaks it down into a number of pure compounds—he also reports traces of elementary carbon which he feels are probably impurities. Then come the biochemists, who slice the book and mince it and, best of all, homogenize it (because on the slices and the mince they can still see those black contaminants and the homogenate can be centrifuged to remove them, permitting them to work with a pure system). But all of these chemists have an uncomfortable feeling that though what they are doing is important, the real answers will come from the fellow down the hall who has just arrived and is still polishing his bright and expensive equipment—the molecular biologist.

With the self-confidence which comes from the adulation of the less fundamental sciences, he is anxious to begin work on the copy he has selected because someone has told him that it is biased and distorted. Having hung a sign over his door which reads "No twisted book without a twisted molecule", he proceeds to search for it. By repeated extraction, centrifugation and, sometimes, ultracentrifugation, electrophoresis, hydrolysis, and repolymerization, he finally isolates a pure substance, free of the carbon particles, and what is even better, a macromolecule, and a twisted one at that. His version of the fundamental nature of the book is a molecular model of cellulose.

Simultaneously, the physiologists have been attacking the subject. They have read the report from the anatomists and proceed to study and speculate upon why and how the pages are attached on one side. They study the movement of the pages as the book is riffled, and derive complex equations to describe it. Then a biophysicist discovers that in an appropriate electrostatic field, the graphite deposits produce discontinuities in potential. Fine microelectrodes are developed to pick these up, and amplifiers and oscilloscopes to display them. They discover by sticking these electrodes into the book in various places that those which do not break off will pick up signals, some of which are reproducible. They develop thousands of tracings of these signals and call in the cyberneticist to help them uncode them. The signals are recorded on miles of magnetic tape and fed into huge computers. Excitement mounts when in a particular region extending over a few millimeters in a certain book, one of them discovers on a particular day that, for a few minutes before he damaged the source of the signals, a tremendously complex pattern appeared which was reproducible but incomprehensible. But this is fed into the data reducers and the computers, which can generate and test thousands of hypotheses per minute. Finally, the electric typewriter begins to print —a meaning has been found in that complex pattern. It reads "THE".

By this time the behavioral scientists have been admitted to the institute and begin to study the problem. They are a strange lot. Some of them have read the reports of the anatomists, the chemists, and the physiologists, but many of them don't seem to care. Most will admit, if pressed, that the book is material in nature, obeys material laws, that it and its contents are nothing more than a highly specialized arrangement of chemical substances. But they don't slice the book, and they don't purify the chemical substances—in fact, they seem to feel that it is improper to do so. Instead, they ask questions peculiar to their discipline and look in the book for the answers. The first one likes to count, so he counts the number of letters in hundreds of samples of words and derives a frequency distribution of the words by their length. He finds a preponderance of 4-letter words and forms a hypothesis that the book is a modern novel, and ventures a prediction that it will be a best seller and also banned by the Postmaster General. Then he looks for particular words and counts them and confirms the hypothesis. His colleagues join him, asking other general questions and finding their answers in the content of the book. They learn a great deal about classes of books, how they differ from one another and of their effects on the community. Although he has learned much about the nature of books—more in certain areas than the physical scientist, his techniques falter in the area of the individual book, its characteristics, and his ability to make entirely reliable predictions about it. If it is important to learn something about the individual book, then there is need for a technique which can read it completely. Such a technique has not yet appeared, but some progress has been made in its development. The book is brought in desperation to the psychoanalyst in the hope that he will be able to read it. Well, actually he doesn't, but he asks the author to select portions and read them while he listens. Of course, the author is biased and he reads what he wants to read, or, if there is "good transference", those passages which he thinks the analyst would like to hear. And the analyst himself doesn't always hear with equal acuity, but, depending on his school or on his preconceived notions, is deaf to greater or lesser portions of the data. Nonetheless, this anecdotal, biased, and unverified patchwork may be the closest approximation which we have to the rich and almost inexhaustible fund of information which reposes in the individual human brain and, to a significant extent, determines individual behavior. Like all scientific methodologies, this one was not born perfect and complete, and much remains to be done to perfect its usefulness in research and to validate and improve its therapeutic efficacy.

If it be felt that I have attached increasing values to the disciplines as I have enumerated them, I have done so only to counteract a hierarchical tendency in the opposite direction which I fear exists today. There are no better or worse, no higher or lower disciplines, except with respect to their relevance to particular problems. If a book fulfills its functions poorly by virtue of being badly bound, or because of inferior paper, ink, or glue, the anatomist or the chemist may eventually discover it and quite possibly make it right. In the case of the brain, the biological disciplines have made and will continue to make remarkable progress toward understanding its structure, its metabolism, its functional interrelationships and the mechanisms which underlie behavior, and have solved or will make possible the understanding of those mental disorders in which these functions are significantly defective. But in the area of information, content, and experience, stored as it is in the complex interrelationships of 13 billion neurons, biology is most pretentious if it thinks it can unravel most of the answers by means of its tools alone. There will undoubtedly some day be a biochemistry or a biophysics of memory—but hardly of memories.

It is that concept of psychiatry—monistic, heuristic, and eclectic—which has enabled Dr. Cobb to pursue productively the study of neuropathology, of cerebral circulation, psychosomatic disorders, the rhinencephalon, emotional states, and social psychiatry. It is that concept which guides Dr. Lindemann and his present department, with its broad range of interest and research and its versatile members who move comfortably between psychodynamic theory and the precise and objective areas of neurochemistry and neurophysiology. One has seen those principles become the guiding force in the establishment of other departments of psychiatry and institutes of psychiatric research; and in these days, Dr. Cobb can see that concept becoming the cornerstone of American psychiatry.

The factors which produce mental disorder were never taught to belong to a single discipline nor conform to a single school; the future of psychiatry lies in the integration of many disciplines and various approaches, each with its own values, its unique concepts and techniques, and its special limitations.

"But if our study of neurocirculatory asthenia has taught me anything, it is that one must take a pluralistic point of view toward etiology and realize that many factors combine to bring about the concatenation of events which precipitates a clinical syndrome." [From a paper read by Dr. Cobb at the dedication of the Laboratory for Biochemical Research at McLean Hospital, May 17, 1946.]

* * *

MULTIPLE SCLEROSIS RESEARCH

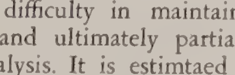
An MS Hope Chest check for $5,680 has been presented to Dr. Dean A. Clark on behalf of the National Multiple Sclerosis Society by Mr. Arnold Cutler, Chairman of its Boston Chapter, for support of the research being carried on at M.G.H. by Dr. Byron H. Waksman, Associate Bacteriologist in the Department of Neurology here at the Hospital. This is the first payment on a multiple sclerosis grant totalling $11,361 for the year.

Dr. Waksman will carry on his investigations in association with Dr. Raymond D. Adams, Chief of our Neurology Service. In the course of this project, Dr. Waksman will investigate certain naturally occurring and experimental animal diseases which resemble multiple sclerosis and related conditions. In particular, he will study the character of diseases produced by allergic reactions to various viruses growing in the brain. Such allergic reactions are known to be capable of producing demyelination, which is a characteristic feature of multiple sclerosis.

Multiple sclerosis is considered one of the major diseases in which demyelination occurs. Demyelination is the destruction of, or damage to, patches of myelin — a fatty substance which appears to insulate the nerve fibers of the central nervous system somewhat like the insulation on an electric cord. It is hoped that Dr. Waksman's research at the Hospital will lead to a better understanding of the mechanism whereby myelin is broken down.

Multiple sclerosis is a progressive, crippling disease. It hits young adults mainly — those in the 20 to 40 age group. Its symptoms are many and varied. Some of the more common ones are defective vision, speech difficulties, extreme fatigue, tremors, difficulty in maintaining body balance, and ultimately partial or complete paralysis. It is estimtaed that more than 500,000 Americans are victims of MS and related diseases.

In presenting the check, Mr. Cutler said the money represented voluntary contributions to the MS Hope Chest by thousands of Americans in all parts of the country. The Chest finances vital research, such as Dr. Waksman's, all over the nation. It also helps to pay for MS clinics and services for MS patients and their families, Mr. Cutler said.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Endoscopy

Benedict, E. B.
Benign inflammatory postoperative esophageal stenosis.
Gastroenterology 39:285.

General Surgery

Barnes, B. A., Cope, O., and Gordon, E. B.
Magnesium requirements and deficits: An evaluation in two surgical patients.
Ann. Surg. 152:518.

Leadbetter, G. W., Jr., Duxbury, J. H., and Dreyfuss, J. R.
Absence of vesicoureteral reflux in normal adult males.
J. Urol. 84:69.

McDermott, W. V., Jr.
Postoperative liver failure.
In Complications in surgery and their management, Artz, C. P., and Hardy, J. D., Editors, Philadelphia, W. B. Saunders Co., chapter 14.

Waddell, W. R., and Field, R. A.
Carbohydrate metabolism in atherosclerosis.
Metabolism 9:800.

Laboratory Science

Morgan, W. S., von der Decken, A., and Hultin, T.
Amino acid incorporation into interior protein sites by purified rat liver systems.
Exp. Cell Res. 20:655.

Medical Science

Smith, L. H., Jr., and Sullivan, M.
Feedback inhibition by fluorinated pyrimidines.
Biochim. biophys. acta 39:554.

Smith, L. H., Jr., Sullivan, M., Baker, F. A., and Frederick, E.
Inhibition of dihydroorotase in pyrimidine biosynthesis.
Cancer Res. 20:1059.

Orthopedic Surgery

Cave, E. F.
Surgery of the chronically disabling knee.
Bull. New York Orthopaed. Hosp. 4: no. 2, p. 2.

Plastic & Reconstructive Surgery

Cannon, B., and Peacock, E. E., Jr.
Medical progress—Plastic Surgery: The hand
N. Eng. J. M. 263:184, 238.

Books

Benda, C. E.
The child with mongolism.
New York, Grune & Stratton, Inc.

Thoma, K. H., and Goldman, H. M.
Oral Pathology, ed. 5.
St. Louis, C. V. Mosby Company.

Thoma, K. H., and Robinson, H. B. G.
Oral and dental diagnosis, ed. 5, Philadelphia, W. B. Saunders Company.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Ballantine, R. I. W.
General anaesthesia for neurosurgery.
Boston, Little, Brown and Company, 1960.
(22Ea)

Barton, R. T.
Religious doctrine and medical practice.
Springfield, Ill., Charles C. Thomas, 1958.
(6H)

Beecher, H. K. (Editor)
Disease and the advancement of basic science.
Cambridge, Mass., Harvard University Press, 1960.
(8A)

Ciba Foundation.
Ciba Colloquia on endocrinology, vol. 13. Human pituitary hormones, edited by G. E. W. Wolstenholme and C. M. O'Connor.
Boston, Little, Brown and Company, 1960.
(14L)

Ciba Foundation.
Symposium on congenital malformation, edited by G. E. W. Wolstenholme and C. M. O'Connor.
Boston, Little, Brown and Company, 1960.
(25L)

Clifton, C. E. (Editor)
Annual review of microbiology, vol. 14.
Palo Alto, Annual Reviews, Inc., 1960.
(9A)

Davidson, J. N.
The biochemistry of the nucleic acids, ed. 4.
London, Methuen & Company, Ltd., 1960.
(5A)

Matthes, K., and others. (Editors)
Der Ultraschall in der Medizin.
Zürich, S. Hirzel, 1949.
(9As)

Page, L. B., and Culver, P. J.
Syllabus of laboratory examinations in clinical diagnosis.
Cambridge, Mass., Harvard University Press, 1960.
(7D)

Rauch, S.
Die Speicheldrüsen des Menschen; Anatomie, Physiologie und klinische Pathologie.
Stuttgart, George Thieme, 1959.
(14K)

Raven, R. W. (Editor)
Cancer, index vol.
London, Butterworth & Co. (Publishers) Ltd., 1960.
(13V)

Report of the study for the Ford Foundation on policy and program.
Detroit, The Ford Foundation, 1949.
(1Af)

Soulas, A., and Mounier-Kuhn, P.
Bronchologie; technique endoscopique et pathologie tracheo bronchique, vol. 1.
Paris, Masson et Cie, 1956.
(7P)

The 114th anniversary of Ether Day was observed on October 17. There was the customary awarding of service pins for 5, 10, 20, and 30 years of continuous service at the Hospital, with Dr. Clark presiding and helping with the distribution of the pins. Nearly 200 were given out, including 5 to our doctors who have served the Hospital continuously for 25 years. The 30-year group was unusually large this year, numbering 14.

Mr. Ralph Lowell, a member of our Board of Trustees, brought greetings from the Board; Dr. Clark gave a brief history of the Hospital; Miss Carrol S. Cox, R.N., a mezzo-soprano, gave us a sample of her lovely voice with two songs by Rodgers and Hammerstein, Mr. Harvey Davies accompanying her at the piano; and with a showing of the MGH film, "A watch in the night", and refreshments, the program came to a close.

We have left till the last to mention what many may feel was the most outstanding feature in this year's observance of Ether Day. A sizeable group of women who graduated from our School of Nursing 50 years ago were asked by Dr. Clark to rise. The applause they received was lengthy and hearty.

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VOLUNTEER GROUPS

MGH Staff Wives Association

About one hundred seventy-five people came to Walcott House to attend the Staff Wives Association Tea, given on November 1 for our visitors from other lands. The guests included doctors and wives, technicians, secretaries, nurses, and fellowship holders from Australia, Austria, Belgium, Canada, Denmark, Egypt, England, Germany, Hungary, India, Israel, Japan, Korea, Norway, Scotland, and South Africa.

Perhaps because of the cold and inclement weather outside, the party seemed to take on a particular warmth of friendliness. The Walcott House living room provided a very pleasant setting, with flowers, silver, and an occasional bright sari adding to the gracious but informal atmosphere of welcome. People came and went from four o'clock until well after six, and both newcomers and old friends enjoyed the conversation and the refreshments.

Staff Wives who poured at the Tea were: Mrs. Charles B. Burbank, Mrs. Alfred Kranes, Mrs. Jackson M. Thomas, Mrs. Earle M. Chapman, Mrs. Joseph C. Aub, Mrs. Kurt J. Isselbacher, Mrs. Thomas B. Fitzpatrick, and Mrs. Leland S. McKittrick.

The Music Committee of the Staff Wives Association presented Mrs. Francis Friedman of Cambridge in a harp recital on the afternoon of November 2. It was the Committee's second concert this fall. Forty-three patients came to enjoy the unusual and delightful half-hour of harp music — twenty-three in wheel chairs and twenty who were ambulatory. With the addition of Hospital personnel and volunteers, an audience of at least seventy-five crowded the MGH Chapel.

The Staff Wives concerts are becoming increasingly popular, and this presents something of a problem, since the patients are brought from all over the Hospital — many in wheel chairs. There are faithful members of the Association who come to help with the transportation of patients, but additional volunteers would be more than welcome. If you can help in this regard, please inquire at the Staff Wives Reception Desk about dates for future concerts when you may be able to give assistance. The patients are most appreciative of this consideration of them.

Distaff Club

December 1 is the date for our annual gift-wrapping meeting. The gifts are for the MGH's Christmas Party for the employees' children.

On December 9 we will have our annual Christmas Party in the Penthouse. We are going to feature an "International" theme this year. The party is given for husbands and their wives, as well as for the bachelor members of the House Staff and their dates.

BIOGLETS

Dr. Khalil Abi-Torbey, Assistant Resident in Urology—born in Beirut, Lebanon, Dec. 3, 1929; on a competitory basis, appointed extern in the American University of Beirut Hospital, 1952; also on a competitory basis, appointed Intern (rotating), American University Hospital, 1953; Intern in Surgery, American University Hospital, 1954; Chief of the Surgical Clinic, American University Hospital, 1955; Resident in Surgery, New England Hospital, Boston, Massachusetts, 1956; Resident in Urology, Cleveland Clinic, Cleveland, Ohio, 1957; Clinical and Research Fellow in Urology, Massachusetts General Hospital, 1958-60.

Dr. David H. Alpers, Intern in Medicine—born in Philadelphia, Pennsylvania, May 9, 1935; A.B., Harvard College, 1956; M.D., Harvard Medical School, 1960.

Dr. Arturo L. Aranas, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in Lipa City, Philippine Islands, May 31, 1929; M.D., University of Santo Tomás, Manila, 1956; Intern (rotating), Memorial Hospital, Worcester, Massachusetts, 1956-57; Resident in Internal Medicine, Memorial Hospital, Worcester, 1957-58; Resident in Psychiatry, Charles V. Chapin Hospital, Providence, Rhode Island, 1958-60; Teaching Fellow in Psychiatry for one year, beginning July 1, 1960, Harvard College.

Dr. Peter V. D. Barrett, Intern in Medicine—born in Los Angeles, California, October 22, 1934; A.B., University of California at Los Angeles, 1956; M.D., Harvard Medical School, 1960; married.

Dr. Joseph R. Barrie, Intern in Surgery—born in Brooklyn, N. Y., August 22, 1935; B.S., Yale University, 1956; M.D., Harvard Medical School, 1960.

Dr. Irving D. Bornstein, Assistant Resident in Dermatology—born in Honesdale, Pennsylvania, June 8, 1931; B.A., University of Virginia, Charlottesville, Virginia, 1953; M.D., University of Virginia, 1956; Intern (rotating), Gorgas Hospital, Canal Zone, 1956-57; military service: Lieutenant, Medical Corps, USNR, Naval School of Aviation Medicine, USNA Station, Pensacola, Florida, 1957-58, and Flight Surgeon with Fleet Aircraft Service Squadron 105, at U.S. Naval Station, Roosevelt Roads, Puerto Rico, 1958-60; Staff Physician, Memorial Medical Center, South Williamson, Kentucky, March to June 1960.

New addresses:

Dr. Norman W. Andrew (r.p. *An.* 1956), Boston City Hospital, Boston, Mass.
Dr. Henry H. Brewster (*W.M.* 1940), University of Colorado Medical Center, Denver 20, Colo.
Dr. Henry N. Claman (r.p. 1958), 420 Rogers Ave., Glen Burnie, Md.
Dr. James H. Eldredge (a.r.s. *Or.* 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Jacqueline Gauthier (r.p. *Psychiat.* (*McL.*) 1959), Massachusetts General Hospital, Boston 14, Mass.
Dr. Anne F. Godley (*M.* 1949), 43 Hedge Rd., Brookline, Mass.
Dr. Volta R. Hall (r.p. *Psychiat.* 1938), 412 Beacon St., Boston, Mass.
Dr. James A. Halsted (*W.M.* 1932), University of Kentucky Medical Center, Lexington, Ky.
Dr. Timothy S. Harrison (a.r.s. 1959), Grace-New Haven Community Hospital, New Haven, Conn.
Dr. John A. Mannick (*S.* 1954), Hospital Division, Medical College of Virginia, Richmond, Va.
Dr. Samuel S. Mathews (*Or.* 1928), 8820 Wilshire Blvd., Beverly Hills, Calif.
Dr. Milton L. Miller (*E.M.* 1932), University of North Carolina School of Medicine, Chapel Hill, N. C.
Dr. Paul L. Norton (*Or.* 1933), Concord Medical Center, Concord, Mass.
Dr. George F. Reed (assoc. s. *Otolar.*), Salada Bldg., 330 Stuart St., Boston 16, Mass.

Brief bits:

Dr. Patricia H. Benedict attended the First International Congress of Endocrinology, in Copenhagen last July, and, with Dr. H. Robert Dudley, Jr. of our Department of Pathology and Dr. George Szabó of the Department of Dermatology, presented an exhibit entitled "Albright's syndrome (fibrous dysplasia)—endocrine features and pigmentation".

Dr. Bradford Cannon presented a paper on "Repair of cranial defects with bone" at the Pan-Pacific Surgical Association meeting, in Honolulu last September. In October he attended the meeting in Los Angeles of the American Society of Plastic and Reconstructive Surgery, of which he is Vice-President, and then went on to San Francisco, where he spoke at a panel on "Facial injuries" for the American College of Surgeons.

Dr. Gordon L. Brownell has assisted in the Isotope Committee Lecture Series here at the Hospital. He directed the AEC-NSF Summer Institute in Radioisotope Techniques at M.I.T., and assisted in organizing the American Cancer Society meeting on Research in Radiotherapy at Madison, Wisconsin.

Dr. Oliver Cope gave two lectures at the Symposium on Surgery of Endocrine Organs, at the New York University Medical Center in November. His subjects were: "The metabolism of calcium, phosphorus, and magnesium: Tests of parathyroid function", and "Surgery of the parathyroids".

Dr. James H. Currens participated in a program sponsored by the Illinois Heart Association, at Mattoon, Illinois, on October 6. and spoke on "The treatment of myocardial failure".

Dr. Ralph Hawkins (r.s. *N.S.* 1948) of Palo Alto, California, treated us to a nice visit here at M.G.H. last October.

Dr. Oscar Hirsch was invited by the Hitchcock Clinic Medical School at Hanover, New Hampshire, to give a lecture last October 18 on "Pituitary tumors".

Dr. Lloyd H. Smith, Jr. attended the First International Congress of Endocrinology, in Copenhagen, last July.

Dr. Jack E. Tetirick (*S.* 1952) of Columbus, Ohio, flew to Indonesia late in October to participate in Project HOPE. Dr. Tetirick will live aboard the S.S. *Hope* for two months. When his team returns home, another will replace it. We wonder if the names of other MGH-ers, besides those of Dr. Spangler and Dr. Tetirick, will appear on the roster of Project HOPE.

Five recent graduates of the MGH School of Medical Illustration attended the annual meeting of the Association of Medical Illustrators, held in Chicago last October. After a 3-day program of seminars and workshops, an MGH reunion was arranged.

Dr. Robbins received this interesting letter, a few weeks ago, from Dr. K. Jack Momose (clin. fel. *R.* 1956). It is headed Department of Radiology, Ottawa General Hospital, Ottawa 2, Ontario, Canada, and reads in part:

> As much as I wanted to stay in Europe a month longer, I finally had to return to Canada, since I had promised to work with Conway Don (clin. fel. *R.* 1957) for a year in Ottawa.
>
> I started out on this trip to Europe with the idea of seeing the many centres of radiology during a period of about six months. As you see, it turned out to be almost a year. By taking this position in Ottawa, I was able to stay in Europe several months longer.
>
> As for the trip — I think that I saw and learned a considerable amount. Since I went as a postgraduate student, I was able to get in at the "back door" of many of the centres. On the other hand, as I had already worked in radiology in all its phases for over six years in some of the best institutions, I felt that I was able to evaluate and incorporate the different approaches and methods which I encountered. I think my four objectives were to learn more neuroradiology, see more special techniques in general radiology (especially catheter work), see different views of radiotherapy, and to assess the various training methods for student radiologists. (Of course, I also went as a tourist to see and learn about the different countries.) I believe I was able to fulfill most of these objectives.
>
> I spent most of my time in London, in order to learn as much as I could about neuroradiology at Queen Square. I spent over seven months there. In comparison with the method taught at the Montreal Neurological Institute, where I had spent about three months last year, I found the methods there in London quite different. I think the Swedish technique which is followed over there has an edge over the Montreal technique. However, I think some of the technique which is employed in Montreal can well be incorporated into the Swedish method. I think the main strength of Queen Square in neuroradiology is due largely to the rich collection of material they have stored away there. I felt that I learned more by going through literally thousands of cases of certain conditions than from just watching the routine work. Another power in that place, which calls for good work in neuroradiology, is the clinical staff with its many stimulating minds. They tend to ask for, and spur on, research in neuroradiology. I found the director, Dr. Hugh Davies, to be the most underrated neuroradiologist in England and in the neuroradiological world. Although he makes suggestions and helps out a great deal whenever someone is writing a paper, he seldom places his name on the paper. He is a most kind and helpful person.
>
> I was able to spend one or two days each week, over a period of six months, with Dr. Steiner at the Hammersmith postgraduate school hospital. He kindly made me an honorary clinical fellow so that I could watch and do some things there. In addition, I was able to visit most of the teaching hospitals in London, such as the Middlesex, University College Hospital, St. Bartholomew's, St. Thomas's, St. Mary's, etc., and all the specialty institutions, such as the Brompton Hospital for Chest, National Heart Hospital, Orthopaedic Institute, Dental Institute, Ear, Nose, and Throat Institute, etc. I also visited the diagnostic and therapeutic centres in Bristol, Manchester, Edinburgh, Newcastle upon Tyne, Oxford, Cambridge, Birmingham, etc. I took the visitors' course in radiotherapy at the Royal Marsden (Professor Smithers) and the special course of Professor Paterson at Manchester. I must say that it was all very stimulating and interesting, although on the diagnostic side I thought they were moderately behind in several branches.
>
> I then spent about seven weeks in the Scandinavian countries. Radiology in Sweden and Norway was an eye opener. Radiology in Sweden, I was always told, is about five to ten years ahead of any other country. In many ways, it certainly is — especially in diagnostic radiology. I wish that I could have stayed much longer there. I did see more neuro-

No. 93 in a series of Staff photographs

Dr. Alexander Leaf, M.D., Associate Physician — Chief Cardiovascular Investigator

radiology and the many catheter techniques which they had developed there. The radiology department seems to be one of the most important departments in a Swedish hospital. They tended to give an exact diagnosis whenever possible, thus making the clinicians' work much easier. The diligence of the Swedish people amazed me. While the consultants in England came to work at about nine to ten o'clock, the Swedish staff came to work between six-thirty and seven-thirty. It also seemed to me that they often went home at about six o'clock during the week and as late as three o'clock on Saturdays.

In England, the lack of money seems to be holding the hospitals back from expanding and from using more modern equipment. However, they were beginning to remedy this and some renovations were being started. What the English did in diagnostic radiology was good, but they seldom incorporated any outside ideas except some of the Swedish methods in neuroradiology and catheter techniques.

When I first went to England I had no intention of taking any examinations, as I wanted to see everything and would have no time to study. However, the people in England are so proud of their hard-earned degrees, which they get after several attempts on the average, that they tend to scoff at any degrees earned in other countries. People used to ask me at what level of training I was. I told them that I had my American Boards in Radiology and my Canadian certificate in both diagnosis and therapy. They then would automatically place me at about their D.M.R.D. level or lower. I encountered this feeling several times during my visits to different places. I therefore asked one of the senior registrars at Queen Square what my chances were to write the F.F.R. He looked surprised and asked if I had written my D.M.R.D. of London. I told him I already had my D.M.R. from Toronto University, but better yet my American and Canadian specialty boards. He gently suggested that I had better try the D.M.R.D., since the F.F.R. was beyond my reach — or at least he inferred it. (He had already tried and didn't make it.) This annoyed me all the more. When I then applied at the Faculty of Radiology, they were very nice but more or less took the same attitude, stated that the D.A.B.R. was about their D.M.R.D. level, but, as I had done about five years of diagnostic radiology, they would ask their warden about this at the next meeting and would let me know. They finally granted me permission to write the examination, but somehow all this annoyed me, since I thought our training was superior to their D.M.R.D. level. At any rate, I got hold of some of their old examination papers to see what the gist of their questions was. The exam consisted of six hours of writing on diagnostic radiology and three hours each in surgery, medicine, and pathology, all of which took about four days. After a gap of two weeks, during which they corrected the papers, I had orals in each subject, which lasted about a week. Two people fire questions at you at each oral. One is a specialist in his field (pathologist, internist, and surgeon), and the other a radiologist in either diagnosis or therapy. Finally, two radiologists from different parts of England showed me about a dozen X-ray films, covering the various branches of radiology, and asked many questions. Fortunately, I passed, and I considered myself lucky, as they let through only five candidates out of about 28.

I guess I could go on and on, but I had better stop now. I think that radiology has a great future and can contribute tremendously to, and even lead in, the field of medicine and attain the high level that the main centres in Sweden have been able to reach. As Professor Hodge once said at A.F.I.P. when I was a fellow there, after he had returned from a trip to Sweden, "If I were only twenty-five years younger. . . . What a future radiology has. . . . A vast new investigative field seems to be opening in X-ray and it would be so good to be in it!" I must say that I agree with him wholeheartedly. After seeing the X-ray departments in Sweden, one can imagine all kinds of things one can do. Not only that, but after seeing some of their work, one feels proud to be a radiologist.

Please give my regards to the people I know at M.G.H.

A brief letter from Dr. Paul E. Spangler (*W.S.* 1925), Senior Medical Officer on the S.S. *Hope,* appeared in the November issue of The News. Soon afterward we were delighted to receive this interesting and detailed report of Dr. Spangler's activities from Mrs. Spangler:

Dr. Spangler sailed as Senior Medical Officer with the S.S. *Hope* on September 22 and was due to arrive at Djakarta, Indonesia, on October 19. I enclose two clippings that tell briefly of the ship's return to San Francisco, late in August, after overhaul in Seattle, and of the first operation performed on the ship after it sailed, and before it had even reached Honolulu.

Dr. Spangler entered the United States Navy as a captain in the Medical Corps in July 1947. He had been on active duty with the Reserve for four years. He was stationed at the old Pearl Harbor Hospital on December 7, 1941; and it was he who performed the first operation of World War II, on one of the casualties wounded by flying shrapnel. After being stationed in the Hawaiian Islands for three and a half years, he went to the hospital ship *Repose*—a sister ship of the *Consolation*—now the S.S. *Hope.* He returned to private practice in Portland, Oregon, for a year, and then applied for a commission in the regular Navy.

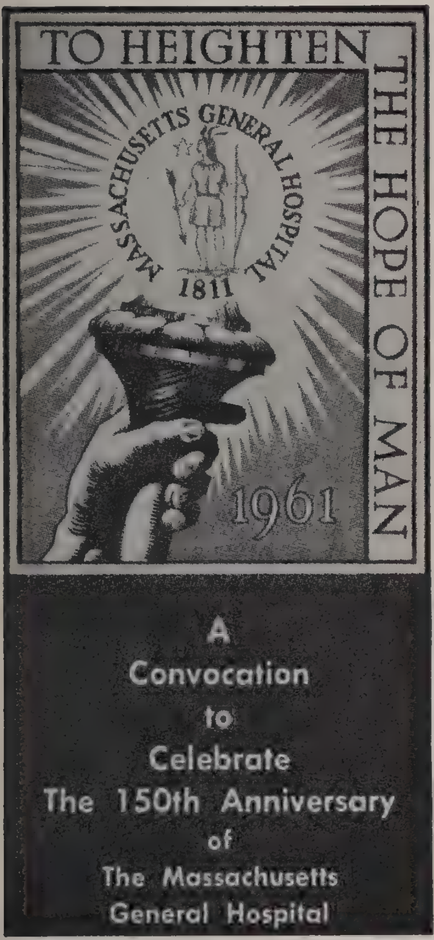
His first duty station was at NAS, Corpus Christi, as Chief of Surgery and then Executive Officer from 1947 to 1949. Then he was sent to the Postgraduate School at the University of Pennsylvania Medical School for a course in surgery which qualified him for the American Board of Surgery. He then served as Chief of Surgery at the Naval Hospital, Portsmouth, Virginia, for three years. In July 1953 he was sent to the U.S.N. Postgraduate School at Monterey, California, as Senior Medical Officer. He held this post for four and a half years. Then he was transferred to the Naval Hospital at Oakland, California, as Senior Medical Member of the Physical Evaluation Board, which post he held until he retired from the Navy on July 1, 1959. However, he had already become interested in Project HOPE, and was signed on in September of 1959. An office was opened in April 1960 at the Stanford Medical Center, Palo Alto, California, but this was closed before the ship sailed.

A dedication ceremony and flag raising was held on September 13, with Vice-President Nixon as speaker. The ship was then moved from its berth at Hunters Point to Pier 50, from which it sailed on September 22. The project is to last a year, with six months in Indonesia and then four months in South Viet-nam. It is hoped that a fleet of hospital ships will follow the example set by the S.S. *Hope.*

Further information on the project may be obtained from the Washington Headquarters, Project HOPE, 1818 M Street, N.W., Washington, D.C.

THE NEWS

No. 200 Boston, Mass. January 1961


TO HEIGHTEN THE HOPE OF MAN
MASSACHUSETTS GENERAL HOSPITAL
1811
1961
A Convocation to Celebrate The 150th Anniversary of The Massachusetts General Hospital

"The Massachusetts General Hospital will observe its 150th birthday in 1961." When the first public announcement of this great milestone in the history of the third oldest voluntary nonprofit hospital in the United States was made nearly two years ago, it conveyed different connotations to different people. To many it was an announcement of an interesting, historical event yet to come; in others, it aroused a curiosity about the origin and history of the Hospital; and in still others it intensified an awareness of the responsibilities that such a heritage imposes upon those entrusted with the future development of this great and venerable institution.

Preparations for the Anniversary have been going on for many months, with nearly 500 people working on the program. And now—suddenly—it is 1961, and on January 31, and February 1 and 2, a three-day Convocation will inaugurate the 150th Anniversary Year of the Massachusetts General Hospital.

The M. G. H., which since its founding has been the main teaching hospital of the Harvard Medical School, received its charter of incorporation from the Massachusetts Legislature on February 25, 1811. The first patient was admitted to the historic Bulfinch Building, which is still in use, in 1821. The McLean Hospital, our psychiatry division, was opened in 1818—the fourth hospital for the mentally ill in America.

The Convocation has been organized round the theme

TO HEIGHTEN THE HOPE OF MAN

The first day, January 31, will be devoted to a series of symposia on areas of medical science in which the Hospital has been making notable contributions, and on nursing. A variety of panel discussions during the next two days, February 1 and 2, will cover such subjects of general interest as patient care, public health, medical economics, and medicine of the future.

Among the participants will be the Secretary of Health, Education and Welfare, Arthur S. Flemming; Dr. Leroy E. Burney, Surgeon General of the United States; Senator Lister Hill of Alabama; Dr. Leona Baumgartner, New York City Commissioner of Health; Dr. Isidor S. Ravdin, Vice President for Medical Affairs of the University of Pennsylvania; Dr. Paul Dudley White, Honorary Physician to the Massachusetts General Hospital; Dr. Ancel Keys, Professor at the University of Minnesota School of Public Health; Miss Daisy C. Bridges, General Secretary of the International Council of Nurses, London; James E. Stuart, President of the Blue Cross Association; Dr. Howard A. Rusk, Chairman of the Department of Physical Medicine, New York University Medical Center; The Rajkumari Amrit Kaur, former Minister of Health of India; Dr. Rene J. Dubos of the Rockefeller Institute, New York; Dr. John Roderick Heller, Jr., President of Memorial Sloan-Kettering Cancer Center in New York City; Dr. Nathan M. Pusey, President of Harvard University; Dr. Julius A. Stratton, President of the Massachusetts Institute of Technology; and Dr. George Packer Berry, Dean of Harvard Medical School.

The MGH House Pupils Association (former residents and interns of the Hospital) and the School of Nursing Alumnae Association have chosen, by secret ballot, their outstanding living members for recognition during the Convocation.

Several of the world's great hospitals and medical institutions will send representatives to receive 150th Anniversary citations and medals at the Anniversary Banquet on February 2 at the Sheraton-Plaza Hotel.

Nationally known individuals will be the main speakers at the banquet and at general luncheons on February 1 and 2. Their names will be announced at a later date.

MGH Trustee John E. Lawrence is Chairman of the Convocation. United States Attorney Elliot L. Richardson, and Edward A. Weeks, Editor of *The Atlantic Monthly,* are Vice Chairmen in charge of speakers and panels. H. D. Hodgkinson, Chairman of the Board of Filene's, heads the publicity committee, and Gerald W. Blakeley, Jr., Vice President of Cabot, Cabot and Forbes, is responsible for arrangements.

Dr. Paul Dudley White is Chairman of the doctors' committee, arranging the scientific symposia. The nursing panels were planned by a committee headed by Miss Ruth Sleeper, Director of our Nursing Service and the School of Nursing.

Other members of the Convocation Committee are the Rt. Rev. Henry K. Sherrill, retired Presiding Bishop of the Protestant Episcopal Church in the United States of America, Honorary Chairman, and MGH Trustee Francis W. Hatch, a Co-Chairman, of the 150th Anniversary Program; Dr. Dean A. Clark, General Director of the M. G. H.; Dr. Edward D. Churchill, Chief of the General Surgical Services; and David C. Crockett, Executive Director of the Program.

Seven scientific symposia will be conducted in the Hospital during the Convocation. The subjects are "Precision in surgery"; "Atherosclerosis"; "Genetic disorders of endocrine glands"; "Connective tissue and certain of its diseases"; "Frontiers in cancer research"; "The study of cell structure in nervous disease"; and "Rhythmic activity of tissues".

Subjects of the nursing symposia, to be held at the Museum of Science, are "The evolving role of the nurse"; and "Nursing education for the future".

The general panels will be on February 1 and 2 at the Sheraton-Plaza Hotel. The subjects will be "The hospital and the community"; "Financing medical care"; "International health"; and "Medicine of the future".

A clinical pathological conference, now a standard feature of medical education which was "invented" at the Massachusetts General Hospital fifty years ago, will be conducted at the Hospital on January 31.

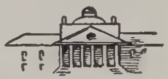
Many activities of a social and scientific nature will be taking place not only in conjunction with the Convocation, but throughout the Anniversary Year, as well; and special exhibits, prepared under the direction of the 150th Anniversary Hospital Participation Committee, will depict past achievements, present accomplishments, and future plans of the Massachusetts General Hospital.

* * *

Irvin H. Blank, Ph.D. has been recognized by The New York Academy of Sciences with the honor of Fellowship in the Academy. This honor is in recognition of the achievements of Dr. Blank's work in science. Fellowship in this Academy is awarded to a member who has attained outstanding recognition for scientific achievement or for the promotion of science, and is accordingly recognized as an honor in the world of science.

Dr. Frederic M. Blodgett (*C.M.* 1946), Assistant Professor of Pediatrics at Yale Medical School, received the Francis Gilman Blake Award for 1960. This award, sponsored by the Yale chapter of Nu Sigma Nu, is presented annually to the faculty member chosen by the graduating class as the most outstanding teacher in the medical sciences.

Dr. Richard J. Clark was recently presented with a meritorious award at the third annual national meeting of the President's Committee on Employment of the Physically Handicapped, for "leadership as director of the cardiac work classification unit of the Massachusetts Heart Association".



The Board of Trustees, at their meetings on November 4 and 18, 1960, voted:

To reappoint:

Dr. John Gergely as Associate Biochemist (Medicine), for the three-year period beginning June 1.

To appoint:

Dr. Felix A. Battat as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;

Dr. William D. Bradford as Exchange Resident on the Children's Medical Service, for the period November 1, 1960 through December 12, 1960;

Dr. Donald L. Bornstein as Resident in Medicine for one year, beginning January 1, 1962;

Dr. Nelly Chiofalo (Basauri) as Clinical and Research Fellow in Neurology, assigned to Electroencephalography, for a period of eight months, beginning November 1, 1960;

Dr. Melvin E. Clouse as Second Assistant Resident in Radiology, beginning January 1, 1962;

Dr. John Q. Durfey as Assistant in Anesthesia, effective as of November 3, 1960;

Dr. James M. Gibson as Intern in Pathology for one year, beginning July 1;

Dr. Hensley S. Johnson as Clinical Fellow in Dermatology, effective as of October 3, 1960;

Barbara W. Kalckar, Ph.D. as Associate Biochemist (Medicine), for the three-year period beginning July 1;

Leonard M. Lansky, Ph.D. as Assistant Psychologist in the Department of Psychiatry, effective as of November 1, 1960;

Dr. Rita A. Manzi as Assistant Resident in Anesthesia, beginning August 1;

Dr. Gerald R. Plotkin as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. René Riquelme as Clinical and Research Fellow in Surgery, for the period September 16, 1960 through March 15, 1961;

Dr. Lawrence C. Sack as Second Assistant Resident in Radiology for one year, beginning January 1, 1962;

Dr. Clement B. Sledge as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;

Dr. Lawrence Stark as Clinical and Research Fellow in Neurology, assigned to Electroencephalography, for one year, beginning November 1, 1960;

Dr. Martin J. Wohl as Resident in Medicine for one year, beginning January 1, 1962.

At their meetings during November 1960, the General Executive Committee voted:

To rescind the appointment of:

Dr. Perla Berta Salama as Research Fellow in Neurology, to have begun September 1, 1960.

To promote:

Dr. Frederick W. Ackroyd from Third Assistant Resident to Second Assistant Resident in Surgery, effective January 1;

Dr. Arthur E. Baue to the position of Resident on the East Surgical Service, effective January 1;

Dr. Bob Bullwinkel to the position of Second Assistant Resident in Surgery, effective February 1;

Dr. Richard E. Senghas to the position of Senior Resident in Orthopedic Surgery for one year, beginning January 1.

To extend the appointments of:

Dr. John Denovian as Clinical Fellow in Medicine, assigned to Cardiology, from December 1, 1960 through February 28, 1961;

Dr. Giovanni Giuliano as Clinical and Research Fellow in Medicine, from November 30, 1960 through December 31, 1960.

To reappoint:

Anthony L. Andrikides, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning November 1, 1960;

Dr. Harold B. Anstall as Clinical and Research Fellow in the Blood Bank for one year, beginning October 1, 1960;

Dr. Kathryn S. Beck as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Jane M. Berman as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Laurence C. Bonar, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;

Dr. Virginia L. Clower as Assistant Attending Psychiatrist at McLean Hospital, beginning December 2, 1960;

Dr. Roy M. Coleman as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Eubert J. Daniel, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning December 29, 1960;

Dr. Stephen E. Hedberg as Second Assistant Resident in Surgery, beginning January 1;

Dr. Eda M. Kahana as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. Bernard Levey as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Anthony P. Monaco as Second Assistant Resident in Surgery, beginning January 1;

Leighton B. Richards, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning December 1, 1960;

Dr. William M. Thurlbeck as Clinical and Research Fellow in Pathology, for the period November 1, 1960 through May 31, 1961;

Chuan-Tao Yu, Ph.D. as Research Fellow in Medicine for one year, beginning November 2, 1960.

To appoint:

Dr. Peter T. Choras as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Annemarie Closse, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning February 1;

Dr. Wellington B. Cu as Third Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Jack Ellenberg as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Robert W. Farkas as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Donald J. Fern as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Bruce W. Fischberg as Second Year Resident in Psychiatry at McLean Hospital, beginning January 1;

Dr. William H. Goodson, Jr. as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Murray V. King, Ph.D. as Research Fellow in Orthopedic Surgery, retroactive for one year, beginning January 1, 1960;

Dr. John B. Livingstone as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Judith G. Ronat as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Philip I. Salib as Graduate Student Assistant in Orthopedic Surgery, for the period October 28, 1960 through December 15, 1960;

Dr. Melvyn B. Schupack as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. John S. Strauss as First Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Captane P. Thomson as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Harold W. Williams, Jr. as Second Year Resident in Psychiatry at McLean Hospital, beginning July 1.

* * *

"A SENTIMENTAL JOURNEY"

To any devoted thyroidologist a visit to Dublin cannot fail to be, in part at least, sentimental. And borrowing a title from Sterne is amply justified by the fact that he was born in Ireland of an Irish mother.

Our visit was prompted by a modest little invitation appended to the program of the Fourth International Goiter Conference, held in London July 5 through 8, 1960. It read, "Members of the Conference and their families are warmly invited to visit Dublin on Tuesday, July 12th", the purpose, of course, being to visit the haunts of the late Robert James Graves, M.D. Of all the 650 conferees, only the Merrill N. Footes of Brooklyn and the Meanses of Boston had the wisdom to accept this invitation. They were indeed well repaid.

Dublin is a gracious and stately city, with great architectural integrity. Although there has been a settlement on the banks of the Liffey for many centuries, the present aspect of Dublin dates chiefly from the eighteenth century. It is Georgian, and very lovely Georgian at that.

After ensconcing ourselves in the old-fashioned comfort of the Shelbourne Hotel, we strolled about the city — especially to Trinity College, Dublin's brightest gem, and beautiful Merrion Square, where Robert Graves once lived. In the evening we repaired to the Queen's Theatre, where we saw a fine performance, by the Abbey players, of John Murphy's "The Country Boy". This play portrays vividly some of the harrowing consequences of the migration of young Irish people to America.

Next day, bright and early, we were off to the spacious house of the Royal College of Physicians of Ireland, in Kildare Street, escorted thither by Mr. Arthur Lawson, to whom we had been kindly referred by Dr. Francis C. Kelly of the Chilean Iodine Bureau in London. We were cordially welcomed by Dr. Charles Dickson, Fellow and Registrar of the College, who took us in hand and became our guide for the entire morning.

Although the present building of the College is just short of a century old, the College itself was founded in 1654 — that is to say, during the dictatorship of Oliver Cromwell, whose name is still thoroughly hated in Ireland. In the beginning, the College of Physicians constituted the first Medical Faculty of Trinity College, but after some thirty years, dissensions arose between them, and they parted company. Under a new charter from William III, the College of Physicians, in 1692, embarked on its subsequent independent existence.

The present home of the College serves, among other things, as a hall of fame for the great physicians of Ireland's golden age of medicine in the first half of the nineteenth century, up to the terrible catastrophe of the potato blight of 1845-47 with its resulting famine and pestilence, from the effects of which Ireland has never completely recovered. This golden age was the period in which many American doctors went to Dublin for graduate training. In those days they had to go abroad somewhere to get really first-rate medical education, and Dublin, along with London, Edinburgh, and Leiden, was among their places of choice. In the assembly hall of the College stand heroic-sized statues in white Carrara marble of Graves, William Stokes, Sir Dominic Corrigan, and Sir Henry Marsh.

From the College of Physicians we proceeded to the Meath Hospital. This is where Graves and his distinguished contemporaries worked. Opened in 1771 upon the site of Dean Swift's garden, it is still in full use as a teaching hospital today. Graves served on its staff from 1821 to 1843. In its general features it is not unlike the original Bulfinch Building of the M. G. H. Open wards, with large chimneys and fireplaces in the middle as the only source of heat, are particularly reminiscent of the Bulfinch in its salad days.

Merrill Foote joined us as we arrived at the front door of Meath Hospital, and Dickson introduced us to several members of its staff gathered on its front steps. Among these was Mr. Henry Stokes, grandson of William Stokes of Cheyne-Stokes and Stokes-Adams fame, now 80 years old, but seemingly extremely fit. We wished we could have spent hours at the Meath Hospital, to make a thorough ward round, in fact, but this was not possible. Instead, we hurried off to visit the grave of Graves, and lay an imaginary wreath upon it. Amidst greenery, flowers, and peace, in Mount Jerome Cemetery, is a simple stone bearing the following inscription:

Here Repose
The Mortal Remains of
Robert James Graves M.D.

He was born 28 March 1797
and died 20 March 1853
Aged 56 years

He requested that his only epitaph
should be that he was the son of the
late Rev^{d} Dr Rich^{d} Graves
Professor of Divinity in the University
of Dublin and that after
a painful and
protracted illness he died
in the love
of God and in the Faith
of Jesus Christ

The name of Robert Graves is known to every English-speaking member of our profession, and to many others. The American Goiter Society has emblazoned his countenance upon its letterhead, but why? There can be no doubt that it is chiefly, if not entirely, for his classical and excellent description of exophthalmic goiter that he is now known. Graves, however, was not the first to recognize this syndrome. His first published report on it was in 1835, but Caleb Hillier Parry of Bath had preceded him by twenty years, and Giuseppe Flajani had reported cases of goiter and violent heart action as early as 1802. All these physicians, together with the German, von Basedow, who described the malady in 1840, together with one or two others, have served eponymic roles with respect to exophthalmic goiter. If one wanted to be utterly fairminded, eponymically, perhaps one should call it Flajani-Parry-Graves-Basedow disease. This isn't much worse than Hand-Schüller-Christian disease, or Charcot-Marie-Tooth type of progressive muscular atrophy. But why an eponym at all? Simply because the purpose of a term is to convey meaning, and in this case by long association the eponyms have come to convey, more concisely and clearly than any descriptive appellation can do, the concept of a disease entity. Long usage decrees, moreover, that in English it shall be "Graves's" and in continental languages, "Basedow's" disease, nor must we forget that before any of these worthies, artists had observed the prominent eyes and enlarged necks, for they have left records of them in paint!

The chief point to make now, however, is that Graves, had he never touched upon exophthalmic goiter, still would be one of medicine's famous figures. As a clinical teacher he was outstanding. His published volumes of lectures on clinical medicine constitute a medical text of first rank. Being lectures, they are somewhat chattier than modern textbooks of medicine, but they are systematic and comprehensive, nonetheless. Graves was evidently a physician of very wide clinical experience, but with a profound interest in the underlying sciences upon which he drew freely for explanations of clinical phenomena. Thus, in his studies on inflammation he had constantly in mind the physiological events taking place in the capillary and arteriolar vessels. He always made every effort to consider the true nature of morbid change in designing treatment to correct it, and he was not one to accept prevailing theories uncritically. Often he dissented, and gave logical reasons for doing so.

Graves obviously was deeply interested in fevers and their epidemiology — "geography of diseases", he called it, and his chapters on these subjects are especially distinguished. He had a great deal to say about typhus, which was both endemic and often epidemic in Ireland in his day. He recognized its contagious character and noted the evil effect of over-crowding, as in workhouses, almshouses, gaols, etc., in intensifying the severity of an epidemic. This concept seems to be in line with the historic use of such terms as ship fever and prison fever for typhus.

I can find no direct separation of typhoid from typhus fever in Graves's writings, although this had been made clinically by Louis in Paris as early as 1829, and anatomically by Gerhard in Philadelphia in 1836. It is inconceivable, however, that typhoid did not abound in Ireland in Graves's time. Doubtless the two diseases were lumped together under the term typhus in his thinking, as it was in that of many others. He does use the term "maculated typhus", and states that in the severe epidemics it is the prevailing form. But cases of continued fever, with predominantly abdominal symptoms — including tympanites and hemorrhage from the bowels, which he also mentions, were very likely typhoid.

Trousseau, who wrote a very laudatory preface to the French edition of Graves's lectures, acclaims him particularly for "completely reversing medical practice" in the matter of how to feed patients with prolonged fevers. "The Dublin physician," said Trousseau, "single-handed, assailed an opinion which appeared to be justified by the practice of all ages," namely, that a low diet was "an indispensable condition in the treatment of fevers." Graves, on the contrary, inculcated the necessity of giving adequate nourishment under these circumstances, thus anticipating by some fifty years those who again liberalized the diet in typhoid fever, round the turn of the present century. It is recorded that he requested that "He fed fevers" should be his epitaph. Judging by his gravestone, however, he later changed his mind about this.

To other febrile diseases Graves also gives considerable attention. He recognized the ague (malaria) — which was evidently widely disseminated along with typhus, and presumably typhoid, in Ireland in those days — as quite distinct from these diseases. He observed a diminution in its incidence when swampy areas were properly drained, and he had success in treating it with quinine.

René Dubos cites Graves as having observed a spontaneous fluctuation in the character of scarlet fever. "In the year 1801," wrote Graves, "scarlet fever committed great ravages in Dublin, and continued its destructive progress during the spring of 1802." It returned at intervals during the next few years, but in a form "either so mild as to require little care, or so purely inflammatory as to yield readily to the judicious employment of antiphlogistic treatment."

Two other epidemic diseases also aroused his interest — cholera and influenza. Of the former, he wrote, "What causes combined to convert a malady habitually confined to the Indian peninsula, into a disease which overshadowed the earth, sparing no nation nor language, it would be useless to inquire; the subject is buried in profound obscurity." It was in 1817 that the cholera "assumed a new and more powerful character; it then became endowed with properties that rendered its extension steadily progressive over the earth in spite of all obstacles interposed by diversity of soil or climate." Graves followed its spread with close attention. It went eastward into Asia and westward into Europe. In 1832 it reached Edinburgh and London. That same year it quickly spread to Ireland and finally to North America.

In 1826 Graves, in a lecture to his students at Meath Hospital, gave them a description of cholera based on accounts of "eastern authors" and prepared them for its arrival in Ireland. When it did arrive in 1832, he had plenty of patients suffering from it to show them. Studying his own cases, it is clear from his remarks — although he doesn't use just this language — that he understood quite well that what these people died of was dehydration, due to the terrific loss of water through the bowels. The indication was to stop the diarrhea and, to this end, he introduced the generous use of acetate of lead combined with opium. He later learned that another physician had used it, but not in effective dosage. "Be this as it may," he said, "acetate of lead was not known to the medical men of Dublin and to the practising apothecaries before I recommended it. It had been frequently employed in the form of injection by them; but no one had given it in large doses by the mouth, or introduced it to the notice of the profession. I believe I can fairly claim the merit, such as it is, of being the first to give it in large and effectual doses." He laid great stress on early diagnosis and early inauguration of treatment, and claimed good results under these circumstances.

With regard to influenza, he collected information on many epidemics. He was most interested in comparing the rate of its spread with that of cholera. The latter had "been twenty years in compassing the earth; while influenza . . . often traverses the same space in a few months."

He also has a chapter on yellow fever, which reached Ireland in 1826, and he compares his findings with those of Louis at Gibraltar in 1828. But Graves's work is by no means overweighted on infectious diseases. Practically all branches of general medicine are, at least, touched upon in his well-balanced work — diseases of metabolism, the central nervous system, those of various organs, heart, lungs, abdominal viscera, etc., including (rather lightly) even the goiter.

But to conclude this necessarily sketchy account of the work of Graves, I will revert to his opening chapters in which he sets forth what may be his most important contribution of all — namely, his methods of clinical teaching. He was indoctrinating his students in these matters. "You come here to convert theoretical into practical knowledge," and this, he implied, cannot be done by sitting on benches listening to lectures, but only at the bedside, and, what is more, in a responsible role at the bedside. So he invented the clinical clerkship, and put it to use in the Meath Hospital in the early 1820's. He did not actually claim to have invented it, and said he got the idea from Germany. Nevertheless, if this is so, he at least improved upon it. In any event, there was nothing of the sort elsewhere in the United Kingdom at that time, nor for many years after he had had it in successful operation in Dublin. Without such a system as the clinical clerkship, Graves maintained, a man becomes a practitioner of medicine without ever having learned to practise. He has had no "*experience*, because he has at no time been charged with the responsibility of investigating a case for himself and by himself, because at no time has he been called on to make a diagnosis unassisted by others, and above all, because he has never been obliged to act upon that diagnosis, and prescribed the method of treatment." Here is something to which modern medical educators can appropriately pay homage!

After leaving Dublin, we took an all-too-brief motor trip through the lovely coastal areas between Galway and Sligo, with a charming young student to drive us. He had a warm Irish heart and the gay spirit characteristic of his people. This part of our trip also had some sentimental value, because — think of how many Bostonians have come from these parts.

Back in the Shelbourne Hotel just prior to a take-off for London, we encountered Edward Scott O'Keefe of the MGH staff and my classmate twice over — Harvard College '07 and HMS '11. He and Mrs. O'Keefe and a bright young granddaughter were all taking summer courses in early Irish literature at Trinity College. "It's the best place," said Ned, "to get courses of this kind."

Indeed, Ireland *is* the best place to get a variety of good things — at least, so it seemed to us in our very brief visit.

James Howard Means, M.D.,
Honorary Physician

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biophysical Research

Gross, J., Levene, C. I., and Orloff, S.
Fragility and extractable collagen in the lathyritic chick embryo. An assay for lathyrogenic agents.
Proc. Soc. Exper. Biol. & Med. 105:148.

Gross, J., and Piez, K. A.
The nature of collagen. I. Invertebrate collagens.
Proc. AAAS Sympos. on Calcification in Biol. Systems, 395.

Piez, K. A., and Gross, J.
The amino acid composition of some fish collagens: The relation between composition and structure.
J. Biol. Chem. 235:995.

Cardiology

Shanahan, R., Myers, G. S., Del Campo, E., Friedlich, A. L., and Scannell, G.
Right ventricular pressure curves in congenital and acquired heart disease.
Brit. Heart J. 22:457.

Dermatology

Baker, R. V., Birbeck, M. S. C., Blaschko, H., Fitzpatrick, T. B., and Seiji, M.
Melanin granules and mitochondria.
Nature, London 187:392.

Blank, I. H.
Percutaneous absorption: Methods of study and factors which influence absorption.
J. Occupational Med. 2:6.

Blank, I. H.
Percutaneous absorption: Statement of problem and critical review of past methods.
J. Soc. Cosmetic Chemists 11:59.

Blank, I. H., and Dawes, R. K.
Antibacterial activity of weak solutions of aluminum salts.
Arch. Dermat. 81:565. (*See also* 82:428)

Cohen, A. S., and Hashimoto, K.
Electron microscopic observations on the lesion of elastosis perforans serpiginosa.
J. Invest. Dermat. 35:15.

Fitzpatrick, T. B.
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In The metabolic basis of inherited disease, Stanbury, J. B., Wyngaarden, J. B., and Frederickson, D. S., Editors, New York, McGraw-Hill Book Company, Inc., chap. 13.

Fitzpatrick, T. B.
Dermatologic lesions and diseases associated with diabetes.
In Diabetes, Williams, R. H., Editor, New York, Paul B. Hoeber, Inc., chap. 42.

Fitzpatrick, T. B.
Presidential address. Albinism: Some thoughts on the color problem and integration of dermatology and medicine.
J. Invest. Dermat. 35:209.

Freinkel, R. K.
Metabolism of glucose-C-14 by human skin *in vitro.*
J. Invest. Dermat. 34:37.

Freinkel, R. K., and Lurie, A. S.
Some observations on the effect of *l*-tri-iodothyronine on acne vulgaris.
J. Invest. Dermat. 34:277.

Greisemer, R. D.
Biological factors affecting percutaneous absorption.
J. Soc. Cosmetic Chemists 11:79.

Hashimoto, K., and Hill, W. R.
Elastosis perforans serpiginosa: A case report with histochemical and enzyme digestion studies.
J. Invest. Dermat. 35:7.

Imbrie, J. D., Bergeron, L. L., and Fitzpatrick, T. B.
Follow-up study of effect of oral methoxsalen (8-methoxypsoralen) on sunburn and suntan.
Arch. Dermat. 82:617.

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J. Invest. Dermat. 35:69.

Sinesi, S. J.
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Plast. & Reconstruct. Surg. 26:141.

Szabó, G.
Studies on mammalian pigmentation. II. The displacement of hair melanocytes during experimental carcinogenesis.
Anat. Rec. 137:170.

Szabó, G., and Bourne, G. H.
The effect of vitamin A on adult skin in organ cultures.
In Congres International de Biologie Cellulaire, Paris, Sept. 4-9, 1960. Resumes des communications, 243.

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Blood vessel thromboplastins and early thrombosis after vascular operations.
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Burn therapy: I. Concealed progress due to a shifting battlefront.
Ann. Surg. 152:767.

Orthopedic Surgery

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Fractures, dislocations and fracture-dislocations.
In traumatic medicine and surgery for the attorney, Washington, D. C., Butterworth Inc., vol. 2, p. 61.

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Watkins, A. L.
Present status of physical medicine and rehabilitation in treatment of arthritis.
Rheumatism 16:62.

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Childhood schizophrenia, autism and Heller's disease.
In Mental retardation. Proceedings of the First International Conference on Mental Retardation, Bowman, P. W., and Mautner, H. V., Editors, New York, Grune & Stratton, Inc., p. 469.

Benda, C. E.
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In Mental retardation. Proceedings of the First International Conference on Mental Retardation, Bowman, P. W., and Mautner, H. V., Editors, New York, Grune & Stratton, Inc., p. 340.

Benda, C. E.
Rudolf Virchow's cellular pathology after one hundred years, and modern geneto-cytology.
In Jubilee volume, 100th anniversary, Rudolf Virchow Medical Society in the City of New York, New York and Basel, S. Karger, p. 49.

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Psychiatric management of operative syndromes. I. The therapeutic consultation and the effect of noninterpretive intervention.
Psychosom. Med. 22:267.

Melchior, J. C., Benda, C. E., and Yakovlev, P. I.
Familial idiopathic cerebral calcifications in childhood.
Am. J. Dis. Child. 99:787.

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A comparative analysis of autonomic responses in startle.
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The effect of X-irradiation on sodium and water transport in rat ileum.
Radiation Res. 13:369.

Potsaid, M. S.
Experimental and clinical uses of cineradiography in heart disease.
Proc. New England Cardiovascular Soc. 18: 26, 1959-1960.

Schultz, M. D., and Hale, J.
Instructions for the use of radiotherapy charts.
Radiology 74:843.

Schunk, H., and Maruyama, Y.
Two vascular grooves of the external table of the skull which simulate fractures.
Acta radiol. 54:186.

Wang, C. C., and Reeves, J. D.
Mesenteric vascular disease.
Am. J. Roentg. 83:895.

Webster, E. W.
Physical considerations in the design of facilities for the uniform whole-body irradiation of man.
Radiology 75:19.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Alexander, P., and Block, R. J. (Editors)
A laboratory manual of analytical methods in protein chemistry, vol. 1.
New York, Pergamon Press, 1959.
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Annual Symposium of the M. D. Anderson Hospital and Tumor Institute.
Genetics and cancer: A collection of papers presented at the 13th annual symposium.
Austin, Tex., University of Texas Press, 1959.
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Astwood, E. B. (Editor)
Clinical endocrinology, vol. 1.
New York, Grune & Stratton, 1960.
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Blumgart, H. L. (Editor)
Symposium on congestive heart failure. (American Heart Association Monograph No. 1)
New York, American Heart Association, 1960.
(15D)

Boyer, P. D., and others. (Editors)
The enzymes, ed. 2, vol. 4A.
New York, Academic Press, Inc., 1960.
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Brachet, J.
The biochemistry of development.
New York, Pergamon Press, 1959.
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Brock, S. (Editor)
Injuries of the brain and spinal cord and their coverings, ed. 4.
New York, Springer Publishing Company, Inc., 1960.
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Butler, J. A. V., and Katz, B. (Editors)
Progress in biophysics and biophysical chemistry, vol. 10.
New York, Pergamon Press, 1960.
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Campbell, E. J. M. (Editor)
Clinical physiology.
Oxford, England, Blackwell Scientific Publications, 1960.
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Chargaff, E., and Davidson, J. N. (Editors)
The nucleic acids, vols. 1-3.
New York, Academic Press, Inc., 1955-1960.
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Principles of orthopaedic surgery, rev. ed.
Boston, Little, Brown and Company, 1960.
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Comar, C. L., and Bronner, F. (Editors)
Mineral metabolism: An advanced treatise, vol. 1, pt. A.
New York, Academic Press, Inc., 1960.
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Organic reactions, vol. 11.
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Human nutrition and dietetics.
Baltimore, The Williams and Wilkins Company, 1959.
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Mechanisms in radiobiology, vol. 2.
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Fundamentals of child psychiatry.
New York, W. W. Norton and Company, 1960.
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Goepp's medical state board questions and answers, ed. 9.
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Atlas of electroencephalography, ed. 2, vol. 1.
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New York, Academic Press, Inc., 1960.
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Psychoanalysis and the family neurosis.
New York, W. W. Norton and Company, 1960.
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Leukemia: Research and clinical practice.
Boston, Little, Brown and Company, 1960.
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Heller, J. H. (Editor)
Reticulendothelial structure and function. (Third Symposium of the International Society for research on the reticulendothelial system)
New York, The Ronald Press Company, 1960.
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Hollander, J. L.
Arthritis and allied conditions, ed. 6.
Philadelphia, Lea & Febiger, 1960.
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Krupp, M. A., and others.
Physician's handbook, ed. 11.
Palo Alto, Lange Medical Publications, 1960.
(7D)

Moyer, J. H. (Editor)
Hypertension.
Philadelphia, W. B. Saunders Company, 1959.
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Moyer, J. H., and Fuchs, M. (Editors)
Edema, mechanisms and management.
Philadelphia, W. B. Saunders Company, 1960.
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Mulholland, J. H. (Editor)
Current surgical management II.
Philadelphia, W. B. Saunders Company, 1960.
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Overman, R. T., and Clark, H. M.
Radioisotope techniques.
New York, McGraw-Hill Book Company, Inc., 1960.
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Rebuck, J. W. (Editor)
The lymphocyte and lymphocytic tissue.
New York, Paul B. Hoeber, Inc., 1960.
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Schachter, M. (Editor)
Polypeptides which affect smooth muscles and blood vessels.
New York, Pergamon Press, 1959.
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Stanbury, J. B., and others.
The metabolic basis of inherited disease.
New York, McGraw-Hill Book Company, Inc., 1960.
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Stewart, C. P., and Stolman, A. (Editors)
Toxicology: Mechanisms and analytical methods.
New York, Academic Press, Inc., 1960.
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Stoner, H. B. (Editor)
The biochemical response to injury. A symposium organized by The Council for International Organizations of Medical Sciences.
Oxford, England, Blackwell Scientific Publications, 1960.
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Titchener, J. L., and Levine, M.
Surgery as a human experience.
New York, Oxford University Press, 1960.
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Top, F. H., and others.
Communicable and infectious diseases, ed. 4.
St. Louis, The C. V. Mosby Company, 1960.
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Yoffey, J. M., and Courtice, F. C.
Lymphatics, lymph and lymphoid tissue.
Cambridge, Mass., Harvard University Press, 1956.
(14J)

BIOGLETS

Dr. Charles E. Burden, Assistant Resident on the Children's Medical Service—born in Bath, Maine, August 25, 1933; B.S., Yale University, 1955; M.D., Harvard Medical School, 1959; Intern, Children's Medical Center, Boston, 1959-60; married; one child.

Dr. Mervyn F. Burke, Jr., Assistant Resident in Surgery—born in Berkeley, California, March 16, 1929; A.B., University of California, 1950; M.D., University of California School of Medicine, 1954; Intern, San Francisco Hospital, 1954-55; military service: Surgical Ward Officer, U.S. Army Hospital, Bad Kreuznach, Germany, 1955-57; Assistant Resident in Surgery, University of California Hospital, 1957-60; married.

Dr. George P. Canellos, Intern in Surgery—born in Boston, Massachusetts, November 1, 1934; A.B., Harvard College, 1956; M.D., Columbia University College of Physicians and Surgeons, 1960; married.

Dr. Sheldon Cooperman, Assistant Resident in Pathology—born in New York City, August 16, 1931; attended New York University; M.D., State University of New York College of Medicine at New York, 1955; Intern in Ward Medicine, Barnes Hospital, St. Louis, Missouri, 1955-56; military service: Medical Officer, Flight Surgeon, USAF in England, 1956-58; Resident in Pathology, Mary Hitchcock Memorial Hospital, Hanover, New Hampshire, 1958-59; Teaching Fellow in Pathology, Dartmouth Medical School, Hanover, New Hampshire, 1959-60; married; three children.

Dr. John M. Davis, Intern in Children's Medicine—born in Kansas City, Missouri, October 11, 1933; A.B., Princeton University, 1956; M.D., Yale Medical School, 1960; married.

Dr. Paul R. Dinsmore, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in Bangor, Maine, January 1, 1933; pre-college school years spent round the country as an "Army brat", my father being with the Adjutant Generals Corps; military service: temporary active duty as an enlisted man, taking basic training and a course in Medical Technology, Brooke Army Medical Center, Fort Sam Houston, Texas, 1951; B.A., University of Maine, Orono, Maine, 1954; M.D., George Washington University School of Medicine, Washington, D.C., 1958; Intern, University of Chicago Clinics, 1958-59; currently, Teaching Fellow at McLean, rotating through Neurology at Boston Veterans Administration Hospital

Dr. Richard G. Eaton, Assistant Resident in Orthopedic Surgery—born in Forty Fort, Pennsylvania, Dec. 3, 1929; B.S., Franklin and Marshall College, Lancaster, Pennsylvania, 1951; M.D., University of Pennsylvania School of Medicine, 1955; Intern (rotating), Graduate Hospital, University of Pennsylvania, 1955-56; Assistant Resident in Surgery, Peter Bent Brigham Hospital, Boston, Massachusetts, 1956-57; military service: Captain, U.S. Army, Fort Hood General Surgical Service, 1957-59; Assistant Resident in Orthopedic Surgery, Children's Medical Center, 1959-60; married; two children.

Dr. Lloyd A. Ferguson, Intern in Medicine—born in St. Louis, Missouri, November 5, 1932; B.S., University of Illinois, Urbana, Illinois, 1951; M.S., University of Illinois, 1954; military service: U.S. Army, 1954-56; M.D., University of Chicago School of Medicine, 1960; married; two children.

Dr. T. Corwin Fleming, Assistant Resident in Neurology—born in Boston, Massachusetts, January 26, 1932; A.B., Harvard College, 1952; M.D., Harvard Medical School, 1956; Intern in Medicine, UCLA Medical Center, Los Angeles, California, 1956-57; military service: Research Associate in Neurophysiology, NIH, Bethesda, Maryland, 1957-59; Resident in Psychiatry, University of Pennsylvania, Philadelphia, 1959-60; married; two children.

Dr. F. Daniel Foley, Assistant Resident in Pathology—born in Jersey City, New Jersey, March 3, 1933; A.B., St. Peter's College, Jersey City, 1954; M.D., Creighton University, Omaha, Nebraska, 1959; Intern in Medicine, Bellevue Hospital (Columbia), New York, N. Y., 1959-60; married; two children.

Dr. Richard F. Gibbs, Assistant Resident in Anesthesia—born in Chelsea, Massachusetts, June 11, 1931; B.A., Brandeis University, Waltham, Massachusetts, 1953; M.A., University of Massachusetts, Amherst, 1955; Teaching and Research Fellowship, Graduate School, Department of Zoology-Physiology, University of Massachusetts, 1953-55; M.D., New York Medical College, Flower and 5th Avenue Hospitals and the Metropolitan Hospital Medical Center, New York City, 1959; Intern (rotating), Beverly Hospital, Beverly, Massachusetts, 1959-60.

Dr. Gordon G. Globus, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in Norwich, Connecticut, January 6, 1934; A.B., Cornell University, Ithaca, N.Y., 1955; M.D., Tufts University, Medford, Massachusetts, 1959; Intern, Veterans Administration Hospital, Los Angeles, California, 1959-60.

Dr. Stephen E. Goldfinger, Intern in Medicine—born in Brooklyn, N. Y., March 8, 1935; A.B., Princeton University, Princeton, New Jersey, 1956; M.D., Columbia College of Physicians and Surgeons, New York City, 1960; married.

Dr. S. Sheila Hafter, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in New York City, October 19, 1930; B.A., Brooklyn College, Brooklyn, N. Y., 1950; M.A., New School for Social Research, New York, N. Y., 1954; M.D., Harvard Medical School, 1958; Intern (rotating) in Medicine and Surgery, St. Elizabeths Hospital, Washington, D.C., 1958-59; Teaching Fellow in Psychiatry, Harvard Medical School, 1959 to date.

Dr. Donald B. Halverstadt, Intern in Surgery — born in Cleveland, Ohio, July 6, 1934; B. A., Princeton University, 1956; M.D., Harvard Medical School, 1960; married; one daughter, Donna Lee, born September 9, 1960 —the day when Hurricane Donna also attracted much attention.

Dr. Peter G. Kimball, Intern on the Dental Service—born in Marblehead, Massachusetts, March 4, 1934; A.B., Hamilton College, Clinton, N. Y., 1956; D.M.D., Harvard School of Dental Medicine, 1960; married.

Dr Leonard I. Kleinman, Intern in Children's Medicine—born in Brooklyn, N. Y., June 29, 1935; A.B., Columbia College, New York, N. Y., 1956; M.D., State University of N. Y., Downstate Medical Center, 1960.

Dr. Burnham E. Lamkins, Assistant Resident in Dermatology—born in Troy, N. Y., January 15, 1932; B.S., St. Bernadine of Siena College, Loudonville, N. Y., 1954; M.D., Albany Medical College, Albany, N. Y., 1959; Intern (rotating), Beverly Hospital, Beverly, Massachusetts, 1959-60; married; two children.

Dr. Bernard Levey, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in Cleveland, Ohio, September 3, 1933; B.S., Adelbert College, Western Reserve University, Cleveland, Ohio, 1955; M.D., Western Reserve School of Medicine, 1959; Intern in Medicine, Beth Israel Hospital, Boston, Massachusetts, 1959-60.

Dr. Bucknam McPeek, Assistant Resident in Anesthesia—born in Enid, Oklahoma, March 22, 1933; lived in Washington, D.C. and Little Rock, Arkansas; A.B., Harvard College, 1955; M.D., Harvard Medical School, 1959; Harvard Surgical Service at Boston City Hospital, 1959-60.

Dr. Walid A. Mnaymneh, Assistant Resident in Orthopedic Surgery — born in Beirut, Lebanon, July 18, 1931; attended the elementary and secondary schools and college at the American University of Beirut, 1937-50; B.A. in Medicine, Medical School of the American University of Beirut, 1951; M.D., Medical School of the American University of Beirut, 1954; Intern, 1955, Junior Assistant Resident in Surgery, 1956, Senior Assistant Resident in Surgery, 1957, and Resident in Surgery, 1958, American University Hospital in Beirut; Assistant Resident in Orthopedic Surgery, Massachusetts General Hospital, 1958-59; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, 1959-60; rejoined the Orthopedic Department at Massachusetts General as Assistant Resident, April 1960.

Dr. Ashby C. Moncure, Intern in Surgery—born in Richmond, Virginia, December 27, 1934; attended the University of Virginia, Charlottesville, Virginia, 1953-56; M.D., University of Virginia School of Medicine, 1960; married.

Dr. Gerald S. Moss, Intern in Surgery—born in Cleveland, Ohio, March 4, 1935; graduate of Shaw High School, Cleveland, Ohio; undergraduate, Ohio State University, Columbus, Ohio; B.A., Western Reserve University, Cleveland, Ohio, 1956; M.D., Ohio State University Medical School, 1960; married; one son.

Dr. Hart deC. Peterson, Assistant Resident on the Children's Medical Service—born in Newton Centre, Massachusetts, February 4, 1933; A.B., Middlebury College, Middlebury, Vermont, 1954; M.D., Boston University School of Medicine, Boston Massachusetts, 1958; Intern and Resident in Pediatrics, Boston City Hospital, 1958-60; married.

Dr. William J. Yount, Intern in Medicine—born in Menominee, Michigan, August 24, 1936; B.S., University of Wisconsin, Madison, Wisconsin, 1957; M.D., University of Wisconsin, 1960.

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

The last of a series of autumn morning coffee hours was given on November 17, at the Beacon Hill home of Mrs. Louis Bakay. Her co-hostess in entertaining the doctors' wives from Boston and the North Shore was Mrs. Leonard W. Cronkhite, Jr. Mrs. Cronkhite is Chairman of the North Shore division of the MGH volunteer organization. The purpose of these meetings has been to discuss and plan for future activities of the organization.

Other community coffee hours had been held during October and November. Mrs. Vernon H. Mark was the Newton hostess; Mrs. J. Gordon Scannell, the Belmont hostess; Mrs. John D. Stoeckle, the Winchester hostess; and Mrs. Melvin J. Glimcher, the Brookline hostess. Mrs. Albert C. England, Jr. of Lincoln and Mrs. John W. Cass, Jr. of Wellesley sponsored a joint gathering for the Staff Wives of those two communities. It was held at the de Cordova and Dana Museum in Lincoln, so that the Staff Wives could also have the pleasure of viewing a new exhibition of contemporary paintings from the collection of Mr. and Mrs. Patrick B. McGinnis.

The Music Committee of the Staff Wives Association sponsored a piano and viola concert in the Chapel on November 16. Sheila Vincent Boyce was at the piano and Diana Stevenson Brengel was violist.

A piano concert, on November 30, was given by Minuetta Kessler.

A tea in honor of our Volunteers was given by the Trustees and General Director in Bartlett Hall on December 6.

Beautifully decorated tables of delicacies provided an attractive setting for the many invited guests, who enjoyed this opportunity for the exchange of pleasantries. Examples of work done by the Volunteers, in many departments of the Hospital, were on display.

* * *

The Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, at their meeting on October 17, 1960, voted to appoint:

Dr. Anne Khu as Fellow in Ophthalmology, assigned to the Ophthalmic Plastics Laboratory for one year, beginning October 1, 1960;
Dr. John M. Kurkjian as Resident in Otolaryngology, beginning July 1, 1962;
Dr. George F. Miller as Resident in Otolaryngology, beginning July 1, 1962;
Dr. Eugene N. Myers as Resident in Otolaryngology, beginning July 1, 1962;
Dr. John C. Sebestyen as Fellow in Ophthalmology, assigned to the Ophthalmic Plastics Laboratory for another year, beginning September 1, 1960;
Dr. Daniel Toussaint as Fellow in Ophthalmology, assigned to the Howe Laboratory for one year, beginning October 1, 1960;
Dr. Richard D. Zonis as Resident in Otolaryngology, beginning July 1, 1962.

New addresses:

Dr. Mark D. Altschule (dir. *Int. M.* and *Res. Clin. Physiol.* (*McL.*)), McLean Hospital, Belmont, Mass.
Dr. Richard S. Cosby (*E.M.* 1940), 111 Congress St., Pasadena Calif.
Dr. Daniel Deykin (*M.* 1958), National Heart Institute, National Institutes of Health, Bethesda 14, Md.
Dr. Joseph H. Dimon, III (sr. r.s. *Or.* 1960), 1938 Peachtree Rd., N. W., Atlanta, Ga.
Dr. Geoffrey Edsall (*E.M.* 1936), Massachusetts Institute of Public Health Laboratories, 375 South St., Forest Hills, Boston 30, Mass.
Dr. Norris B. Flanagan (a.r.p. *Psychiat.* 1940), 203 Grove St., Wellesley, Mass.
Dr. Thomas Frank (a.r.p. *C.M.* 1953), 134 A Brattle St., Cambridge 38, Mass.
Dr. Thomas G. Gabuzda (*M.* 1956), Lemuel Shattuck Hospital, 170 Morton St., Jamaica Plain, Mass.
Dr. H. Louis George, Jr. (*C.M.* 1929), 104 Paddock St., Watertown, N. Y.
Dr. Lester H. Grant (a.r.p. 1957), Grace-New Haven Community Hospital, New Haven, Conn.
Dr. Stephen E. Hedberg (*S.* 1956), Massachusetts General Hospital, Boston 14, Mass.
Dr. John W. Josse (*M.* 1957), Dept. of Biochemistry, Stanford University School of Medicine, Palo Alto, Calif.
Dr. Anthony P. Monaco (*S.* 1957), Massachusetts General Hospital, Boston 14, Mass.
Dr. David C. Poskanzer (r.p. *N.* 1959), Massachusetts General Hospital, Boston 14, Mass.

Brief bits:

Dr. Gordon L. Brownell attended the meeting of the Dosimetry Committee in New York on November 21, 1960.
Dr. Evan Calkins was invited to participate in the Third National Conference on Leprosy, held at Carville, Louisiana, November 7-10, 1960. He spoke on "Amyloidosis in leprosy".
Dr. Dean A. Clark is one of the three doctors named by Governor Foster Furcolo to represent hospitals of the Commonwealth of Massachusetts at the White House Conference on Aging, to be held January 9-12, in Washington D. C.
Dr. Philip E. Meltzer gave two lectures at the combined meeting of the North and South Carolina Otolaryngological and Rhinological Societies, held on September 12 through 14, 1960. He also delivered a speech at the International Symposium on Otosclerosis at the Henry Ford Hospital in Detroit in November. His subject was "General remarks on surgery for otosclerosis".

Here are a few excerpts from a letter from Dr. John A. Mannick (*S.* 1954), dated November 22:

My official appointment is Instructor in Surgery at the Medical College of Virginia. . . . I am an attending man on one of the ward surgical services — a position very similar to that of a Junior Visit at M. G. H. . . . I have an office with Dr. Hume in the Medical College Hospital and help him with his private practice. . . . I will also go into private practice in a small way myself on December 1. . . . In addition, I am the newly appointed assistant director of the research lab, and direct the transplantation research done there.

Dr. Bauer received this letter from Dr. Donald N. Wysham (*M.* 1954) and Mrs. Wysham a few weeks ago. The Wyshams are in India on an Ecumenical Mission for the United Presbyterian Church of America.

There has been quite a change of scene for us since we wrote you last Christmas. A few weeks ago we arrived in Landour for full-time language study. Landour is perched on the crest of one of the Himalayan foothills, some 7,000 feet straight up from the flat, hot plains of northern India. The view from our veranda includes buildings of the famous Woodstock School below us, where Doug has just entered first grade, and further down, the twisting mountain roads that descend toward Dehra Dun and the plains. A five-minute walk from our house to the ridge above provides a spectacular view of the snowy range of Himalayan Mountain peaks. The weather remains comfortably cool, but we expect the onset of the monsoon rains soon. We are both slowly gaining in our use of Hindustani. We find we can speak reasonably well with the wallas (tradesmen) who come each morning, and can shop in the bazaar without using English. We expect to be here until September, when Don must get back to work at the hospital in Ludhiana.

In our last letter we gave only a brief picture of the hospital and medical school at Ludhiana. Since then, we hope you've had a chance to read a fine article ("The medical challenge of India and Pakistan") in the April 15 issue of *Presbyterian Life*. It is not only a broad picture of the medical needs of this part of the world, but a brief glimpse at some of the ways this need is being met day by day. Some of you, however, may not know that Ludhiana is one of three medical schools in the world partially supported by the United Presbyterian Church in the U.S.A. The Christian Medical College in Ludhiana was begun many years ago as a school for training women doctors, but beginning in 1947 men as well have been accepted. At that time the school assumed growing responsibilities for a teaching program that hoped to win approval for the full Indian medical degree. Eighteen months ago the first class graduated with the M.B.B.S. degree. Ludhiana offers a five-year program, with fifty students in each class — half of them men and half women — and about half the total number are Christians. Our students come from all over India. Large numbers of Christians come from Kerala at the southern tip of the continent. There are many Sikhs from the Punjab. Their turbans and beards are a familiar sight in the classrooms. It is tempting to refer to our students as boys and girls, for in India the usual age for entrance into medical school is sixteen or seventeen years. It is fun for us to get to know them, both in the hospital and in our home, where we get together with a group of students every week for an evening of games, colored slides, or discussions about Christianity. Like any American college students, they enjoy the coffee and cake that go with it!

You would enjoy seeing our hospital, and would appreciate some of the ways in which it is peculiarly Indian. It rivals a first-class American hospital in some respects. We have about 600 beds at the moment, and see most of the diseases common in the United States, such as coronary heart disease and diabetes, but also many diseases rarely seen in the U.S.A. — leprosy, amebiasis, tetanus, some malaria, and many others. The hospital and medical college staff number about seventy to eighty doctors, about half of them non-Indians. These come from Canada, New Zealand, England, Scotland, and Germany, as well as the U.S.A. Being a major referral center, the hospital does fairly advanced work — heart surgery, for example — while Don is frequently called to read electrocardiograms. One of our hopes is to see the beginning of a research program in Ludhiana in the future.

Shortly after our arrival in Ludhiana, we were joined by another Presbyterian family — the Melvin Casbergs. As director of the institution, Dr. Casberg is already deeply at work in an effort to put it on a firmer financial footing. His leadership is attracting other well-trained American physicians who will join our staff soon, including a urologist and a radiologist. We are encouraged by both his hardheaded realism in facing the problems of the institution, and his vision. He hopes to staff Ludhiana well in all major medical and surgical specialties, as well as encourage a research program in medical areas where India needs help. . . .

Running a large household in India, combined with two hours of language study with a pundit each day, is a full-time job for Dorrie. With household help, she finds she can devote more time to the children, and next winter she will be teaching our Douglas his first grade lessons. Both John and Doug seem to love India. Inevitably, they have picked up some of the language, and Dorrie finds Doug helpfully explaining something in Hindustani occasionally. One has to learn the language to keep up with one's children! It is interesting to see our cultures becoming intermingled. Picture John, aged four, in cowboy regalia, sucking a stick of sugar cane or watching the servants cook their evening chappatis over a charcoal fire. . . .

Don has had to make occasional house calls in the city, and lack of transportation is a problem. We hope to be able soon to afford a used jeep for these purposes.

Our warmest greetings to you all.

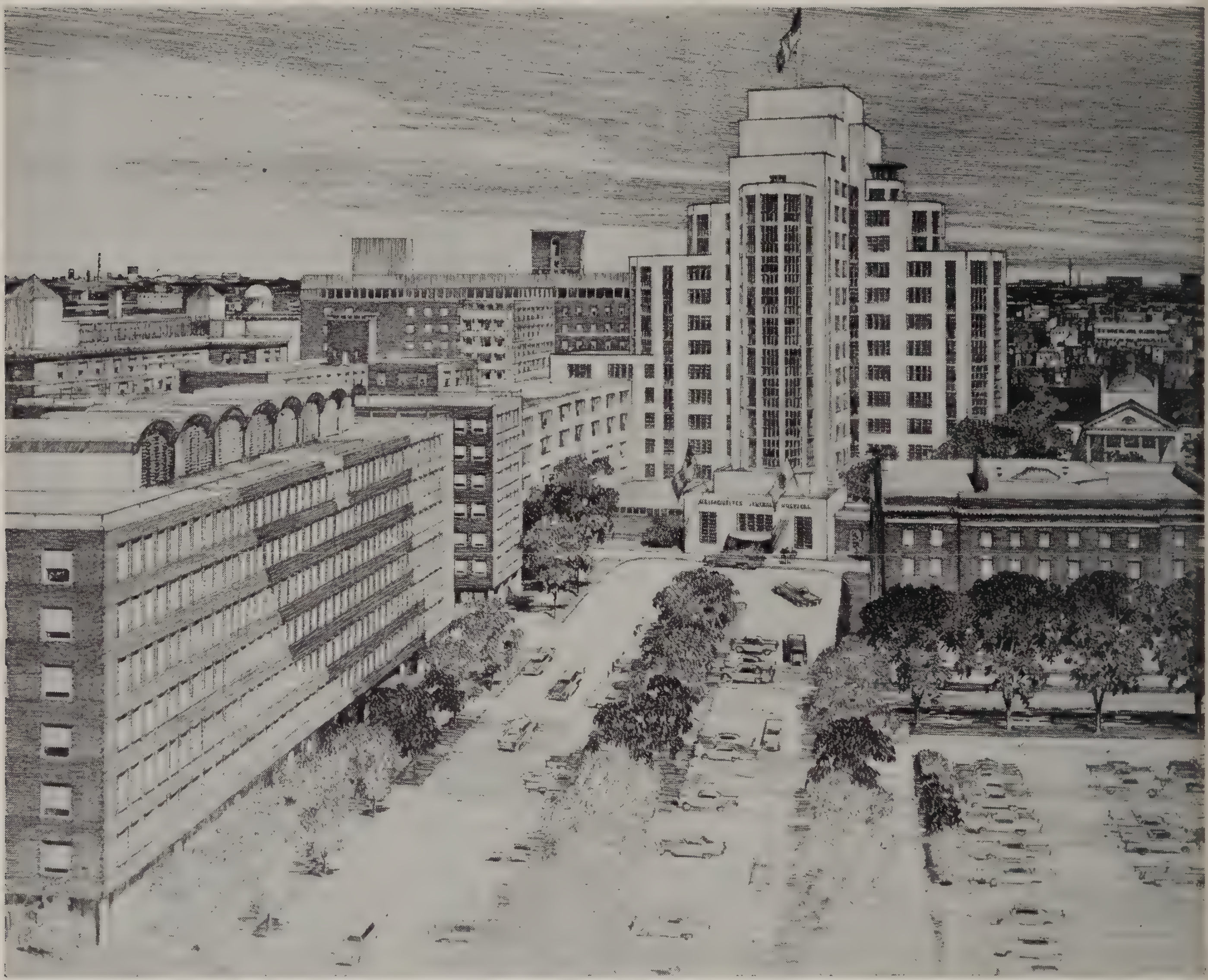
We were very glad to receive this letter from Dr. Désiré J. A. Rebello (a.r.p. *D.* 1954), written from the Liverpool Royal Infirmary, Pembroke Place, Liverpool 3, England:

I have changed my plans and am still in England. I have moved to Liverpool, which is about 30 miles from Manchester, and am now working for the United Liverpool Hospitals, in the Department of Dermatology of the Liverpool Royal Infirmary. The Royal Infirmary is the major teaching hospital for the University of Liverpool School of Medicine. There is a new modernistic building here for the medical school.

Liverpool suffered heavily from bombing during the war. One can still see shells of buildings that were gutted by bombs. However, the people of Liverpool are gradually rebuilding their city.

Liverpool is situated on the Mersey estuary. It is a busy port. Across the river is Birkenhead, which has several shipbuilding yards.

I wonder if you would be so kind as to mail my copies of THE NEWS to me here. Also, I wonder if the booklet "Research activities of the Massachusetts General Hospital" is still published. If so, I would like to receive it.



Architect's rendering of the new Clinics Building, to be erected on North Grove Street, between Cambridge and Fruit Streets

I used to get it when I was in America. [Both wishes have been granted. — Editor]

This most interesting letter has come from Dr. William P. Boger (a.r.p. 1942):

I enjoy the correspondence in The News so much that I make bold to offer an item for your consideration.

I spent the month of October making a lecture tour "around South America". Factually, it is quite easy, with the help of modern air travel, to accomplish the miles involved, but it is completely idle to think that one can encompass the geography, the culture, and the medical situation of even a fraction of this great continent in so short a space of time. However, it was a tremendous privilege for me to get a first-hand look at some of the medical problems totally foreign to our medical practices up here and to see the enormity of the problems with which the physicians in South America must cope, and with such inadequate machinery.

It was deeply interesting to me to discover to what extent that which one is able to accomplish medically depends upon social structure, governmental stability, and economics. In fact, I could not help feeling, very acutely, the frustration of many of the men who have spent one or even five years here in the United States at excellent centers, when they return to their own countries and find that it is one thing to know what to do, but almost an impossibility to actually do it.

My trip took me to Bogotá, Lima, Santiago, Buenos Aires, Montevideo, São Paulo, Port-of-Spain, and San Juan. During the trip I gave 22 lectures on the subject of the treatment of bacterial infections and the use of antibiotics, and on the staphylococcus problem. The trip was an arduous one and, although I was constantly stimulated by the grandeur of the scenery and the novelty of the many new things I saw every day, I arrived home pretty limp.

Quite unexpectedly, I was honored by being made a corresponding member of the Society of Internal Medicine of Buenos Aires, but even without that, I added considerably to the weight of my correspondence.

Everywhere I found evidence of the "long shadows" cast by Harvard and M. G. H. In fact, in consideration of the few names and addresses I found in the MGH "Directory", which I scanned prior to setting off on the trip, I encountered a considerable number of physicians who had either been at Harvard and M. G. H. or were desirous of going there. As always, it was inspiring to me to get this further stimulus to do better work than one might ordinarily do, just to live up to the great tradition that Harvard and M. G. H. stand for.

My trip was a wonderful privilege, and it has given me a lot of new insights into social and political problems, aside from the medical ones. If anyone is headed south any time soon, I will be happy to give him the benefit of a few helpful hints.

Incidentally, altitude sickness is not something just to be laughed off. It is a real thing, and anyone planning a trip ought to take into account the altitude of some of the stopping points and give thought to the extent to which this might limit activity or actually curtail it for a day or two. I got to La Paz unexpectedly, 13,380 feet high, and found out the hard way.

Dr. Cope has very kindly passed this letter on to us. It is from Dr. Jack E. Tetirick (*S.* 1952):

I am aboard the *S. S. Hope,* at Djakarta, Indonesia. I am the first surgeon aboard, along with John Ratcliffe (*W.S.* 1946). Ruth Currie (Dick's sister) is here, having resigned her post on White 10, so the M. G. H. is well represented.

We are shaking down the very difficult job of combining an ocean liner manned by the American President Lines, a floating hospital, and a floating medical school — all based in a foreign country of incredible chaos and poverty.

The people of Indonesia are afire with the idea of *Hope* — the fact that it is a teaching mission; that it is people to people, not government to government. Our surgery is televised to an adjacent classroom which is packed with Indonesian doctors each day. I have never felt so useful in my life and I rate this as an experience second to none. In a few days we move out to repeat the episode elsewhere in Java and Bali. There are many specialists aboard and a full complement of technicians — EKG, EEG, lab, dietician, physiotherapy, record room personnel, etc. — each doing a job, *plus* training Indonesians in their jobs — a fantastic array of talent and dedication.

We are lavishly entertained. The American ambassador states he has never seen the likes of it. All the other ambassadors have been aboard, including a scowling Russian.

Don't let the MGH people, in any category, miss this. The west coast people are better represented. The Chief is William B. Walsh, M. D., Washington, D. C.

The News

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 201 Boston, Mass. February 1961

THE HYPERTENSION CLINIC

It is always astonishing to realize how recently knowledge of many of the major diseases has been accumulated. Hypertension is only one example of this. Methods for measuring arterial blood pressure, with some semblance of accuracy, did not become available to clinicians until about the beginning of the present century. Some awareness of the importance of high blood pressure and its association with renal disease dates back to Richard Bright, who in 1827 noted that the arteries of the diseased kidney offered an increased resistance to injection. Nine years later, in 1836, Bright noted that hypertrophy of the heart was often present in patients dying of renal disease, even though no local cause for such hypertrophy could be found within the heart. He commented on these findings as follows: "This naturally leads us to look for some less local cause for the unusual efforts to which the heart has been impelled; and the two most ready solutions appear to be either that the altered quality of the blood affords irregular and unwonted stimulus to the organ immediately, or that it so affects the minute and capillary circulation as to render greater action necessary to force the blood through the distant subdivisions of the vascular system." Bright's second alternative contains a clear implication that the cardiac hypertrophy in these cases was the result of increased arterial pressure.

In the decades following Bright's great work, knowledge of the importance of blood pressure was furthered by the work of many investigators, notably Toynbee, Traube, Marey, Gull, and Mahomed; but throughout most of the nineteenth century no simple "bloodless" method was available for the bedside measurement of blood pressure. Consequently, clinicians of that era had to rely on palpation of the radial pulse for estimating arterial pressure. The art of palpating the pulse was cultivated with great solemnity, and its practitioners achieved a proficiency which has long since been lost. During the 1870's and '80's a number of ingenious machines were invented for the purpose of measuring blood pressure, but none were very accurate or very portable. The first major advance came with the development of the pneumatic cuff by Riva-Rocci in 1897. This was originally used to determine the systolic blood pressure—by noting the pressure in the cuff at which the radial pulse disappeared at the wrist. A few years later, in 1905, Korotkov, a Russian physician, suggested that the sounds heard on auscultation over the artery below the cuff could be used as criteria for both systolic and diastolic pressures. This method of measuring blood pressure is, of course, the one universally used today.

Following these developments, blood pressure measurement rapidly came into widespread clinical use. Whether or not these measurements were beneficial to the patients in the early years of the 20th century is certainly debatable. However, they were seized upon avidly by the insurance companies, which were quick to recognize the value of the measurements in predicting life expectancy. The larger companies rapidly began to accumulate statistical data for the purpose of determining insurance risk. These compilations of data have until recently been the chief source of normal values for blood pressure and it is only within recent years that large-scale studies of arterial pressure in normal subjects have been carried out under less prejudicial auspices.

At the Massachusetts General Hospital, hypertension began to receive special attention in 1928, when Dr. Robert S. Palmer, then finishing his cardiac residency, let it be known that he was interested in seeing patients with this problem in the Medical Clinic. Gradually, the number of patients referred to Dr. Palmer increased, and other physicians who shared his interest joined in. As the activities of the group expanded, it eventually became large enough to require a special day and a clinic secretary.

In the middle 1930's, the results of several lines of approach to hypertension began to show promising results. Goldblatt published his now famous experiments, showing that hypertension can be induced in certain animals by restricting the flow of blood to one or both kidneys. The rice diet, introduced by Kempner, was shown to be a highly effective mode of treatment for patients able to tolerate its strictures. And, at about this same time, early work on surgical sympathectomy was under way.

Each of these important developments was tested and applied by Dr. Palmer's growing group, in association with surgical and urological colleagues. Drs. Richard Chute and Neil L. Crone began an investigation of the effects of nephrectomy in patients with hypertension and unilateral renal disease. Dr. Reginald H. Smithwick undertook an investigation of the surgical approach to the relief of hypertension, leading to the development of the technique of dorsolumbar splanchnicectomy which bears his name. Dr. Palmer, Dr. Dera Kinsey, and other internists in the group, concerned themselves with the selection of patients for surgery, and also conducted clinic studies concerning the value of various diets and drugs, and of psychotherapy, in the treatment of hypertension.

During and following World War II, it became apparent in clinics throughout the country that the removal of unilaterally diseased kidneys was effective in only a small fraction of patients so treated, and enthusiasm for this procedure waned. At the same time, it appeared that the beneficial effects of surgical sympathectomy were often temporary, and smaller numbers of patients were being treated by this technique. Meanwhile, many new and more effective drugs were being developed for the medical management of hypertension.

The clinic at this time turned its attention more toward the evaluation of drug and dietary regimens, and to the psychiatric problems which are consistently evident in hypertensive patients. Beginning in about 1951, Dr. Palmer adopted a "class method" of treatment. Under this system, patients instructed and otherwise assisted each other in diet and discipline, and shared their common medical and emotional problems under the guidance of their physician. This system, a unique and highly effective form of group psychotherapy, was continued until Dr. Palmer resigned as Chief of the Hypertension Clinic in 1958. At that time, Dr. Charles H. DuToit was appointed as Dr. Palmer's successor.

Dr. DuToit, then Director of the Chemistry Laboratory, had long been interested in the chemistry of the catechol amines (epinephrine and norepinephrine) and had developed highly reliable methods for quantitatively measuring these compounds in urine and in other biological fluids. He hoped to study the role these compounds play in hypertension, and had already accumulated a considerable amount of clinical and chemical data on the clinic patients prior to his sudden death in March 1959.

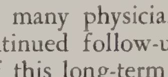
I had joined the clinic group, together with Dr. DuToit, in 1958, and was asked to take over as his successor. Members of the group now include Dr. James H. Currens and Dr. John Denovian, each with a long association with the clinic, Dr. Guy W. Leadbetter, Jr. of the Urology Department, Dr. Guillermo C. Sanchez and Dr. William F. McNeely of the Medical Staff, and Dr. Isadore Starr, who commutes from Laconia, New Hampshire, to join the clinic on alternate weeks.

We are endeavoring to maintain the standards of care, and attention to the individual problems of troubled patients, which characterized the activities of our predecessors in the clinic, and at the same time to bring new diagnostic and therapeutic techniques to bear on their underlying disease. In recent years, with the advent of vascular surgery and the development of new diagnostic techniques, it has become possible to find and correct constricting lesions on the renal blood vessels. In a heartening number of instances this type of surgery has resulted in cure or modification of high blood pressure. This study is being spearheaded by Dr. Leadbetter, aided by Dr. Alfred L. Weber of the Radiology Department. As a part of this program, we are able to make cross comparison between a number of different diagnostic techniques, and to study the functions of the kidney which has been partially deprived of its blood supply before and after surgical correction of vascular lesions.

A second major objective is to determine the role of the catechol amine compounds in hypertension, using the techniques perfected by Dr. DuToit and other methods which have been advanced only very recently. This study will be greatly facilitated by the completion of the new Hypertension Laboratory soon to be under construction on Domestic 3. The testing of new drugs, and especially the investigation of their mode of action, remain as important functions of the clinic.

We also have a unique opportunity to obtain a long perspective view of hypertensive disease, for Dr. Palmer has left as a legacy to our clinic a pedigreed group of hypertensive patients whose disease has been carefully documented for many years. These patients have remained steadfast through several eras of therapy, and have seen a good many physicians come and go. By continued follow-up and documentation of this long-term group, valuable information can be obtained about the natural history of hypertension and the value of our therapeutic methods, although sometimes they make us wonder, as Dr. Robert F. Loeb once remarked about a similar group of patients: "Are we following them, or are they following us?"

Lot B. Page, M.D.,
Assistant Physician
and *Chief of the Hypertension Clinic*



The Board of Trustees, at their meetings on December 2 and 16, 1960, voted:

That Dr. Paul M. G. St. Aubin be granted leave of absence for a period of six months, beginning January 1.

To appoint:

Dr. Lawrence D. Egbert as Clinical Fellow in Anesthesia, beginning approximately June 1;

Dr. Murray Feingold as Junior Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Alvaro Fernandez (Salas) as Clinical and Research Fellow in Neurology for one year, beginning December 1, 1960;

Dr. Christopher J. W. Huston as Clinical and Research Fellow in Surgery for one year, beginning November 1, 1960;

Dr. Peter R. Huttenlocher as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;

William Irvine, F.R.C.S. of the London Hospital, London, England, as Visiting Surgeon pro tempore, for a few weeks during the early part of 1961;

Dr. Marvin H. Lipton as Assistant Resident in Anesthesia, beginning August 1;

Dr. Manuel Nava (y Gutierrez de Velasco) as Clinical and Research Fellow in Medicine for one year, beginning December 1, 1960;

Dr. Peter P.-E. Schuntermann as Junior Assistant Resident on the Children's Medical Service, beginning July 1;

Dr. Eliot M. Slater as Assistant in Anesthesia, beginning December 5, 1960;

Dr. Harry J. Smith as Clinical Fellow in Pathology for one year, beginning July 1.

At their meetings on December 7, 14, and 28, 1960, the General Executive Committee voted:

To grant Dr. Giulio Carugo, Clinical Fellow in Anesthesia, leave of absence for a period of approximately six months, beginning January 1.

To continue the appointments of:

Dr. Edward Los as Assistant Resident in Anesthesia for a second year, beginning January 1;

Dr. Richard C. Packert as Clinical Fellow in Radiology, from December 31, 1960 through March 31, 1961.

To promote:

Dr. George B. Carter from the position of Second Assistant Resident to that of First Assistant Resident in Radiology, beginning January 1;

Dr. John B. Little from the position of First Assistant Resident to that of Resident in Radiology, beginning January 1;

Dr. Yosh Maruyama from the position of First Assistant Resident to that of Resident in Radiology, beginning January 1;

Dr. James W. Tanner from the position of Second Assistant Resident to that of First Assistant Resident in Radiology, beginning January 1.

To appoint:

Dr. Miguel Gonzalez-Acevedo as Graduate Student Assistant in Surgery, for the period October 17, 1960 through February 15, 1961;

Dr. Alexander Hubens as Graduate Student Assistant in Surgery, for the period October 17, 1960 through December 31, 1960;

Dr. D. Glyn Millard as Clinical Assistant in Radiology, beginning January 1;

Yutaka Nagai, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Amado D. Ortiz as Graduate Student Assistant in Surgery for one year, beginning October 17, 1960;

Dr. John T. Pollard, Jr. as Clinical Assistant in Radiology, beginning January 1;

Dr. Clinton B. Seeley as Clinical Assistant in Radiology, beginning January 1.

A General Executive Committee vote of July 27, 1960, which failed to reach the office of THE NEWS until January, appointed Dr. Timo U. Kosunen as Research Fellow in Neurology for one year, beginning September 1, 1960.

* * *

THE ORTHOPEDIC RESEARCH LABORATORIES

[The dedication of our new Orthopedic Research Laboratories took place last September. We regret that the length of the report we had prepared on the event and the amount of space available in our pages since that time have been so incompatible that it has been necessary to withhold the article until now. Because THE NEWS attempts to report on all outstanding events which occur at the M.G.H. and because the material contained in the address delivered by Dr. Barr at the dedication ceremonies is of such value, historically, to all MGH-ers, we give you this transcript of Dr. Barr's speech even at this later date, feeling that the passage of these few weeks has not detracted in any way from its intrinsic value. — Editor]

The fall of the year is a pleasant time in New England. It must give all of us a kind of inner satisfaction—such as we knew as children of going to school again (for some of us, that's a good many years ago). We have attended an adult class today, with intellectual food served for our mental appetites. Professor Francis O. Schmitt has made us think about research of a fundamental character in a teaching hospital, and Dr. John D. McLean will add to the subject. Perhaps you will bear with me for a few minutes while I pretend that I am wise enough to continue with our discussion.

The history class is now in session. If I were to ask this class to name the men who have been on our orthopedic staff at Massachusetts General Hospital—men whose lives have helped shape the destiny of our service—I am sure I could see eager hands go up. Someone would name Joel Goldthwait, another, Robert B. Osgood, another, Armin Klein, and another, Marius N. Smith-Petersen. Other names would come to our minds, also; but our research laboratories are in being today chiefly because these men lived in Boston and worked on our service at the M.G.H. They helped to make Boston the cradle of our specialty—orthopedics. So young is our service that the professional lives of these men, covering the past fifty years, encompass the whole span of our specialty's history at the Massachusetts General. Through the efforts of Joel Goldthwait, Ward I was built. It was our first orthopedic and fracture ward, where, when Nat Allison was chief, I served thirty years ago as resident. Today that building houses the Bay State Rehabilitation Service, where the ambulatory handicapped are helped on their climb up the road to physical, social, and economic independence.

Robert B. Osgood—beloved by all who knew him, my chief when I was resident at the Children's—was at one time chief at the M.G.H. He was a man always interested in research and he pursued that research in his chosen field.

Armin Klein, for many years a member of the Orthopedic Visiting Staff here at the General, was on the faculty of Harvard and Tufts Medical Schools. He gladly taught me and scores of other residents the art of healing.

Marius N. Smith-Petersen was well known to all of us—a man with an original mind, whose brilliant contributions made him truly a mender of the maimed.

When you walk through the Orthopedic Research Laboratories remember that they stand today as a tribute to these and other orthopedic surgeons—clinicians who have led the way not only in patient care, but also in teaching and research.

The history class is now dismissed.

We have looked briefly at the past, and now the class in recent events will be in order. I take the teacher's prerogative of reminiscing, and this is the way I remember the events leading to the conception, foetal development, and birth of our laboratories.

Thirteen years ago I dropped in at the

office of the Chief of Surgery on White 4, and confided to him that a major aim of my life as Chief of the Orthopedic Service was to see research work of an enduring nature pursued on the service by our staff at the M.G.H. I was anxious to raise money, apply for a grant, and get going. Pete Churchill looked thoughtfully at me, smiled, and said, "The first thing to do is to find your man." He went on to explain that funds and facilities can always be found to support an able man who has original research vision. I was at first a little crestfallen, having believed, in a naive way, that if we had money we could buy the brains. On reflection I realized that Pete was right and that before one makes the stew one must first catch the rabbit. Although I did not fancy the role, I became a rabbit catcher.

My first bit of good luck came in the form of a tireless, resourceful, and dependable fellow, who, in addition to being an excellent clinician, has produced a sizeable output of first-class research work. I was lucky in another way in finding Thorny Brown, for he himself has proved to be an excellent rabbit catcher. Between the two of us, and with the able assistance of other hunters, we believe we have found the man who is productive in his own research activities, who can envision areas of worthwhile effort, and can assemble and direct the activities of the group which tackles the problem selected for study. Mel Glimcher has had graduate training in mathematics and physics, as well as in clinical orthopedics. He is especially—I might say uniquely—qualified to bring the new concepts of solid state physics at the molecular level to bear on our fundamental orthopedic problems. He has assembled his team, and they are now hard at work unraveling the mechanism of mineralization of tissue. They are starting by putting the building blocks together as a solution of collagen and calcium phosphate in pure water. By precise control of specified physical situations, they are studying the parameters of tissue mineralization. For the purpose of this study, a great deal of expensive equipment has been assembled. One might ask, why put the laboratory here rather than at the Harvard Medical School or at M.I.T.? Frankly, there are those who think that such research has no place in a hospital. However, the MGH trustees, administration, and our staff agree that it belongs here, and here it is—building completed, fully equipped, crowded with workers, each studying some phase of tissue mineralization, each producing verified bits of information which will fit into a larger concept of what encourages and what inhibits bone formation. Thus, in this laboratory, as in thousands of other research activities on our globe, new stocks of knowledge are being accumulated which will give us increasing power over the forces of nature, taking us step by step toward ever better mastery of our fate.

There are unexpected by-products of such research. Our clinical staff becomes familiar with—friends with—other research workers and with their thinking and their techniques. These techniques are not "ivory tower", but will, I am confident, become clinical tools in the near future. In a few years our orthopedic graduate students will become familiar with and use the electron microscope, X-ray diffraction, and the biologist's concept of the macromolecular structure of collagen. Through the clinical application of this new knowledge, the need for surgery may be lessened and we can become again what we once were—true orthopedists, students of the musculoskeletal system, and not just orthopedic surgeons.

So, in this laboratory we study special examples of fundamental biological phenomena. Other wiser physicians have done so before. For instance, Oliver Wendell Holmes studied mineralization. He chose one of the conchs—the nautilus. In our laboratory we have been looking into how pearls are formed, and it seems that an organic matrix is just as necessary for the formation of a pearl, or oyster shell, or clam shell as it is for mammalian bones. We hope that in our laboratories we will see nature as it is and that we will rediscover, as Holmes did, a kinship among all living things and hear once again the message which he heard from the chambered nautilus:

> Build thee more stately mansions, O my soul,
> As the swift seasons roll!
> Leave thy low-vaulted past!
> Let each new temple, nobler than the last,
> Shut thee from heaven with a dome more vast,
> Till thou at length art free,
> Leaving thine outgrown shell by life's
> unresting sea!

The individuals who made these laboratories possible have contributed, and those who will seek truth within its walls will contribute, to the welfare of the human race. For what better monument could they ask?

Joseph S. Barr, M.D.,
Chief of Orthopedic Surgery

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Pontoppidan, H., and Beecher, H. K.
Progressive loss of protective reflexes in the airway with the advance of age.
J.A.M.A. 174:2209.

Arthritis and Rheumatism

Ropes, M. W., Muller, A. F., and Bauer, W.
The entrance of glucose and other sugars into joints.
Arthritis & Rheumatism 3:496.

Ward, J., Cohen, A. S., and Bauer, W.
The diagnosis and therapy of acute suppurative arthritis.
Arthritis & Rheumatism 3:522.

Biological Chemistry

Spiro, R. G.
Studies on fetuin, a glycoprotein of fetal serum. I. Isolation, chemical composition, and physicochemical properties.
J. Biol. Chem. 235:2860.

General Medicine

Freymann, J. G., Vander, J. B., Burrell, S. B., and Marler, E. A.
Corticosteroid therapy of chronic lymphocytic leukaemia: A study of erythrocyte survival and leukocyte dynamics.
Acta Unio internat. contra cancrum 51:849.

Freymann, J. G., Vander, J. B., Marler, E. A., and Meyer, D. G.
Prolonged corticosteroid therapy of chronic lymphocytic leukaemia and the closely allied malignant lymphomas.
Brit. J. Haemat. 6:303.

Graham, J. R.
Profiles in headache.
M. Science 8:647.

Graham, J. R.
Use of a new compound, UML-491 (1-methyl-D-lysergic acid butanolamide), in the prevention of various types of headache: A pilot study.
New England J. Med. 263:1273.

Graham, J. R., Malvea, B. P., and Gramm, H. F.
Aerosol ergotamine tartrate for migraine and Horton's syndrome.
New England J. Med. 263:802.

General Surgery

Carter, E. L., and Huggins, C. E.
A comparison of the effects of general hypothermia and arfonad-induced hypotension on survival of dogs after temporary acute occlusion of the portal vein.
Surgery 48:1028.

Neurosurgery

White, J. C.
Timing of nerve suture after a gunshot wound.
Surgery 48:946.

Orthopedic Surgery

Aitken, A. P., and Nalebuff, E. A.
Volar transnavicular perilunar dislocation of the carpus.
J. Bone & Joint Surg. 42-A:1051.

Otolaryngology

Kelemen, G.
Aural embryopathies.
In Mental retardation. Proceedings of the First International Conference on Mental Retardation, Bowman, T. W., and Mautner, H. V., Editors, New York, Grune & Stratton, Inc., p. 254.

Books

Marble, H. C.
The hand: A manual and atlas for the general surgeon.
Philadelphia, W. B. Saunders Company.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Academy of Sciences, USSR.
Problems of evolution of physiological functions. A collection dedicated to the 75th birthday of L. A. Orbeli.
Moscow, Academy of Sciences, USSR, 1958.
(4C)

American Physiological Society.
Handbook of physiology, sec. I, vol. 3. Neurophysiology.
Baltimore, The Williams and Wilkins Company, 1960.
(19C)

Augenstine, L. G. (Editor)
Bioenergetics; consideration of processes of absorption, stabilization, transfer, and utilization.
New York, Academic Press, Inc., 1960.
(5A)

Bick, E. M. (Editor)
Trauma in the aged.
New York, McGraw-Hill Book Company, Inc., 1960.
(23T)

Bierring, W. L. (Editor)
Rypins' medical licensure examinations, ed. 9.
Philadelphia, J. B. Lippincott Company, 1960.
(1N)

Burton, M., Magee, J. L., and Kirby-Smith, J. S. (Editors)
Comparative effects of radiation.
New York, John Wiley & Sons, Inc., 1960.
(36Jn)

Castleman, B., and Dudley, H. R. (Editors)
Clinicopathological conferences of the Massachusetts General Hospital; selected medical cases.
Boston, Little, Brown and Company, 1960.
(7C)

Gorbman, A. (Editor)
Comparative endocrinology.
New York, John Wiley & Sons, Inc., 1959.
(14L)

Homburger, F. (Editor)
Progress in experimental tumor research, vol. 1.
Philadelphia, J. B. Lippincott Company, 1960.
(23K)

Jancsó, N.
Speicherung; Stoffanreicherung im Retikuloendothel und in der Niere.
Budapest, Akadémiai Kiadó, 1955.
(17E)

Lawrence, H. S. (Editor)
Cellular and humoral aspects of the hypersensitive states.
New York, Paul B. Hoeber, Inc., 1959.
(15D)

Mazer, C.
Mazer and Israel's diagnosis and treatment of menstrual disorders and sterility, ed. 4.
New York, Paul B. Hoeber, Inc., 1959.
(24E)

Mitchell, J. S. (Editor)
The cell nucleus.
New York, Academic Press, Inc., 1960.
(2Am)

Pincus, G., and Vollmer, E. (Editors)
Biological activity of steroids in relation to cancer.
New York, Academic Press, Inc., 1960.
(5T)

Rudnick, D. (Editor)
Cell, organism and milieu (17th Symposium of the Society for the Study of Development and Growth).
New York, The Ronald Press Company, 1959.
(2Am)

Rudnick, D. (Editor)
Developing cell systems and their control (18th Symposium of the Society for the Study of Development and Growth).
New York, The Ronald Press Company, 1960.
(2Am)

Seven, M. J., and Johnson, L. A. (Editors)
Metal-binding in medicine.
Philadelphia, J. B. Lippincott Company, 1960.
(5M)

Ussing, H. H., and others.
The alkali metal ions in biology.
Berlin, Springer Publishing Company, Inc., 1960.
(5M)

Utkin, I. A.
Theoretical and practical problems of medicine and biology in experiments on monkeys.
New York, Pergamon Press, 1958.
(2B)

Walton, A. O., and Andrews, F. A. (Editors)
The Foundation directory.
New York, Russell Sage Foundation, 1960.
(1Af)

Wolstenholme, G. E. W., and O'Connor, C. M. (Editors)
Ciba Foundation Study Group No. 5. Regeneration of the inorganic ion content of cells.
Boston, Little, Brown and Company, 1960.
(14J)

Wuhrmann, F., and Wunderly, C.
The human blood proteins.
New York, Grune & Stratton, 1960.
(14Am)

* * *

Dr. and Mrs. Claude E. Welch returned recently from Australia. They had been invited to Melbourne by St. Vincent's Hospital, where, during the entire month of October, the hospital was commemorating the fiftieth anniversary of the founding of its clinical school, and simultaneously was dedicating several large buildings, including many new wards, operating theatres, research laboratories, and a 500-bed nurses' home.

As a portion of this program, Dr. Welch had been appointed as the Visiting Professor of Surgery for the month. This included a fairly continuous program of lectures, ward rounds, and operative surgery.

St. Vincent's Hospital is one of the four hospitals in the city that have clinical schools associated with the University of Melbourne. A new medical school is opening there this year, and thenceforth all medical students in the University of Melbourne will be taught in either the Royal Melbourne Hospital or in St. Vincent's.

There are many close professional relationships between Melbourne and Boston. Many of our own staff landed there soon after the onset of World War II; the arrival of our armed forces came at a very dark hour in Australian history, and gratitude for our intercession has never dimmed since. One of our graduates, Mr. John B. Colquhoun (*Or.* 1927) is head of the Orthopedic Department in St. Vincent's. Many surgeons from Melbourne have visited in Boston during the past few years. Actually, there are four Australians studying in the Massachusetts General Hospital at this time, according to the receptionists' records.

Melbourne has a comparatively brief but important history as a medical center. The surgeon who has been known best in America was Sir Hugh Devine. He was associated with St. Vincent's for nearly all of his long and brilliant professional life. Sir MacFarlane Burnet, one of the foremost investigators of viruses, has a large research center attached to the University and the Royal Melbourne Hospital. He was awarded a Nobel Prize for his important work in virology during this same month of October when I was in Australia.

St. Vincent's Hospital was founded by the Sisters of Charity. These Sisters are completely devoted to the hospital, and, as a result, it has an *esprit de corps* that is unusually high. The hospital was immaculate; the operating rooms were large and completely equipped. The surgical staff is distinguished and well trained; most of its members have English as well as Australian degrees.

It has often been said that the Australians are a most generous and openhearted people. This is true to a greater extent than one could believe possible. They are charming, sympathetic, intensely practical—lovers of sports, tea, and travel. In addition, since the country is young and under-developed, they are individualists and pioneers.

Mrs. Welch spent a great deal of her time in the nursing school and in the college of nursing, since the education and training of nurses is under constant scrutiny and many American methods are being integrated into their programs. At the end of the month Mrs. Welch was made the first and only honorary member of the St. Vincent's Nursing School.

En route to Melbourne, the Welches spent a few days in Hong Kong, where they were the guests of Dr. C. A. Wang (*W.S.* 1944) and Mrs. Wang, in their beautiful home on the island. However, the unstable political climate and the hundreds of thousands of refugees make life there somewhat precarious. On rounds in Queen Mary's Hospital it was apparent that surgical methods had to be modified to cope with the great problem of malnutrition which is common to nearly all the refugees.

On their return trip, the Welches had a brief view of the huge institute that the Rockefeller Foundation is building in New Delhi for medical research, and then a long visit in Teheran with Capt. and Mrs. G. M. Williams. Here they saw many hospitals, and inspected some that were old, and some that were new, with the most modern facilities. The American Hospital there is small but perfectly equipped. There are now many men in the city of Teheran who have been trained in medical schools and hospitals in America. They are sparking a renaissance in Iranian medicine that should bear fruit in a few years.

When questioned about their trip on their arrival home, the travelers said: "In Teheran we also met the parents and the father- and mother-in-law of Farrokh Saidi (a.r.s. 1960), and they and their friends overwhelmed us with the traditional Iranian hospitality. Since our bags were already full, we left, weighed down by beautiful dishes, Persian rugs, and fur hats from the Caucasus. So encumbered, we returned and, after 79 days and 38,000 miles, were again in Boston. Our children did not recognize us, but our dog found us even more interesting than we were when we left."

* * *

VOLUNTEER GROUPS

MGH Staff Wives Association

A pleasing post-holiday concert was given in the Chapel on the afternoon of January 4. The performing artists were Carol Joplin, soprano, and Susan Stark, her piano accompanist.

Carol Joplin, a voice major at Skidmore College, is the daughter of Dr. and Mrs. Robert J. Joplin. Mrs. Joplin is active on the Music Committee of the Staff Wives Association. Miss Joplin offered a program of songs by composers as varied as Handel and Gian-Carlo Menotti.

Susan Stark, who is accompanist for the Skidmore College chorus, played a piece by Bach-Busoni and a prelude and fugue by Bach.

Both girls, seniors at Skidmore this year, were given permission to return to college a day late in order to give this MGH concert. Both have toured Europe with the College Glee Club. Their young talent, in an old setting, made the concert particularly charming.

A concert by Anton Winkler, flutist, was given on January 18 in the Chapel.

On February 1, Ann Talbot, mezzo-soprano, gave a concert, also in the Chapel.

BIOGLETS

Dr. Giuseppe G. Pietra, Assistant Resident in Pathology—born in Piacenza, Italy, December 30, 1930; Maturita Scientifica, Bologna, Italy, 1948; M.D., University of Milano, 1955; military service: Lieutenant in the Health Service, Italian Army, 1955-57; Research Fellow, Division of Oncology, Chicago Medical School, 1957-60; married.

Dr. Alexander Polak, Assistant Resident in Pathology, assigned to Neuropathology—born in Prague, Czechoslovakia, October 10, 1931; M.D., University of Western Ontario, London, Ontario, Canada, 1955; Intern (rotating), Toronto General Hospital, Toronto, Canada, 1955-56; Resident in Medicine, Toronto General Hospital, 1956-57; Resident in Surgery for 6 months, Shaughnessy Hospital, Vancouver. British Columbia, 1957; Resident in Neurosurgery for 6 months, University Hospital, Saskatoon, Saskatchewan, 1958; Fellow in Neurology, Toronto General Hospital, 1958-59; Clinical and Research Fellow, Massachusetts General Hospital, 1959-60.

Dr. Murray K. Rosenthal, Junior Assistant Resident on the Children's Medical Service—born in Malden, Massachusetts, December 14, 1932; A.B., Harvard College, 1954; A.M. (Biology), Boston University, Boston, Massachusetts, 1955; M.D., University of Vermont College of Medicine, Burlington, Vermont, 1959; Intern in Pediatrics (rotating), Rochester General Hospital, Rochester, N. Y., 1959-60; married; one daughter.

Brief bits:

Dr. Clemens E. Benda has been elected an Affiliate of the Royal Society of Medicine, London.

Miss Constance L. Braman, R.N. has been named as consultant to the registrar of Boston's Central Directory for Nurses.

Dr. J. Bradford Millet has announced his association with Dr. Richard A. Currie, for the practice of General, Thoracic, and Cardiovascular Surgery, at 216 Mayro Building. Utica, N.Y.

Dr. Kurt H. Thoma has returned from Buenos Aires, where he lectured before the Circulo Odontologico Del Oeste at the International Odontological Meeting held in celebration of the 150th anniversary of Argentina's independence. Dr. Thoma also gave a four-day refresher course to a group of South American oral surgeons on the subject "Surgical treatment of oral lesions and tumors".

Dr. Paul D. White has received an honorary membership from the National Association of Science Writers "in recognition of a major contribution to sponsoring the dissemination of accurate scientific knowledge by the press of the nation". Dr. White was one of only three to receive this newly-instituted top honor of the N.A.S.W.

New addresses:

Dr. Ralph H. Adams (*W.S.* 1935), Huggins Hospital, Wolfeboro, N.H.

Dr. Scott Adler (sr.r.s. *Or.* 1959), 200 Oak St., Albuquerque, N.M.

Dr. Joseph M. Alper (*E.M.* 1935), 1185 Park Ave., New York 28, N.Y.

Dr. D. Robert Alpert (a.s. *Oph.*), 1101 Beacon St., Brookline, Mass.

Dr. Edwin F. Alston (*Path.* 1944), 2305 Van Ness Ave., San Francisco, Calif.

Dr. Benjamin H. Alton (*W.S.* 1916), Gansett, Woods Hole, Mass.

Dr. Arthur F. Amick (*M.* 1957), 3415 Minnehaha Ave., Minneapolis 6, Minn.

Dr. W. Gerald Austen (*S.* 1956), National Heart Institute, Bethesda, Md.

Dr. William B. Ayers (*W.S.* 1943), 1554 Northern Blvd., Manhasset, Long Island, N.Y.

Dr. William B. Bacon (a.r.p. *Path.* 1951), South Hamilton, Mass.

Dr. Cecil F. Baxter (*W.S.* 1944), Medical Arts Bldg., Sarasota, Fla.

Dr. Carl B. Beeman (*Path.* 1934), 515 Lakeside Drive, Grand Rapids 6, Mich.

Dr. Glenn E. Behringer (*W.S.* 1946), 266 Beacon St., Boston, Mass.

Dr. George O. Bell (*W.M.* 1936), Lahey Clinic, 605 Commonwealth Ave., Boston. Mass.

Dr. Armand L. Bengle, Jr. (*E.S.* 1947), 2217 Webster St., San Francisco 15, Calif.

Dr. Donald W. Bickley (*W.M.* 1936), 2001 Kimball Ave., Waterloo, Iowa

Dr. Robinson LeR. Bidwell, II (*E.S.* 1943), 31 Bramhall St., Portland, Maine

Dr. James D. Bisgard (*W.S.* 1924), 422 Doctors Bldg., 44th and Farnam Sts., Omaha, Nebr.

Dr. John A. Boone (*C.M.* 1934), Medical College Hospital, 55 Doughty St., Charleston 16, S.C.

Dr. Lemuel Bowden (*E.S.* 1941), 177 E. 79th St., New York 21, N.Y.

Dr. Frederic B. Breed (a.s. *Oph.*), Danversport, Mass.

Dr. Robert J. Brockhurst (*M.* 1948), Retina Associates, 99 W. Cedar St., Boston, Mass.

Dr. Lloyd Brown (*N.S.* 1938), 316 State St., Bangor, Maine

Capt. Robert H. Brown, MC, USN (*E.S.* 1944), Orthopedic Service, U.S. Naval Hospital, Bethesda 14, Md.

Dr. C. Sidney Burwell (*W.M.* 1919), Harvard Medical School, 25 Shattuck St., Boston 15, Mass.

Dr. Roy L. Byrnes (a.r.p. *Path.* 1954), 34745 Camino Capistrano, Capistrano Beach, Calif.

Dr. Jack A. Cannon (*E.S.* 1944), Dept. of Surgery, UCLA Medical Center, Los Angeles 24, Calif.

Dr. J. Vernon Cantlon (*E.S.* 1935), 220 S. Virginia St., Reno, Nev.

Dr. Samuel C. Capps (*Path.* 1946), Butterworth Hospital, 100 Michigan Ave., Grand Rapids 3, Mich.

Dr. Sam L. Clark, Jr. (*M.* 1950), Washington University School of Medicine, St. Louis, Mo.

Dr. William D. Cochran (a.r.p. *C.M.* 1954). Boston Lying-in Hospital, 221 Longwood Ave., Boston, Mass.

Dr. Mary S. Coley (*C.M.* 1955), 63 Dauntless Lane, Hartford 5, Conn.

Dr. Henry B. Crawford (*Or.* 1931), 15 Prince St., Rochester. N.Y.

Dr. Thomas D. Cunningham (*W.M.* 1918 and *C.M.* 1920), 932 Republic Bldg., Denver 2, Colo.

Dr. Willard M. Daggett, Jr. (*S.* 1959), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Clyde W. Dawson (*Or.* 1936), Columbus Surgical Center, 1275 Olentangy River Rd., Columbus 12, Ohio

Dr. Arthur C. Guyton (*W.S.* 1943), University Medical Center, Jackson, Miss.

Dr. John S. Harter (*W.S.* 1935), Medical Arts Bldg., Louisville, Ky.

Dr. Clement A. Hiebert (*S.* 1952), 18 Bramhall St., Portland, Maine

Dr. L. Edgar Hummel (*Path.* 1932), Edward J. Meyer Memorial Hospital, 462 Grider St., Buffalo 15, N.Y.

Dr. Samuel P. Hunt (a.r.p. *Psychiat.* 1940). 520 Skiff St., North Haven, Conn.

Dr. Paul J. Kestens (clin. & res. fel. *S.* 1960), 42 rue de Tirlemont, Louvain, Belgium

Dr. Walter H. Lacey (*W.S.* 1917), West Hill, Keene, N.H.

Dr. John B. McGinty (a.r.s. *Or.* 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Patricia A. McIntyre (*M.* 1953), Confederate Memorial Medical Center, Kings Highway at Linwood Ave., Shreveport, La.

Dr. Clare K. Marshall (r.p. *N.* 1954), 433 Main St., Burlington, Vt.

Dr. H. Peter Mueller (clin. assoc. *R.*), 39 Tyler Rd., Belmont 78, Mass.

Dr. George D. Parker (*Dn.* 1939), 4919 E. 38th Ave., Denver 7, Colo.

Dr. John T. Pollard, Jr. (r.p. *R.* 1959), 81 College Ave., Somerville, Mass.

Dr. Clinton B. Seeley (r.p. *R.* 1960), 106 Elm St., Belmont, Mass.

Dr. William Stone, Jr. (a.s. *Oph.*), 478 Commonwealth Ave., Boston, Mass.

Dr. Donald W. Sutherland (*M.* 1958), 4 High St., Drift, Ky.

Dr. Eji Suyama (*S.* 1951), Maine Coast Memorial Hospital, Union St., Ellsworth, Maine

Dr. Rajendra Tandon (r.p. 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Jerome Waldman (a.r.s. *Or.* 1949), 1950 Sheridan Rd., Highland Park, Ill.

Capt. George M. Williams, MC, USA (*S.* 1958), ARMISH/MAAG, U.S. Army Hospital, APO 205, New York, N.Y.

Dr. Ralph C. Williams, Jr. (*M.* 1955), Rockefeller Institute for Medical Research, 66th and York Ave., New York, N.Y.

Dr. Allen P. Winsor (*W.M.* 1919 and *W.S.* 1921), 172 Buckminster Rd., Brookline Mass.

Dr. Edwin T. Wyman, Jr. (sr.r.s. *Or.* 1960), U.S. Naval Hospital, Camp Lejeune, Jacksonville, N. C.

Dr. Alexander L. Zaoussis (a.r.s. *Or.* 1954), 9 Merlin St., Athens, Greece

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A long and very interesting letter has come from Dr. Hugh Grant Rowell (*W.S.* 1921), written from North Tarrytown, N. Y. The letter reads, in part:

> Being ever a nosey person and considering the world my oyster, I have had a multitude of careers, and though having retired, I am still up to my neck.
>
> Several years ago, upon my retirement, I, together with a long-time associate (both of us trained and interested in genealogy), set up what we call SPECIALIZED RESEARCH, through which we accept clients for genealogical and special research work. We are, as of now, official genealogists to the Pell Family Association, Inc., as well as having clients both in this country and in Europe.
>
> Genealogy is, of course, simply humanized history, and it is fascinating. I have prepared and published in the *New England Historical and Genealogical Register* a series of articles on the Rowell-Redington-Wheeler families.
>
> Like Hugh Williams and, I believe, Dr. Balch, I have been a clock collector for years and have a pretty fine collection of rare ones — mostly American and Dutch. I wrote a great deal on the subject, being a columnist and regular contributor to the now defunct *American Collector* and being Clock Editor as

NO. 94 IN A SERIES OF STAFF PHOTOGRAPHS
DR. LOT B. PAGE, ASSISTANT PHYSICIAN—CHIEF OF THE HYPERTENSION CLINIC

well as Circus Editor of *Hobbies*. I have clocks on my walls, mostly replacing paintings. I also have a clock room instead of the usual rumpus room in the cellar.

I have done a lot of research on circus history and have a very fine collection of very rare circusiana, including possibly the oldest circus poster in America. My model, based on Ringling-Barnum, was one of the earliest and was shown for Ringling-Barnum in New York City, also for a year with the Harry Peters lithographs at the Museum of the City of New York, at the New York Historical Society for several months, and at the Somers Museum of the Circus. Its last appearance was at the Roxy Theatre in New York City — now, alas, torn down.

I have had great pleasure in the genealogical-patriotic societies, of which I have been a state and national officer in many instances. Having followed down a large number of ancestral lines, I have been admitted to many Old World and American groups. As of now, I am President (national) of the Order of Americans of Armorial Ancestry, whose name appears on this letterhead.

I did some interesting work years ago on popular medical articles for *Colliers*, the *American Magazine*, and *MacLeans* (in Canada). I was teamed up with a top-level cartoonist, and we went to town. I also did a huge scientific tome which Saunders, back in the 1930's, sold for $7.50. I liked writing and still do.

One happy memory concerns the boat show I staged on the S.S. *Brazil*, on a South American cruise round 1938. I had a Broadway "band" just returning from Rio, and such stars as the Weire Brothers.

Professionally, I got into that field in which medicine and education are now combined, and in which I was a pioneer. I also did pioneer teacher training work in education of the gifted and the handicapped.

As to clippings, I have any number of fat press books which, I'll wager, my executor will incinerate pronto some day.

Although I retain my New York State medical license and am a life member of APHA, my activity in both those fields is mental, as of now.

I sometimes think that the best years of my life were spent at the Massachusetts General Hospital as striker and house pupil. I realize increasingly how good the opportunities and training were; and, of course, I met Mrs. Rowell there, as any nurse of that day will probably remember.

In a "Give my regards to Broadway" note — it has always been a matter of great pride to learn of the astounding accomplishments of the group who were with me at M.G.H. My real satisfaction has been to see how they have carried the message to Garcia.

In response to our appeal for something about his experiences while he was in Bahrain, Dr. Paul W. Harrison (*E.S.* 1909) has sent us this delightful but all-too-brief letter, written from the Memorial Home Community, Penney Farms, Florida. We hope we may have more from Dr. Harrison—and soon.

Thank you for your letter. It affords an irresistible temptation to haul out of the past an adventure differing from those of these tamer days.

"On a day of the days", as the Arab would say, our high-pressure dervish group held a séance in Kurram, eight miles from Muttreh where the Mission hospital was operating. Such a séance begins at about seven in the evening, and the name of God is repeated rapidly and loudly, with fierce emphasis, until at about midnight the participants begin to go to pieces, falling down, frothing at the mouth, etc.

Then the wonders begin. A baby, sick and with a headache, had its head removed and taken to a tub, full of dirty water, next to the local well. The head was washed carefully, brought back, and put into place. A sick eye was likewise removed and washed. The next morning both patients had recovered completely. The more active participants thrust long slender swords through their abdomens — they protruded from the back. All these things were reported to me the next day by some of my assistants who were onlookers. No matter how completely they were dissociated from each other, these reporters had all seen the same things — a very interesting type of group hypnosis.

One night, however, something more happened. One of the sharp-pointed swords did enter the body a little, leaving a tiny opening into the abdominal cavity. It cut the deep epigastric, which bled actively from both ends. This unexpected result terrified the swordsman. He lay down and evidently tried to stop the bleeding by pushing on his abdominal contents. Practically all of his small intestines were squeezed out and lay in the open air on his abdomen. This impressed the onlookers as being out of order, so they covered the mass of intestines with a five-gallon tin of mud brought over from the nearby well. This they bandaged in with a long bolt of cloth, but they decided it might be better to get this man over to the "Hakim" in Muttreh. It was a rough eight-mile trip for the stretcher-bearers, and they did not arrive until seven o'clock. Mobarrek, my chief assistant, reported the arrival of the patient with these words: "Sahib, a very bad case has come in."

I agreed with him. A little spinal anesthesia was the first step, and two ligatures of the deep epigastric the second. Then we spent forty-five minutes washing the mud off the intestines. Several changes of gloves were required. After widening the small opening a little, we spent the next forty-five minutes in putting the intestines back where they came from. The patient was carefully sewed up with silk, and put to bed.

He developed no peritonitis, and not even any distention. After two days he began to eat, and his extreme depression due to his failure to support his companions lessened. I dreamed of publishing that case until, on the ninth or tenth day, a bad pulmonary embolus carried him off. We felt very annoyed at him for letting us down.

I feel sure that most surgeons here in America have a very inadequate idea of what the peritoneum can do.

Lots of regards.

This very nice note has come from Dr. Murray L. Janower (a.r.p. *R.*):

I just want to drop you a note to let you know how much I have enjoyed reading THE NEWS since I have been gone. It almost makes me feel that I am back with you all at the M.G.H. rather than here.

I am in the Public Health Service, in the Division of Radiological Health in Washington, D.C. We are the agency of the government concerned with the health aspect of the population as affected by ionizing radiation. My work consists of proposing new areas of radiation research and supervising projects already under way. The many, many basic principles learned in Dr. Robbins's department are certainly coming in handy.

I'm also learning what the word "snow" means.

The News

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 202 Boston, Mass. March 1961

THE ARTERIOSCLEROSIS UNIT OF THE CARDIOVASCULAR RESEARCH LABORATORIES

Arteriosclerosis will be the principal or a major contributing cause of death in about 40 percent of all people now living in most of the civilized parts of the world. This dire end will be effected by a process of hardening, thickening, and finally obstruction of the arteries that nourish vital organs of the body. The most common and lethal form in which the disease appears is the "coronary" or "heart attack". Obstruction of the blood supply to the brain leads to several types of "strokes". Involvement of the arteries which supply the kidneys sometimes results in hypertension or kidney failure. Gangrene of the limbs, and damage to the eyes and occasionally to other organs complete the broad spectrum of the serious consequences of arteriosclerosis.

The challenge of arteriosclerosis. Arteriosclerosis presents a major challenge for medical research in the immediate future. It is the greatest public health problem of the civilized parts of the world. It challenges us to develop a method for showing the presence of and measuring the arterial thickening in the living subject. Studies have shown that nearly all adult human beings in civilized regions have this condition to some degree. Yet we remain totally unable to estimate the extent or rate of development of the disease until obstruction of blood flow threatens to damage some vital organ.

Arteriosclerosis presents a prime intellectual challenge to the investigator. Clinical and laboratory research efforts have shown that a multitude of factors may participate in causing arteriosclerosis, e.g., heredity, diet, stress, disorders of lipid and carbohydrate metabolism, and disorders of blood coagulation. The integration of these diverse factors must be achieved for an understanding of the disease mechanism. The necessary thought processes keep the investigator on his toes—and sometimes give him a headache.

Attention to the challenge offered by arteriosclerosis is particularly timely right now. Knowledge in the biological sciences is advancing faster than ever before. This rate of development virtually assures us that the basic information necessary for understanding the mechanism of production of arteriosclerosis is now, or soon will be, available. One may feel confident that substantial progress is near at hand. Indeed, some preventive and therapeutic measures are now supported strongly enough by circumstantial evidence to justify their use in persons with a high risk of suffering from arteriosclerotic disease. The ultimate proof of the efficacy of these measures, or of new ones, will involve long and arduous study until we are able to measure the extent of the disease in the individual patient.

Survey of future research on arteriosclerosis. The Arteriosclerosis Unit is a new subdivision of the Cardiovascular Research Laboratory of the Medical Services. It has been formed to take up the challenge described above and to take advantage of the flood of new knowledge forthcoming from all the natural sciences. It seems appropriate in this first public communication from the new unit to provide the readers with a brief survey of several avenues of study of arteriosclerosis which are likely to be important in the next few years.

One of these significant avenues is the extension of a vast amount of earlier work on the gross and microscopic pathology of arteriosclerosis. Correlation of the pathological findings with the preexisting status of the patient is especially needed. These are some of the factors whose relation to arteriosclerosis needs further study: geography, diet, sex and endocrine status, blood pressure, nicotine and other toxins of civilization, and the presence of concurrent disease. Another requirement is further structural details on how the disease is initiated. There are now three schools of thought whose differences must be reconciled—one advocates intravascular thrombosis as the initial event, a second supports the infiltration of lipid or lipoprotein from the blood stream into the vessel wall, and the third school holds that sufficient lipid may be synthesized within the vessel wall to produce the lesions of arteriosclerosis. Advances which are occurring in the field of histochemistry and in techniques for studying the biochemistry of single cells should point the way to progress in this area.

The second avenue where progress is anticipated is further evaluation of the role of heredity in arteriosclerosis. It has been clear for a long time that the tendency to develop severe arteriosclerosis runs in families and in some racial groups. The belief is now held that the tendency to develop the disease is inheritable, although part of the incidence may be related to similarities of diet and environmental stresses within families. In these respects there seems to be a resemblance among arteriosclerosis, hypertension, and diabetes.

The importance of gaining an understanding of the role played by inheritance in the development of arteriosclerosis has recently been given a very practical turn. Advances in knowledge of genetic mechanisms have begun to show the nature of the molecules actually involved in the process of inheritance and the minutely specific consequences of abnormalities in the key molecules. Thus it has been found that the substitution of just one amino acid for another in the 280 amino acids of each half of the hemoglobin molecule results in sickle-cell anemia or other less common diseases due to hemoglobin abnormalities. A large number of diseases, known collectively as the "inborn errors of metabolism", have been shown to result from absence or improper synthesis of various enzymes. If our growing understanding of molecular genetics could be applied to the study of arteriosclerosis, we might learn what type of molecular abnormality to search for. Despite all the effort already put into arteriosclerosis investigation, we still do not know whether we are dealing with the deficiency of an enzyme of fat metabolism, with a faulty lipoprotein molecule, or with some defect in the blood vessel wall.

A third and major avenue for future investigation concerns the search for these molecular abnormalities which may lead to arteriosclerosis. It is well known that the lesions usually have a scattered distribution, with certain favored sites. Attention must be devoted to the factors in site selection. Why is it that a small amount of the disease in one individual can lead to an early fatal outcome, while extensive disease in another person may not shorten the natural life span? On this question the study of pressure-flow relationships in fluid systems and of the factors involved in the deposit of macromolecules from solution will press forward. Interesting model systems have recently been reported in which the circulation of an animal is led through a circuit of plastic or brass tubing outside the body. Deposits of platelets and lipids in the tubing which mimic the distribution patterns of lesions *in vivo* have been observed.

A widely prevalent thought in arteriosclerosis research has been that a significant abnormality could be found in the blood of affected patients or experimental animals. Unfortunately, too many such defects have been reported and the situation has become complex, indeed.

The proposal that thrombosis in the

blood stream might be the initiating event in arteriosclerosis prompted study of the clotting and clot-digesting (fibrinolytic) mechanisms. The findings have been indefinite but always suggestive. Increased plasma lipids, especially following fatty meals, have been found to promote blood clotting and to be frequently associated with arteriosclerosis. Impairment of fibrinolysis—the removal of existing clots—may also be associated with arteriosclerosis. These studies have been made difficult by an inadequate knowledge of the complex clotting and fibrinolytic systems, but such information is rapidly accumulating.

Let us now consider the area of greatest investigative effort—the study of the body fats or lipids. In the fourteen annual meetings of the American Society for the Study of Arteriosclerosis (now the Council on Arteriosclerosis of the American Heart Association), the papers presented have dealt with cholesterol more than 60% of the time, from clinical, pathological, and biochemical points of view. This strong bias toward cholesterol was based as much upon the availability of fairly accurate and specific methods for its measurement as upon evidence of its role in causing arteriosclerosis.

The enthusiasm for cholesterol did not shed sufficient light on the problem of arteriosclerosis. The bias may now be expected to give way to a thorough consideration of the other classes of lipids—the neutral fats or triglycerides, and the phospholipids.

A number of investigators have directed their attention to the macromolecules in which all the lipids are transported in the blood. The lipoproteins consist of protein, cholesterol and its esters, phospholipids, and triglycerides, in varying proportions. A great wave of enthusiasm for studying these substances was engendered about ten years ago by Gofman and his colleagues at the University of California. Their techniques for measuring the different types of lipoproteins with the ultracentrifuge did not lead to very much progress in terms of practical medicine. This failure was largely due to the impatience of those using the method to have a measure of the amount of arteriosclerosis and of the results of therapy in individual patients. Despite its lack of reliability as a measure of the disease, the method improved our understanding of the nature of lipoproteins. Present knowledge indicates that they represent the association of protein and lipids into complexes which are not molecules in the strict sense of the word. Covalent bonding between lipid and protein is believed to be absent, and only secondary valence forces are considered to be responsible for the binding. The composition of the complexes appears to be constant only on a statistical basis. The lipid moiety, and possibly the protein as well, can exchange in and out of the macromolecules. This much information is only the beginning of that which is needed to understand the relationships among the lipids, the lipoproteins, and arteriosclerosis. The task before us is a painstaking investigation of the ways in which the lipoproteins are formed and broken down. We must learn how the lipid becomes detached from the protein, forming an accumulation within the vessel wall.

The local environment for arteriosclerosis research. It is of interest to mention the important studies being carried out in the Boston area on lipid metabolism and arteriosclerosis. Professor Bloch, at Harvard University, has directed the most extensive contributions to our knowledge of cholesterol biosynthesis. At Harvard Medical School, Professor Kennedy, newly arrived Chairman of the Department of Biological Chemistry, has been largely responsible for current knowledge of the formation of the neutral fats and phospholipids; Professor Oncley has investigated the structure and physical chemistry of some of the lipoproteins; and Professor Janeway, Dr. Gitlin, and their collaborators have studied the turnover of serum lipoproteins. The nutritional aspects of arteriosclerosis have been studied extensively by Professor Stare and his colleagues at the Harvard School of Public Health.

Important contributions on the anatomy of the coronary blood vessels and on endocrine relationships in arteriosclerosis have come from Professor Blumgart and other staff members of the Beth Israel Hospital. Dr. Lever, formerly Associate Dermatologist at M.G.H. and now a member of our Board of Consultation, and his associates have studied patients with hyperlipemia and the mechanism of action of heparin and clearing factor on the transport of blood fat. Dr. Gorlin of the Peter Bent Brigham Hospital has been investigating the physiology of the heart's blood supply.

At the Massachusetts General there are an astonishing number of investigators who are carrying on research projects which have an intentional or an indirect relationship to arteriosclerosis. A mere list can hardly do justice to these efforts, yet it may have some value because this information has not before been assembled. The names of the investigators, their laboratories, and their research interests follow:

H. Anstall—Blood Bank—Clotting, heparin resistance
W. H. Batchelor—Arthritis Unit—Interaction of lipoproteins with tissue constituents
N. L. R. Bucher—Huntington Laboratory—Regulation of cholesterol biosynthesis
B. Castleman, I. Gore, and P. D. White—Pathology Department—Comparison of arteriosclerosis in Japan and the United States
D. G. Cogan and associates—Howe Laboratory, Massachusetts Eye and Ear Infirmary—Aberrant lipogenesis, retinal vascular patterns
J. Currens—Cardiac Unit — Clinical arteriosclerosis
R. A. Field and W. A. Hall—Diabetes Unit—Carbohydrate and lipid metabolism, nonesterified fatty acids
C. M. Fisher—Neurology Service — Arteriosclerosis and the nervous system
L. W. Gaston—Hematology Unit—Blood clotting
J. Gergely—Cardiac Biochemistry Laboratory—Muscle contraction
R. D. Griesemer—Dermatology Service—Sterol synthesis in skin
K. J. Isselbacher and associates—Gastrointestinal Unit—Intestinal absorption and synthesis of lipid, fatty liver
G. L. Nardi — Surgical Service — Coronary blood flow
L. Page—Hypertension Unit—Catecholamines, renal arteriosclerosis
R. S. Shaw—Vascular Laboratory—Occlusive vascular disease
J. Stokes, III—Family Health Service—U.S. P.H.S. Study at Framingham
W. R. Waddell — Surgical Service — Clinical lipid metabolism and arteriosclerosis
E. O. Wheeler—Cardiac Unit—Familial hypercholesteremia
P. D. White—Cardiac Unit—Clinical arteriosclerosis

The author regrets any omissions or errors he may have made in the above list.

The Arteriosclerosis Unit. In the extraordinarily fertile environment described above, this new unit has been established to concern itself directly with arteriosclerosis and with the correlation of knowledge relevant to the disease. Financial support has been provided by generous grants from the John A. Hartford Foundation and the American Heart Association. The members of the unit, in addition to the author, are Dr. Robert S. Lees as Clinical and Research Fellow and Miss Lillian Hagopian as Research Assistant.

The initial laboratory studies will seek to determine the mechanisms governing the association and dissociation of the lipoprotein complexes. It is important to learn to what extent these processes are under enzymic or hormonal control, even though there seems to be no making or breaking of covalent bonds between lipid and protein.

Clinical studies will be carried out for two purposes: to educate the investigators and to make practical application of the laboratory research. In the latter sense, it will be of particular interest to try to relate molecular genetics to the inheritance factors in arteriosclerosis. It is possible that studies of lipoprotein metabolism in patients with premature arteriosclerosis or with hereditary lipid disorders will reveal the presence of defective enzymes or defective proteins, as are found in the other "genetic" diseases. The cooperation of the Hospital staff is asked, that we may be permitted to study these patients whenever possible.

There is now in progress a cooperative study of twin brothers, aged 27 years. One of them recently suffered a heart attack, while the other is a robust young man. Comparison and long-term observation of these two subjects may provide valuable information on the metabolic and physiologic consequences of myocardial infarction. There is also the challenge to apply rational medical measures to treat the unfortunate twin and to preserve the health of his brother.

The direct contribution of the unit to patient care must, for the present time, be limited. The diagnosis of arteriosclerosis usually cannot be made, even with specialized techniques, until the dramatic late complications appear. And definitive medical therapy for the disease is not available. It would appear that the best approach is to carry out a strong research program dedicated to the improved care of future patients, for surely this is one of the functions of a university hospital.

Conclusion. This survey of some of the ways in which investigators are approaching the study of arteriosclerosis has shown the involvement of clinical medicine and epidemiology, pathology, classical and molecular genetics, and various aspects of biochemistry and biophysics. In other words, a general biological attack is under way and is gathering momentum. The challenge and the fascination of research in this field lies in the integration of the various streams of developing knowledge. It seems likely that many of "the straws in the wind", which everyone now finds confusing, are really secondary evidences of some fundamental and yet unrecognized cause of arteriosclerosis. The elucidation of this cause may come from thoughtful consideration of basic biological principles by well-prepared minds.

Frederick T. Hatch, M.D., Ph.D.,
Assistant Physician
and *Chief of the Arteriosclerosis Unit*

The Board of Trustees, at their meetings on December 30 and January 13, voted:

That the Children's Medical Service be allowed an additional Intern on July 1, with the understanding that this would not increase the total number of the House Staff on that Service.

To accept with regret the resignations of:

Dr. David Spiro from the position of Assistant Pathologist, effective as of December 31, 1960;

Dr. A. Dennis Surtees from the position of Assistant Anesthetist, effective as of January 23.

To appoint:

Dr. J. Richard Baringer as Assistant Resident in Neurology for one year, beginning July 1;

Dr. Philip R. Boyd as Clinical and Research Fellow in Psychiatry for one year, beginning January 9;

Dr. Martha A. Carpenter as Exchange Assistant Resident on the Children's Medical Service, for the period December 12, 1960 through January 20, 1961;

Dr. Larry J. Embree as Clinical Fellow in Neurology, to act as Assistant Resident, beginning July 1;

Dr. Milan Fiala as Clinical and Research Fellow in Medicine, beginning January 1;

Dr. Martin H. Flax as Assistant in Pathology, beginning January 1;

Dr. John L. Green as Exchange Assistant Resident on the Children's Medical Service, for the period January 21 through March 9;

Dr. Robert E. Hayes, III, as Clinical Fellow in Neurology, to act as Assistant Resident, beginning July 1;

Dr. Richard C. Hirschhorn as Assistant Resident in Urology for one year, beginning July 1;

Dr. Herman M. Kalckar as Biochemist, beginning July 1;

Dr. Carl M. Leventhal as Assistant Resident in Neurology for one year, beginning July 1;

Dr. John D. Murphy as Assistant Resident in Anesthesia, beginning July 1;

Dr. Eli R. Shuter as Assistant Resident in Neurology for one year, beginning July 1;

Dr. Lois M. Smedley as Assistant to the Children's Medical Service, effective as of November 1, 1960;

Dr. Narayana C. Surya as Visiting Psychiatrist pro tempore, for a period of three months, beginning January 15;

Murray Wittner, Ph.D., M.D. as Clinical and Research Fellow and Acting Intern in Pathology for one year, beginning July 1.

At their meetings on October 19, and January 4 and 18, the General Executive Committee voted:

To extend the appointment of:

Dr. Luis L. de Mola as Clinical Fellow in Pathology, through March 31.

To promote:

Dr. John E. Adams to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. John F. Barlow to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. F. Daniel Foley to the position of Second Assistant Resident in Pathology for one year, beginning July 1;

Dr. Lewis P. James, Jr. to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. Herbert I. Krickstein to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. Giuseppe G. Pietra to the position of Second Assistant Resident in Pathology for one year, beginning July 1.

To appoint:

J. Paul Burnett, Jr., Ph.D. as Research Fellow in Medicine for one year, beginning December 30, 1960;

Branislav D. Jankovic, M.D., Ph.D. as Research Fellow in Neurology for one year, beginning January 1;

Tapan K. Mukherjee, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning February 1.

The 69th annual Vincent Show will be given in New England Mutual Hall by the Vincent Club, for the benefit of the Vincent Memorial Hospital, at 8:30 o'clock on Tuesday evening, April 4, through Saturday evening, April 8. There will be a matinee on Saturday afternoon at 2:30.

This year's show, "Winning Ways", in contrast with 1960's salute to the past, will be a gay and glamorous spoof on politics. The plot centers around the problem of getting one of our first female candidates for the Presidency into the White House. The co-authors are Mrs. Endicott Peabody and Mrs. Rose Parsons Lynch.

Tickets will go on public sale at the box office at New England Mutual Hall, 225 Clarendon Street, Boston, on Monday, March 20. It will be open Mondays through Fridays from 9:30 A.M. to 5:30 P.M. The box office telephone number is COpley 7-1379. Tickets for all six performances range in price from $1.25 to $6.00.

Since 1892, when its total gift was $494.50, to the 1960 gift of $45,000, the Vincent Club has contributed over $1,156,630 to the Vincent Memorial Hospital. Won't you all plan to come to New England Mutual Hall between April 4 and 8 and help the Vincent Club support its favorite candidate, your eighty years junior half-sister, the Vincent Memorial Hospital?

VOLUNTEER GROUPS

MGH Staff Wives Association

The Staff Wives Music Committee is particularly grateful to a recent soloist, Anne Talbot (wife of Dr. Nathan B. Talbot), whose distinguished musical background includes singing in oratorios, being soloist for the Chorus Pro Musica, and giving many concerts throughout New England. For nine years Anne Talbot has sung at the M.G.H. for patients, personnel, and visitors. The Hospital thanks her for nine generous gifts of fine music, and looks forward to her next concert.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry Research

Gergely, J., and Maruyama, K.
The binding of inorganic phosphate to myosin in the presence of adenosine triphosphate.
J. Biol. Chem. 235:3174, 1960.

Martonosi, A., Gouvea, M. A., and Gergely, J.
Studies on actin. IV. Actin as a component of myosin-B.
J. Biol. Chem. 235:3169, 1960.

Parker, C. J., Jr., and Gergely, J.
Soluble relaxing factor from muscle.
J. Biol. Chem. 235:3449, 1960.

Endoscopy

Benedict, E. B., Hawes, L. E., Stewart, C. R.,

Spellman, J. W., and Walsh, W. F.
Corsage pin in stomach.
J.A.M.A. 175:48, 1961.

Radiology

Dreyfuss, J. R., and Willocx, R. G.
The elevator esophagus: A fluoroscopic clue to possible organic disease.
Radiology 75:914, 1960.

Books

Garland, J. E.
Every man our neighbor: A brief history of the Massachusetts General Hospital, 1811-1961.
Boston, Little, Brown and Company, 1961.

This is the last issue of THE NEWS in which 1960 titles will appear.

THE METABOLIC BASIS OF INHERITED DISEASE

JOHN B. STANBURY, M.D., JAMES B. WYNGAARDEN, M.D., DONALD S. FREDRICKSON, M.D., Editors

During most of the recorded history of man's existence disease has been predominantly "exogenous" in origin. Life was brief in a hostile environment of famine and pestilence. Pandemics decimated the population of continents with an efficiency which still evokes respect in this area of nuclear deterrents. Within the past few years, and perhaps within the restricted locale of the Western World, environment has been largely negated as the major arbiter of health or disease. This event is a legacy of both science and sociology—adequacy of nutrition and housing, sanitation, immunization, the discovery of chemotherapeutic agents, and many other similar advances. Some will point out that over-nutrition carries its own subtle dangers and that the continued inclemency of the environment is readily apparent at 5:00 P.M. on Memorial Drive.

It may be said that disease is now predominantly "endogenous". Health or disease of an individual is increasingly a function of his genetic endowment as the major determinant of his survival potential. Diseases may be inherited in man in the same inexorable geometry as shown by Mendel's peas, or, more subtly, the susceptibility toward a disease may be transmitted in ways quite obscure at this time. Within the past two or three years a new type of genetic disorder in man has been demonstrated, characterized by an abnormal number or shape of the chromosomes. Within this brief time approximately thirty "chromosomal diseases" have been recognized. In this complex spectrum of the relationship of the disease to inheritance—stretching from the relative crudity of chromosomal displacement to the obscurity of familial disposition for the development of neoplastic or degenerative diseases—greatest interest has always been centered on the so-called inborn errors of metabolism. Here the disease is thought to be related to abnormality of a single gene. Clarification of the disease mechanism has almost invariably shown the primary fault to be that of a single enzyme.

Recently an important book was published, entitled *The metabolic basis of inherited disease,* edited by Drs. John B. Stanbury, James B. Wyngaarden, and Donald S. Fredrickson, and published by McGraw-Hill Book Company, Inc., New York, 1960. It is appropriate to comment on this book in these columns, since Dr. Stanbury originally conceived the need for such a treatise and was instrumental in initiating its publication. Furthermore, eight of the forty-six contributors to this book are currently on the MGH staff and several others are former members of our Hospital community, including Drs. Wyngaarden and Fredrickson.

The diseases discussed in this book vary in their frequency and importance in clinical medicine—from diabetes mellitus to beta-aminoisobutyricaciduria. Protean in their clinical manifestations, they entice the investigator to try to find the biochemical basis of the disease mechanism. In some of the diseases the abnormality has been pinpointed with beautiful precision as that of a single enzyme. In the classical example of sickle-cell disease a new order of precision has been achieved with the demonstration of a single amino acid substitution in the abnormal globin as the determinant of disease. In other diseases, including gout and diabetes, the primary defect is still far from clear, despite the work of many investigators. This book does not attempt to give a definitive clinical description of the fifty or sixty diseases included. For this purpose, even its ponderous 1400 pages would not suffice. The main purpose of the book is to illustrate how far current biochemical and physiological investigations have been able to elucidate the primary enzymatic basis of a disease and how this relates to its clinical and pathological manifestations. As in any contributors' volume, the presentations vary in tone and completeness. Within the guidelines laid down by the editors, the general pitch of the book is uncompromisingly "advanced". It is a superb documentation of the impact of modern biochemistry on medical investigation.

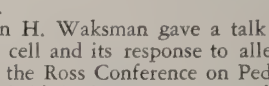
None of the inborn errors of metabolism can be cured in the sense that the absent or deranged enzyme be replaced. On the other hand, knowledge of the disease mechanism may allow a rational circumvention to be devised. If milk is withheld, the galactosemic patient is not seriously handicapped. If pyrimidine nucleotides are given, the block in nucleic acid synthesis characteristic of orotic aciduria may be bypassed. As more information on normal biological control mechanisms becomes available, such as feedback inhibition, these may be brought to bear on other metabolic errors. How many inborn errors of metabolism exist? Several have come to light since this book was submitted for publication, and hundreds of laboratories are working to insure their early obsolescence. It has been estimated without firm grounds that man has from 80,000 to 100,000 genes. In theory one might have a similar order of genetic diseases. Most genetic diseases may be lethal, since they involve enzymes whose activities are necessary for survival. Other genetic disorders may be trivial, involving enzymes whose activities are not required for health. Between these two extremes lie a large number of important and intriguing diseases. *The metabolic basis of inherited disease* is by far the most rewarding source currently available in which to read about them.

Lloyd H. Smith, Jr., M.D.,
Assistant Physician

We recommend highly an informative and attractive little book, *Every man our neighbor: A brief history of the Massachusetts General Hospital, 1811-1961,* written by Joseph E. Garland. Its 56 nine- by six-inch pages, plus many illustrations and a Foreword by Dr. George Packer Berry, Dean of the Faculty of Medicine, Harvard University, can best be abstracted by quoting the first paragraph in Mr. Garland's Preface to his book. It reads:

> About four months ago it occurred to some of the people who were planning the 150th Anniversary of the Massachusetts General Hospital that a short, more or less readable story of its history did not exist. Four consecutive accounts—adding up to two thousand pages (and the mountain from which most of the molehill that follows was sifted)—had been capably written, but they do not constitute in the aggregate an easy evening's entertainment or introduction. A bird's eye view was needed, and I agreed to be the bird. The result is a kind of sketch; it touches on the high points and avoids detail, and is intentionally inferential rather than comprehensive.

The book was published by Little, Brown and Company, Boston, and may be purchased at our General Store for the very modest price of $1.00. Everyone interested in any way in the Massachusetts General Hospital should not fail to procure a copy of Mr. Garland's book.



Brief bits:

Professor Ryo Takahashi, M.D., E.N.T. Clinic, Tokyo Jikei-Kai School of Medicine, Tokyo, Japan, has published a volume on the transsphenoidal approach to pituitary tumors and has sent a copy to Dr. Oscar Hirsch. The author dedicates his book to Dr. Hirsch, who is a pioneer in this approach.

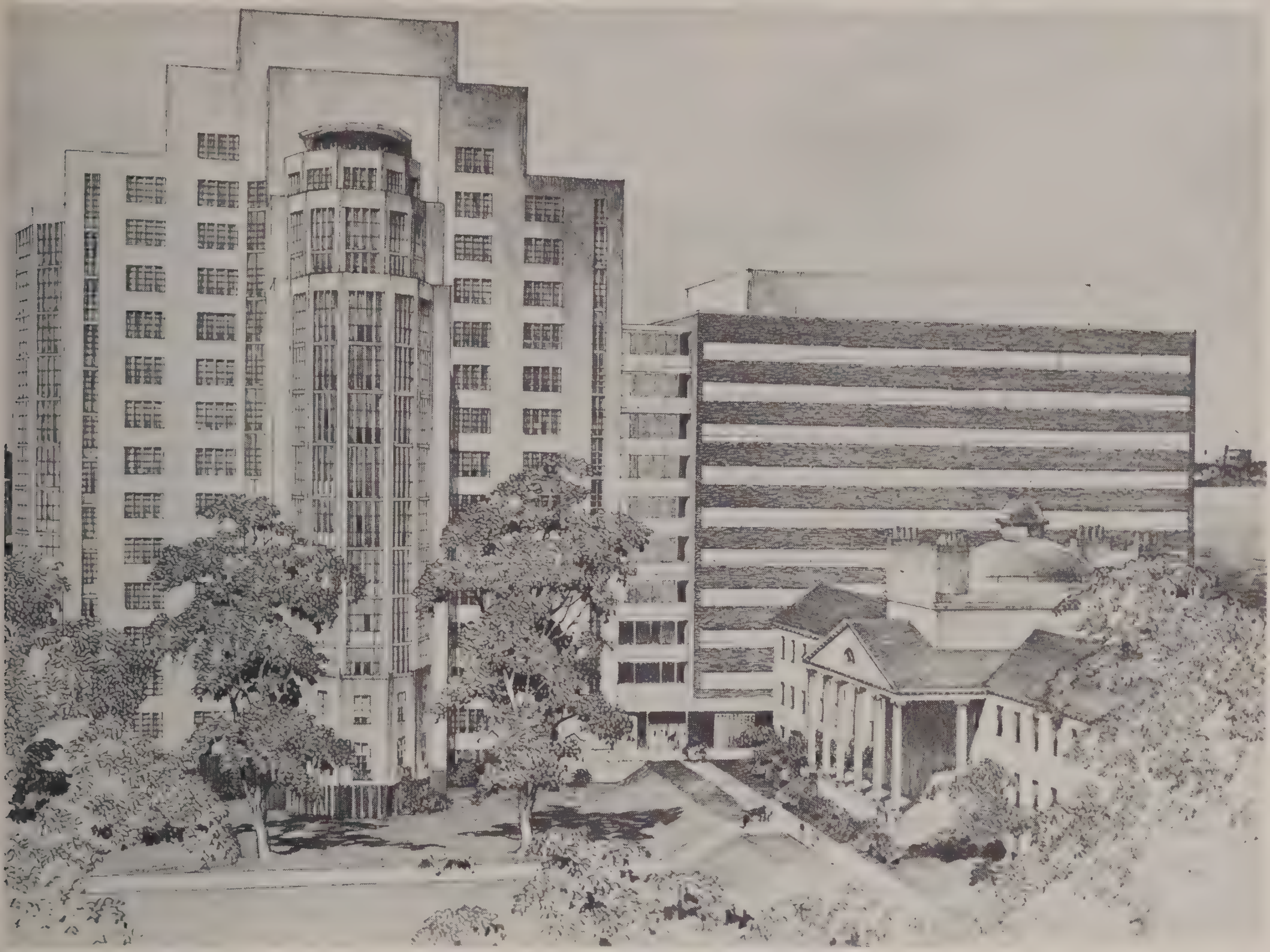
Dr. Byron H. Waksman gave a talk on "The normal cell and its response to allergic stimuli" at the Ross Conference on Pediatric Research, held in Denver on November 9 and 10. From November 10 to 12, Dr. Waksman delivered several lectures in a course on Clinical Immunology, given at the University of Washington School of Medicine in Seattle.

New addresses:

Dr. Nels W. Ahnlund (r.s. *Or.* 1943), Medico Dental Bldg., 6th and Santa Clara Sts., San Jose, Calif.

Dr. Erna G. Anderson (r.p. *C.M.* 1943), Medical Dept., Eastman Kodak Co., 1669 Lake Ave., Rochester 13, N. Y.

Dr. Niels L. Anthonisen (r.p. *Psychiat.* (*McL.*) 1932), Veterans Administration Hospital, White River Junction, Vt.



Architect's rendering of the proposed new Surgical and Special Services Building

Dr. Jason A. Aronson (a. *Psychiat.*), 50 Beacon St., Boston, Mass.
Dr. James H. Averill (*M.* 1947), 264 Elm St., Northampton, Mass.
Dr. Russel L. Baker (r.p. *N.* 1943), Medical Arts Bldg., 1020 S.W. Taylor St., Portland 5, Oreg.
Dr. Donald C. Balfour, Jr. (*E.M.* 1943), Las Encinas Hospital and Las Encinas Medical Foundation, 2900 E. Del Mar Blvd., Pasadena, Calif.
Dr. Fred B. Ballard (a.r.p. 1958), Medical Arts Bldg., Chattanooga 2, Tenn.
Dr. Peter R. Bally (a.r.p. 1956), Medizinische Universitätsklinik, Kantonsspital, Zürich, Switzerland
Dr. Bernard Bandler (r.p. *Psychiat.* 1941), Boston University-Massachusetts Memorial Hospitals Medical Center, 750 Harrison Ave., Boston 18, Mass.
Dr. Thomas B. Barnett (*M.* 1950), University of North Carolina School of Medicine, Chapel Hill, N. C.
Dr. John T. Bate (r.s. *U.* 1925), 301 W. Ormsby Ave., Louisville 3, Ky.
Dr. Richard F. Bedell (*C.M.* 1958), Scarswold Apts., Scarsdale, N. Y.
Dr. Lillian F. Bennett (*C.M.* 1946), 2299 19th Ave., San Francisco 16, Calif.
Dr. Howard W. Berg (r.p. *D.* 1936), Brigham Hall Hospital, 229 Bristol St., Canandaigua, N. Y.
Dr. George A. Berkheimer (r.s. *Or.* 1941), 325 N. Front St., Harrisburg, Pa.
Dr. John T. Binion (*M.* 1953), Doctors Bldg., 3707 Gaston Ave., Dallas 10, Tex.
Dr. William R. Blade (*r.p. R.* 1958), 1510 Seabright Ave., Santa Cruz, Calif.
Dr. Gordon L. Block (r.s. *U.* 1950), Doctor's Bldg., Cincinnati 2, Ohio
Dr. Daniel K. Bloomfield (r.p. 1957), Western Reserve University School of Medicine, Cleveland 6, Ohio
Dr. Frances J. Bonner (a. *Psychiat.*), 160 Lake Ave., Newton Centre, Mass.
Dr. Russell P. Borden (*W.S.* 1914), Langley, British Columbia, Canada
Dr. Harold F. Bosco (*Dn.* 1946), 300 Main St., New Britain, Conn.
Dr. Samuel J. Brendler (sr. r.s. *N.S.* 1953), New England Center Hospital, 171 Harrison Ave., Boston 11, Mass.
Dr. Robert L. Brent (*C.M.* 1955), Jefferson Medical College of Philadelphia, 1025 Walnut St., Philadelphia, Pa.
Dr. Edward M. Bridge (*C.M.* 1927), University of Buffalo, 3435 Main St., Buffalo, N. Y.
Dr. Clyde O. Brindley (*M.* 1950), National Institutes of Health, Bethesda 14, Md.
Dr. F. Bert Brown (*Or.* 1937), 22 W. Gaston St., Savannah, Ga.
Dr. R. Gordon Brown (*Path.* 1942), 122 S. Michigan Ave., Chicago 3, Ill.
Dr. ~~Edward M.~~ Burns (r.p. *Psychiat.* 1935), 110 E. Main St., Madison 3, Wis.
Dr. Arthur C. Cairns (gr. stud. a. *M.* 1959), 119 Sunnyside Ave., Montreal, Canada
Dr. F. Phinizy Calhoun, Jr. (*E.M.* 1938), 478 Peachtree St., Atlanta, Ga.
Dr. Lewis Capland (r.p. *D.* 1940), 1680 Meridian Ave., Miami Beach, Fla.
Dr. Paul J. Catinella (a.d.), Medical Arts Bldg., 697 Cambridge St., Brighton 35, Mass.
Dr. Lee M. Cecil (*M.* 1950), 710 C St., San Rafael, Calif.
Dr. Richard B. Chapman (a. *Oph.*), 743 High St., Dedham, Mass.
Dr. Leon I. Charash (a.r.p. *C.M.* 1952), 146 Mount Joy Ave., Freeport, N. Y.
Dr. Jacob Christ (a. attend. psychiat. (*McL.*)), 51 Brattle St., Cambridge 38, Mass.
Dr. Herbert S. Cline (a.r.p. *Psychiat.* 1956), 185 Dean Rd., Brookline 46, Mass.
Dr. Cully A. Cobb, Jr. (r.p. *N.* 1948), Medical Arts Bldg., Nashville 12, Tenn.
Dr. Howard C. Coggeshall (*W.M.* 1935), 3710 Swiss Ave., Dallas 4, Tex.
Dr. Irwin J. Cohen (*C.M.* 1931), Veterans Administration ~~Central Office~~, Vermont Ave. and Eye St., Washington 25, D. C.
Dr. ~~Richard~~ B. Cohn (*Path.* 1933 and *E.S.* 1936), Stanford Medical Center, Palo Alto, Calif.
Dr. Paul Colokathis (a.r.s. *Or.* 1954), 146 Tarrytown Rd., Manchester, N. H.
Dr. Grant E. Colpitts (r.p. *Path.* 1952), St. Luke's Hospital, Duluth, Minn.
Dr. John B. Colquhoun (*Or.* 1927), 85 Spring St., Melbourne, Australia
Dr. Thomas B. Coolidge (*W.M.* 1929), 947 E. 58th St., Chicago 37, Ill.
Dr. Walter C. Cotter ~~(r.s. N.S. 1957)~~, 274 Benefit St., Providence, R. I.
E. Murray
Dr. Frederick H. Cummer, Jr. (sr. r.p. *Psychiat.* (*McL.*) 1950), Boston City Hospital, Boston, Mass.
Dr. Edward M. Daniels (assoc. psychiat. (*McL.*)), 26 Lyman Rd., Chestnut Hill 67, Mass.
Dr. Hadassah S. Daniels (a. attend. psychiat. (*McL.*)), 26 Lyman Rd., Chestnut Hill 67, Mass.
Dr. Jane E. Denton (*M.* 1946), Main St., Hopkinton, Mass.
Dr. Herman DeWilde (clin. assoc. *Dn.*), 403 Commonwealth Ave., Boston 15, Mass.
Dr. G. Richard Dickersin (a.r.p. *Path.* 1957), Brockton Hospital, Brockton, Mass.
Dr. Victor M. Dillon (*Or.* 1932), 2166 Hayes St., San Francisco 17, Calif.
Dr. Kenneth L. Dole (*E.S.* 1917), Cedar Point, Mackinac Island, Mich.
Dr. James H. Donald (*M.* 1947), Burns Bldg., Colorado Springs, Colo.
Dr. Truman G. Drake (a.r.p. 1937), 114 N. Taylor Ave., St. Louis 8, Mo.
Dr. J. Charles Drooker (s. *Otolar.*), 285 Commonwealth Ave., Boston 15, Mass.

Dr. Raymond J. Duffy (r.p. *Psychiat.* (*McL.*) 1935), Methodist Bldg., Wheeling, W. Va.
Dr. John W. Dulin (*Path.* 1933), Dey Bldg., Iowa City, Iowa
Dr. Edwin R. Durno (*E.S.* 1929), House of Representatives Office Bldg., Washington, D. C.
Dr. John H. Dwyer (a.r.p. *C.M.* 1956 and r.p. *Psychiat.* (*McL.*) 1958), Western Psychiatric Institute and Clinic, 3811 O'Hara St., Pittsburgh 13, Pa.
Dr. Henry W. Edmonds (r.p. *Path.* 1942), 110 Irving St., N.W., Washington 10, D. C.
Dr. Norman Egel (*Or.* 1938), 797 Elmwood Ave., Rochester 20, N. Y.
Dr. Frank R. L. Egloff (r.p. *Psychiat.* 1951), 31 Main St., Farmington, Conn.
Dr. Howard L. Elliot (r.p. *An.* 1942), Chestnut Hill, Harlan, Ky.
Dr. Joseph D. Enterline (*E.S.* 1943), Kings View Hospital, Reedley, Calif.
Dr. Frank R. Ervin (assoc. psychiat.), Massachusetts General Hospital, Boston 14, Mass.
Dr. John O. Esslinger (a.r.s. *Or.* 1952), 622 N. Woodward Ave., Birmingham, Mich.
Dr. Henry C. Everett, III (a.r.p. *Psychiat.* 1958), Johns Hopkins Hospital, Baltimore 5, Md.
Dr. Edward G. Ewer (*Or.* 1936), 419 30th St., Oakland 9, Calif.
Dr. Robert Fienberg (clin. assoc. *Path.*), Beverly Hospital, Beverly, Mass.
Dr. Francis M. Findlay (*E.S.* 1924), San Manuel Hospital, San Manuel, Ariz.
Dr. John T. Finkenstaedt (*M.* 1947), Cornell University Medical College, 1300 York Ave., New York 21, N. Y.
Dr. Harlan I. Firminger (sr. r.p. *Path.* 1947), University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore 1, Md.
Dr. E. Halsell Fite (*E.S.* 1926), Memorial Medical Bldg., 443 N. 16th St., Muskogee, Okla.
Dr. James A. Flagg (a.r.p. *An.* 1955), Bridgeport Hospital, Grant St., Bridgeport, Conn.
Dr. Clayton W. Fortune (*Or.* 1930), 626 James Place, Erie, Pa.
Dr. Dwight M. Fowler (*E.S.* 1946), Cove St., Duxbury, Mass.
Dr. Lewis Francis (a.r.p. *An.* 1950), 3022 Breckenwood Drive, Lexington, Ky.
Dr. Henry S. Fuller (*W.M.* 1943), Walter Reed Army Institute of Research, Washington 12, D. C.
Dr. Robert E. Funsch (a.r.s. *Or.* 1951), 950 Francis Place, Clayton 5, Mo.; 508 N. Grand Ave., St. Louis, Mo.
Dr. Henry B. Garrigues (*W.S.* 1939), 1301 Columbia St., Seattle 4, Wash.
Dr. Leo E. Gibson (r.s. *U.* 1926), 831 James St., Syracuse, N. Y.
Dr. Ross Golden, (h.p. *R.* 1921), University of California at Los Angeles Medical Center, Los Angeles 24, Calif.
Dr. Charles P. Graham (*E.S.* 1935 and *N.S.* 1936), 304 N. 11th St., Wilmington, N. C.
Dr. George J. M. Grant (r.p. *D.* 1932), 9 Central St., Lowell, Mass.
Dr. Ashton Graybiel (*E.M.* 1932), U.S. Naval Aviation Medical Center, Pensacola, Fla.
Dr. D. Crosby Greene (*C.M.* 1940), Washington County Health Dept., 1302 Pennsylvania Ave., Hagerstown, Md.
Dr. Nicholas M. Greene (a.r.p. *An.* 1951), Grace-New Haven Community Hospital, New Haven, Conn.
Dr. Richard W. Greene (*M.* 1945), 32 Johnson Ave., Newark, N. J.
Dr. James Greenough (*W.S.* 1920), 400 Main St., Oneonta, N. Y.
Dr. Robert A. Gregory (r.p. *N.* 1933), Provincial Hospital, Lancaster, New Brunswick, Canada
Dr. Samuel S. Hanflig (*Or.* 1931), 45 Pinehurst Rd., Belmont 78, Mass.
Dr. Richard B. Harvey (*M.* 1946), 251 Edwards St., New Haven, Conn.
George Hauser, Ph.D. (assoc. biochem. (*McL.*)), McLean Hospital, Belmont 79, Mass.
Dr. John W. Hayden (a.r.s. *Or.* 1955), Gundersen Clinic, 1836 South Ave., La Crosse, Wis.

Such wide and excellent coverage by the communications media—radio, television, magazines, and the press—was given to the Convocation ceremonies, which inaugurated the celebration of the 150th Anniversary of the Massachusetts General Hospital, that any further remarks here would add nothing. We do feel, however, that our readers would be interested in having for their permanent files the following pertinent data, as received from the office of the 150th Anniversary. concerning the individuals, hospitals, and institutions which were honored by or participated in the Convocation:

Fifteen of the world's outstanding hospitals and medical institutions, 15 outstanding doctors who received their early training at the Massachusetts General Hospital, 9 outstanding graduates of the MGH School of Nursing, and 3 outstanding members of the Social Service Department were honored by the Hospital during the Convocation. The institutions were selected because they are linked with the M.G.H. through their historical background or because of other considerations of a common purpose. The doctors were nominated by secret ballot from among the 2200 members of the MGH House Pupils Association, an organization made up of former interns and residents. The nurses were chosen by secret ballot of the members of the MGH Nurses' Alumnae Association, and the Social Service recipients were chosen by the Social Service Department.

Each of the recipients received a citation and a commemorative medal. The medal which was struck to commemorate the 150th Anniversary of the Hospital, shows on the obverse the profiles of the two founders of the Hospital—Dr. John Collins Warren and Dr. James Jackson. Just above their heads is a small clutch of poppies to symbolize the Hospital's first great contribution to medicine: the public demonstration of surgical anesthesia. On the reverse, the portico of the Bulfinch Building is shown. This view is recognized all over the world as the symbol of the Massachusetts General Hospital. The sculptor is Eberhardt Luttner, a young German artist who, although only 33 years of age, has made numerous distinguished bas-reliefs: Pope Pius XII and Pope John XXIII, Chancellor Adenauer, and many others. He has also executed a heroic-sized Madonna, which stands high above Maximilianstrasse in Munich.

The following hospitals and medical institutions were honored during the Anniversary Banquet at the Sheraton-Plaza Hotel:

Karolinska Institute of Stockholm—a great medical center which last year observed its 150th anniversary, was represented by Dr. Harry Boström, Head of the Department of Metabolic Research of the Wenner-Gren Institute for Experimental Biology at the University of Stockholm and Assistant Professor in Medicine at the Serafimer Hospital of Karolinska Institute. Dr. Boström participated in a scientific symposium on "Connective tissue and certain of its diseases" during the Convocation.

The All-India Institute of Medical Sciences in New Delhi—a significant achievement in India's medical progress, was represented by the Rajkumari Amrit Kaur, its President and founder and India's former Minister of Health. The Rajkumari participated in a symposium on "International health".

Allgemeines Krankenhaus of Vienna—the hospital at which Dr. James C. White studied in 1856, returning to become the first dermatologist at the M.G.H. and in America, was represented by Professor Dr. J. Tappeiner, its Director.

Guy's Hospital in London—honored as the prototype of the modern voluntary hospital and as the institution where Drs. James Jackson and John Collins Warren, co-founders of the M.G.H., studied under Sir Astley Cooper.

La Pitié of Paris—recognized as one of the great hospitals of Europe, where Dr. Jackson and other young members of M.G.H.'s first staff came under the influence of Dr. Pierre Charles Alexandre Louis.

Ospedale Maggiore di Milano, Italy—cited as the oldest voluntary philanthropic hospital in the world which is still in operation more than 500 years after its founding.

L'Hotel-Dieu de Quebec of Quebec—the first hospital in America, founded in 1638, was represented at the Convocation by Dr. Louis-Napoleon Larochelle, President of its Medical Bureau.

The Montreal General Hospital, the "M.G.H. of Canada"—represented by David A. Wanklyn, its President.

The two hospitals in the United States that are older than the Massachusetts General—Pennsylvania Hospital in Philadelphia, founded by Benjamin Franklin in 1751, and The Society of the New York Hospital, founded in 1771, represented by their respective Presidents, T. Truxton Hare, Jr. and Frederick K. Trask, Jr.

The Rockefeller Institute and Hospital in New York—honored for its contributions to and support of medical research, represented by its President, Dr. Detlev W. Bronk.

The Johns Hopkins Hospital, Baltimore—which raised teaching hospitals to the status of university graduate schools, represented by Walter F. Perkins, President.

The Yale University School of Medicine, New Haven—also celebrating its 150th anniversary this year, represented by Dr. Vernon W. Lippard, Dean.

The Boston Dispensary—founded in 1796 as the first organized effort to meet the needs of the sick poor in Boston, represented by Augustin H. Parker, Jr., President.

The Touro Infirmary, New Orleans—a salute to the memory of the Touro brothers, Abraham of Boston and Judah of New Orleans, who left major legacies to the M.G.H. and Touro Infirmary more than a century ago.

The citations and commemorative medals were presented to the 15 doctors at a luncheon in the Sheraton-Plaza, presided over by Dr. Nathan M. Pusey, President of Harvard University. The awards were given by Dr. James M. Faulkner, President of the MGH House Pupils Association and Acting Director of the Boston University-Massachusetts Memorial Hospitals Medical Center. The names of the recipients and their citations follow:

Dr. Fuller Albright (*W.M.* 1926), whose citation was accepted by his wife because of his illness—former Associate Professor of Medicine at Harvard Medical School, member of the Board of Consultation at the M.G.H. Dr. Albright, a highly original investigator in the field of endocrinology, attracted a group of brilliant medical scientists to work with him at the M.G.H. and discovered several endocrine disorders in the course of his researches. A graduate of Harvard College and Harvard Medical School, he is 61 and lives in Brookline.

A bold explorer and a keen observer, he took delight in opening new horizons to our vision.

Dr. Henry Knowles Beecher (*W.S.* 1934)—Henry I. Dorr Professor of Research in Anesthesia at Harvard Medical School and Director of Anesthesia and the Anesthesia Laboratory at the M.G.H. He was the first anesthetist, 25 years ago, to found a laboratory solely for research in anesthesia and related problems. Dr. Beecher has been a leader in demonstrating that the effects of drugs on the mind can be scientifically studied and measured. He has made original contributions to the investigation of pain and the effects on it of drugs. He is 56 and was educated at the University of Kansas and Harvard Medical School. Dr. Beecher lives in Canton.

His career has been a calculated campaign against pain, in which he has taken measure of the enemy forces and by dividing them has conquered.

Dr. Edward Delos Churchill (*W.S.* 1922)—John Homans Professor of Surgery at Harvard Medical School and Chief of the General Surgical Services at the M.G.H. He has made pioneering contributions to chest surgery, especially in respect to techniques for operating on the lungs and parathyroid glands. During World War II he was Consulting Surgeon to the North African and Mediterranean Theaters of Operations and led the way to new advances in military medicine. Dr. Churchill was educated at Northwestern University and Harvard Medical School. He is 65 and lives in Belmont.

A man of many talents, his contributions to thoracic surgery, to the education of young surgeons, and to military medicine have earned him the gratitude of a nation.

Dr. Frederick Amasa Coller (*W.S.* 1914)—Professor of Surgery, Emeritus, and Chairman, Emeritus, of the Department of Surgery at the University of Michigan. A great teacher and practising surgeon, Dr. Coller was educated at South Dakota State Teachers College and Harvard Medical School. He is 73 and lives in Ann Arbor, Michigan. He was not able to be present because of illness.

A surgeon's surgeon, beloved and respected by colleagues, students, and patients, from coast to coast.

Dr. Joseph Garland (*C.M.* 1919 and *E.M.* 1921)—Editor of the *New England Journal of Medicine,* member of the Board of Consultation of the M.G.H. A former Instructor in Pediatrics at Harvard Medical School, Dr. Garland practised pediatrics from 1922 until 1948. He is 68 and was educated at Harvard College and Harvard Medical School. He lives in Brookline.

Physician, author, editor, wit, and sage. He has placed the mortar of literacy between the stones of science and made the *New England Journal of Medicine* the conscience of our profession.

Dr. Rodolfo Eduardo Herrera (*E.S.* 1943)—Chief Surgeon and Director of Centro Medico and Clinical Professor of Surgery at the San Carlos University of Guatemala, Guatemala City, Guatemala. Dr. Herrera is the founder of Guatemala's medical center and a leader in the development of modern medicine in his country. He is a graduate of the University of Paris and Massachusetts Institute of Technology. He received medical degrees from Harvard Medical School and the San Carlos University of Guatemala. He is 45 and lives in Guatemala City.

A surgeon with the skill to transplant a graft of the M.G.H. to Guatemala City, with a highly successful result.

Dr. Chester Morse Jones (*E.M.* 1919)—Clinical Professor of Medicine, Emeritus, at Harvard Medical School and a member of the Board of Consultation at the M.G.H. President-elect of the American College of Physicians, Dr. Jones has for forty years been a leader in the investigation and treatment of diseases of the gastrointestinal tract. He is 69 and was educated at Williams College and Harvard Medical School. His home is in Newton.

Indomitable explorer of dark and devious passageways, his researches have illuminated a complex field and inspired a generation of followers.

Dr. Robert Ritchie Linton (*W.S.* 1928)—Assistant Clinical Professor of Surgery at Harvard Medical School and a member of the Board of Consultation at the M.G.H. Widely known for his contributions to the surgical treatment of diseases of the blood vessels, Dr. Linton was educated at the University of Washington and Harvard Medical School. He is 60 and lives in West Newton.

With the resourcefulness of a pioneer, he has blazed incredible new trails in vascular surgery.

Dr. James Howard Means (*E.M.* 1913)—Honorary Physician at the M.G.H., Jackson Professor of Clinical Medicine, Emeritus, at Harvard Medical School, and former Chief of the Medical Services at the M.G.H. Dr. Means established the metabolic research Ward 4 at the M.G.H. and was a pioneer in the field of endocrinology. Known for his forthright opinions in the area of medical economics, Dr. Means was educated at Harvard College and Harvard Medical School. He is 75 and lives in Boston.

A truly complete physician, as deft with the brush as with the pen, he coupled the science of physics to the art of physick.

Dr. Joe Vincent Meigs (*E.S.* 1921)—Clinical Professor of Gynecology, Emeritus, at Harvard Medical School, former Chief of the Vincent Memorial Hospital at the M.G.H., Consulting Visiting Gynecologist at the Vincent, and Consulting Visiting Surgeon at the M.G.H. For many years the name of Dr. Meigs and that of the Vincent Memorial have been synonymous, and he is one of the country's leading gynecologists. A graduate of Princeton University and Harvard Medical School, he is 68 and lives in Boston.

His skill as a surgeon, his talent as a teacher, and his integrity as an investigator have made him famed among men and blessed among women.

Dr. Francis Daniels Moore (*W.S.* 1940)—Moseley Professor of Surgery at Harvard Medical School and Surgeon-in-Chief at the Peter Bent Brigham Hospital, Boston. A brilliant operator and investigator, Dr. Moore has specialized in gastrointestinal surgery, tissue transplantation, and the metabolic aspects of surgical care. Educated at Harvard College and Harvard Medical School, he is 47 and lives in Brookline.

A versatile surgeon, as skillful with the spectrophotometer as with the scalpel. He has taught us how to reduce the biochemical dislocations of the postoperative state.

Dr. Walter Gray Phippen (*S.S.* 1906)—President, Emeritus, of the Staff and former Chief of the Surgical Service at the Salem Hospital. A past President of the Massachusetts Medical Society, Dr. Phippen is a respected leader in his profession who has been responsible by precept for raising the standards of community hospitals generally. Educated at Harvard College and Harvard Medical School, he is 84 and lives in Salem.

Surgeon, medical statesman, citizen. He has made the Salem Hospital a model for community hospitals throughout the nation.

Dr. Joseph Stokes, Jr. (*W.M.* 1921)—Professor of Pediatrics at the University of Pennsylvania School of Medicine and Physician-in-Chief at the Children's Hospital in Philadelphia. Dr. Stokes discovered the value of gamma globulin for the prevention of epidemic hepatitis during World War II and has led research in immunization against influenza, polio, mumps, and measles. He is 64 and was educated at Haverford College and the University of Pennsylvania School of Medicine.

His courage and skill in attacking and solving the immediate and baffling problem of hepatitis during the war helped bring victory to our cause and lasting benefits to all mankind.

No. 95 in a series of Staff photographs
Frederick T. Hatch, M.D., Ph.D., Assistant Physician—Chief of the Arteriosclerosis Unit

Dr. Paul Dudley White (*C.M.* 1911 and *W.M.* 1913)—Honorary Physician at the M.G.H. and former Clinical Professor of Medicine at Harvard Medical School. Dr. White, who began his career fifty years ago, on the Hundredth Anniversary of the M.G.H., actively continues a life devoted to the investigation and treatment of heart disease that has brought him international fame. He is 74, a graduate of Harvard College and Harvard Medical School, and he lives in Belmont.

The world is his clinic and the seas his laboratory. His name brings forth praise among great men and terror among great whales.

Dr. Robert Frederick Loeb (*W.M.* 1920)—Bard Professor of Medicine, Emeritus, at Columbia University and Consultant to the Presbyterian Hospital in New York. Dr. Loeb is a Trustee of the Rockefeller Institute and was a member of President Eisenhower's Science Advisory Committee. He is also a member of the Scientific Advisory Committee of the M.G.H. A graduate of the University of Michigan and Harvard Medical School, Dr. Loeb is 65 and lives in New York City.

One of the great teachers of his generation, he has exemplified the role which the exact sciences should play in the education of the modern physician.

Dr. Loeb, the final recipient, gave a short speech, in which he expressed the appreciation of all the doctors who had been cited by the MGH House Pupils Association.

The citations and commemorative medals were presented to the 9 outstanding graduates of the MGH School of Nursing at a banquet in the Hotel Somerset. The awards were given by Mrs. Madalene F. Calogiro, President of MGH Nurses' Alumnae Association, to the following:

Marie Scherer Andrews, Professor of Nursing Education and Chairman of the Department of Nursing, Graduate School, Boston College. Mrs. Andrews is President of the Massachusetts Nurses Association, Civilian Consultant to the United States Navy, and a member of the Watertown Board of Health.

Adele L. Corkum, Assistant Director of Nursing Service in the Baker Memorial of the M.G.H., a Director of the Alumnae Association, and a member of the fund-raising committee of the Boston University School of Nursing.

Katharine E. Faville, Dean of the Wayne State University College of Nursing, Detroit. Miss Faville is a Consultant to the Veterans Administration, a member of the Public Health Research Study Section of the Department of Health, Education, and Welfare, and a Director of the Michigan League for Nursing.

Edna S. Lepper, Associate Director of the MGH Nursing Service and Assistant Professor of Nursing on the Clinical Faculty at Boston University. Miss Lepper is Chairman of the National League for the Nursing Advisory Committee to Federal Nursing Services, and a member of the Board of Governors of the Human Relations Center at Boston University.

R. Louise Metcalf McManus, Director of the Division of Nursing Education at Columbia University Teachers College and of its Institute of Research and Services in Nursing Education. She is also Consultant to the Department of Nursing at Walter Reed Army Institute of Research in Washington.

Margaret G. Reilly teaches at the Boston College School of Nursing and at St. Joseph's College in Framingham. Miss Reilly is Chairman of the Old Colony Health Association's Committee on Education.

Ruth Sleeper, Director of the M.G.H.'s School of Nursing and Nursing Service. Recipient in 1959 of the Florence Nightingale Medal and a past President of the National League for Nursing, Miss Sleeper is Chairman of the Education Committee of the International Council of Nurses, a member of the Expert Committee on Nursing of the World Health Organization, and Honorary Civilian Consultant to the Surgeon General of the Navy.

Ellwynne M. Vreeland, Nurse Director of the Commissioned Corps of the United States Public Health Service, and Chief of the Research Grants and Fellowship Branch of the Division of Nursing of USPHS. She is Chairman of the Program Committee of the New York League for Nursing Education.

Helen Wood, Director of the Simmons College School of Nursing until her retirement in 1946. Miss Wood is a past President of the New York League of Nursing Education, and a former member of the Executive Board of the National League of Nursing Education.

The citations and commemorative medals were presented to the 3 outstanding members of the Social Service Department at a Reunion Dinner of the Department, given at the Boston Club. The awards were given to Miss Josephine C. Barbour, Chief of Social Service at M.G.H., Miss Harriett M. Bartlett, formerly of the Department and of Simmons College School of Social Work, and posthumously to Miss Ida M. Cannon.

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The bronze medal, commemorating the 150th Anniversary of the Massachusetts General Hospital, may be purchased at the General Store. The price of the medal is $5.00. They make very handsome paperweights.

The News

No. 203 Boston, Mass. April 1961

CURRENT STATUS OF LEFT HEART CATHETERIZATION WITH SPECIAL REFERENCE TO MITRAL REGURGITATION

When recently requested by the editor of The News to review the current status of heart catheterization, I pondered as to the most effective approach to a very broad field. I concluded that this subject could be handled best from the viewpoint of my own special interests in this field. This point of view is, of course, a synthesis of my experience and clinical research in the laboratory of Dr. David Littmann at the West Roxbury Veterans Administration Hospital, at the cardiac laboratory at the Massachusetts General Hospital under Dr. Gordon Myers, Dr. Allan Friedlich, and Dr. Gordon Scannell, and presently in my own laboratory at the Memorial Hospital, Worcester, Massachusetts.

Cardiac catheterization by definition signifies the passage of a hollow tube into the heart. This was first accomplished by Forssman in 1927, but the practical applications awaited the work of Cournand in 1941. His work was amplified by others, leading to precision in the diagnosis of complex congenital anomalies of the heart, as well as some of the varieties of acquired heart disease, such as cor pulmonale and rheumatic heart disease.

These studies were based on *right* heart catheterization, which, fortunately for this new field, was quite safe and free of complications. A radio-opaque woven catheter was introduced through a peripheral vein, and under fluoroscopic control was maneuvered through the right atrium, into the right ventricle, and out into the pulmonary artery. Blood samples for oxygen content, and pressures, were obtained in the various sites. It was discovered that if the catheter was advanced out into a distal branch of the pulmonary artery so as to completely occlude the forward flow of blood through this segment, then the mean pressure fell 5 to 10 mm Hg. If the catheter was then withdrawn, it "snapped back" into the main pulmonary artery. The pressure pulse so recorded in the distal occluded pulmonary artery branch was considered to represent the pressure in the pulmonary capillaries, and was later shown to be equivalent to simultaneously measured left atrial pressure. This distal position was named the pulmonary artery wedge or pulmonary capillary ("PC") position. Left atrial pressure is, of course, an important parameter of left ventricular and mitral valve function. Thus, an important measure of left heart function could be estimated by the simple and safe technique of *right* heart catheterization.

In the early 1950's mitral valvulotomy for mitral stenosis became a practicable and safe procedure. Therefore the hydraulic formulae for the prediction of the area of the stenotic valve, introduced by Gorlin and Gorlin in 1951, were an important advance. The valve area was estimated simply by dividing the mitral valve flow rate by the product of a constant times the square root of the mitral gradient. This gradient was the pressure difference between the left atrium and left ventricle. The "PC" pressure was used as equivalent to left atrial pressure, and the left ventricular mean pressure was approximated at 5 mm Hg. In most cases, predicted valve area was equivalent to the surgeon's estimation at operation, so the above simple application of *right* heart catheterization provided important assistance in the selection of patients for mitral valvulotomy.

However, in time it became clear that in certain instances the calculations fell short, and the predicted critically narrowed valve (less than 1.0 to 1.2 cm^2) was not found to be significantly narrowed at surgery; actually, the lesion was predominant mitral regurgitation rather than stenosis. On re-examining the valve formulae several assumptions were questioned. First, was the "PC" equivalent to left atrial mean pressure? Yes, if rigid criteria defining the "PC" position were adhered to. Was the assumption that left ventricular diastolic mean pressure was equivalent to 5 mm Hg a valid one? Not infrequently this assumption was not correct. Thus, if left ventricular failure was present, then the diastolic mean pressure could be elevated to, say, 15 mm Hg. Lacking stenosis of the mitral valve, left atrial and "PC" would also approximate 15 mm Hg. As a result, a gradient of 10 mm Hg would be assumed when actually there was none; and a reduced mitral valve would be calculated in the absence of stenosis.

Procedures for the exact measurement of left ventricular pressure were developed to obviate the latter difficulty. These included transthoracic puncture of the left atrium, transbronchial puncture of the left atrium, and direct transthoracic puncture of the left ventricle. Most commonly the Bjork procedure was utilized: the left atrium was punctured by a long needle introduced from the right posterior thorax. Through this thin-wall needle a fine polyethylene catheter was advanced into the left atrial cavity; after a period of exploration, the catheter was usually advanced across the mitral valve orifice into the left ventricle. After recording pressure pulses in the left ventricle, the catheter was pulled back into the left atrium. Thus, the pressure difference across the mitral valve was directly measured, obviating the previous assumption. Furthermore, simultaneous left ventricular and systemic artery pressure recordings could be obtained, providing information as to aortic valve function. In aortic stenosis the left ventricular systolic mean pressure was significantly higher than that of a systemic artery, the brachial or femoral, and from calculations similar to those in mitral stenosis, the stenotic valve orifice was estimated.

Direct measurement of the mitral valve gradient did improve the results, but could not remove the assumption as to mitral valve flow. Mitral valve flow is based on the systemic cardiac output. This represents total effective *forward* flow from the heart. But with mitral regurgitation, mitral valve flow is greater than systemic flow. For example, if the cardiac output is calculated at 4 liters per minute, and if the mitral valve is sufficiently incompetent, so that, with ventricular systole, equivalent volumes are ejected out of the aortic valve and regurgitated back into the left atrium, then the mitral valve flow will be 8 liters per minute. As outlined above, valve area is directly proportional to valve flow. If actual flow is double the calculated flow, then the true valve area will be double the calculated one. In other words, the calculated area will be falsely smaller than the true area in mitral regurgitation. In the presence of severe regurgitation, an area calculated to be critically narrowed down to 1.0 cm^2 might at operation be found to be insignificantly reduced to from 2.0 cm^2 to 3.0 cm^2. Various interpretations of left atrial pressure pulses, as the rate of fall of the "V" wave, were introduced in order to estimate the presence and degree of regurgitation. The down slope and qualitative characteristics of indicator dilution curves were studied for the same purpose. But these and other techniques were not found to be sufficiently reliable.

Meanwhile, in the fall of 1958, I had returned from my two-year tour with the Air Force to Dr. Littmann's cardiac residency. At this time, Dr. Littmann was pursuing the study of coronary artery disease — perhaps his chief interest in medicine. He was working out a simplified technique of coronary arteriography. His method was an adaptation of the Seldinger procedure of percutaneous arterial catheterization. The method involved percutaneous cannulation of the femoral artery, introduction of a flexible-tipped wire guide through the cannula and into the lumen of the artery, removal of the cannula, and the threading of a special loop-end polyethylene catheter over the guide. When the catheter reached the skin, the catheter and guide were together advanced, so that the catheter was introduced into the arterial lumen. Then the wire guide was withdrawn until the flexible tip and the catheter tip were approximated. Under fluoroscopic control they were advanced up the aorta, over the arch, to a position just above the aortic valve. The wire guide was removed. Arteriography could then be performed by hand-injection of contrast material and the exposure of a rapid sequence of X-ray films.

One day during the spring of 1959, we had just reached the supravalvular position during a planned coronary arteriogram, when we suddenly noted that the diastolic pressure was unusually low. On examination of the pressure curve, it was clear that the catheter had passed the aortic valve leaflets in retrograde fashion and had entered the *left* ventricular cavity. The catheter was gradually withdrawn to the supravalvular aorta, with instantaneous rise in the diastolic pressure. With gradual readvancement of the catheter, left ventricular pressures were again obtained. The special loop-end, which had been designed to deliver contrast material evenly to the coronary sinuses, also facilitated traversing the aortic valve leaflets. Careful follow-up of this patient revealed no evidence of aortic valve damage or any untoward effect.

In the following weeks, left ventricular catheterization by the retrograde technique was attempted on all patients studied by coronary arteriography. Catheterization with rare exception was easily accomplished and well tolerated. The exception was the patient with tight aortic stenosis; we were not able to traverse the small deformed orifice with the relatively large-diameter catheter. Retrograde catheterization was combined with conventional *right* heart catheterization in patients with mitral stenosis. "PC" and left ventricular pressures were simultaneously recorded, their difference in diastole constituting the mitral gradient. Subsequent surgery corroborated the valve areas calculated from data obtained by this combined technique.

We had been aware of Lehman's 1957 report regarding left ventriculography as a method of demonstrating mitral regurgitation. This awareness was punctuated by his delivery of a lecture on this subject at the Peter Bent Brigham Hospital. His technique employed transthoracic needle puncture of the left ventricle, and pressure injection of contrast material into the cavity of the left ventricle. In mitral regurgitation, contrast material mixed with blood was regurgitated into the left atrium, resulting in left atrial opacification.

The value of left ventriculography was clear-cut, but the hazard of the approach, including cardiac tamponade and intramyocardial injection of contrast material, did not seem acceptable to us. At the next opportunity, retrograde left ventricular catheterization was performed, 30 to 40 ml of contrast material was hand-injected into the left ventricular cavity, and serial X-ray exposures made. Our expectations were satisfied, since the left ventricular cavity was well opacified and the procedure was well tolerated. In subsequent weeks we were able to study several patients with known mitral regurgitation, and at ventriculography the left atrium was densely opacified. The degree of opacification seemed to parallel the severity of regurgitation.

In July of 1959, I moved back to the Massachusetts General as cardiac resident. My interest in the problem of the diagnosis and quantitation of mitral regurgitation was equally shared by Dr. Charles A. Sanders and Dr. John D. Turner. We were fortunate in having the support of the entire Cardiac Unit, the encouragement and assistance of Dr. Stanley M. Wyman, and Mr. Oliver E. Merrill's technical competence in coaxing cooperation from the elegant but fussy Elema biplane radiographic apparatus. The net result was the production of more esthetically pleasing and sharply diagnostic angiocardiograms.

We found that the clinical problem of diagnosing and assessing mitral regurgitation was a remarkably frequent one. The detection of significant regurgitation accompanying stenosis of the mitral valve was not an esoteric problem. Dr. Scannell's "open heart" surgery program was operative, and if significant regurgitation was present, then an "open" rather than a customary closed valvulotomy was indicated. By the end of the fiscal year, we had accomplished some 25 such retrograde studies. In all of the operated cases, the surgeon's estimation of the degree of regurgitation was in agreement with Dr. Wyman's interpretation of the left ventriculograms. In one-third of these cases, the retrograde study was paramount in arriving at the correct diagnosis and pointing to the correct surgical approach.

Knowledge of the presence and severity of regurgitation improved the usefulness of the hydraulic valve formulae. When angiography excluded significant regurgitation, then the predicted mitral valve areas were in agreement with the surgeon's estimation of valve size. In some patients with a loud basal systolic murmur, successful retrograde catheterization of the left ventricle and demonstration of an insignificant aortic valve gradient helped to exclude important aortic stenosis. Fortunately, complications were not severe or permanent, and were largely limited to the local site of cannulation.

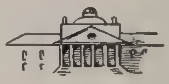
In surveying the diverse field of left heart catheterization, the variety of procedures is striking. Choice of the particular technique depends upon the clinical diagnosis, the patient's medical status, and the proposed therapy. For example, in the uncomplicated case of mitral stenosis without suspected regurgitation, the simple "straight" right heart study, perhaps combined with indicator dilution curves, is quite adequate and reliable. In the case of aortic stenosis, the new transseptal approach to left atrial puncture is the procedure of choice; but if the left atrial catheter fails to enter the left ventricle, then the more hazardous technique of direct transthoracic left ventricular puncture may have to be accepted. When mitral regurgitation is suspected, and aortic valve disease is absent, then retrograde left ventricular catheterization and angiography is the method of choice.

Thus we must conclude, as with all other segments of medicine, that we as physicians must be fully cognizant of all the clinical facets of each patient. Only then can the most appropriate of the variously hazardous diagnostic procedures be selected. And only then can the hemodynamic and angiocardiographic findings be correctly applied. At the same time, these techniques seem to provide valuable information not otherwise available, which is necessary for the decision as to the desirability of surgical intervention, and, if so, the method of correction.

Oscar E. Starobin, M.D.,
Clinical Assistant in Medicine

* * *

Drs. Stanley H. Appel and J. Richard Baringer, two members of our House Staff, received 1st and 2nd prizes in a nation-wide contest sponsored by the journal *Resident Physician.* Questions based upon the general medical literature, over a five-month period, were sent to all the contestants. Answers to twenty questions each month had to be found and submitted.



The Board of Trustees, at their meeting on January 27, voted:

That Ernest L. Dobson, Ph.D., Physiologist in Donner Laboratory and Lecturer in Pathology, University of California, Berkeley, California, be asked to give a Richardson Lecture at the Hospital on April 6.

To appoint:

Dr. Maureen K. Molloy as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Dr. David C. Poskanzer as Clinical Assistant in Neurology, effective as of January 15;

Dr. Henry D. Wilde, Jr. as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Dr. William E. Wilson as Senior Resident in Orthopedic Surgery, for a period of six months, beginning April 1.

At their meetings on January 18, and February 8, 15, and 21, the General Executive Committee voted:

That Dr. Peter Hacking begin his services as Clinical Fellow in Radiology on February 10 rather than June 1.

To promote:

Dr. Stanley P. Bohrer to the position of First Assistant Resident in Radiology for one year, beginning March 1.

To reappoint:

Dr. William C. Amman as Graduate Student Assistant in Medicine, assigned to Allergy, for one year, beginning January 10;

Dr. J. Paul Binette as Research Fellow in

Medicine, retroactive to November 1, 1960;
- Lorna J. Langer Gilmore, Ph.D. as Research Fellow in Biochemistry, in the Department of Pathology, for one year, retroactive to October 1, 1960;
- Murray V. King, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;
- Dr. Jan Koch-Weser as Clinical Fellow in Medicine for one year, beginning January 1;
- Dr. Hans B. Nevinny-Stickel as Clinical Fellow in Medicine for one year, retroactive to July 1, 1960;
- Annette M. C. Rapin, Ph.D. as Research Fellow in Medicine for one year, beginning February 1;
- Dorothy K. Stearns, Ph.D. as Research Fellow in Medicine for one year, beginning January 23;
- Dr. Hubert J. Wolfe as Clinical and Research Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1.

To appoint:

- Arthur B. Callahan, Ph.D. as Research Fellow in Physics (Medicine) for one year, beginning March 1;
- Dr. David Flores (Perez) as Graduate Student Assistant in Orthopedic Surgery, for a period of three months, beginning January 3;
- Anund A. Hallén, M.K. as Research Fellow in Biochemistry (Medicine) for one year, beginning March 1;
- Dr. Alan C. Markland as Senior Assistant Resident in Urology, effective as of January 1;
- Dr. Mei Satake as Research Fellow in Medicine for one year, beginning September 1;
- Dr. Katuhiko Tokita as Research Fellow in Medicine for one year, beginning September 1.

MASSACHUSETTS EYE & EAR INFIRMARY

At their meetings held on November 28 and December 21, 1960, the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary voted to reappoint:

- Dr. James G. Dobbie — Fellow in Ophthalmology, attached to the Retina Service;
- Dr. Claes-Henrik Dohlman — Fellow in Ophthalmology, attached to the Retina Service;
- Dr. Benjamin Ziv — Fellow in Ophthalmology, as Director of the Electroretinography Laboratory.

To appoint:

- Dr. Lloyd M. Aiello — Resident in Ophthalmology, beginning July 1, 1962;
- Dr. Klaus F. Beyer — Resident in Ophthalmology, beginning April 1, 1962;
- Dr. Ernest H. Christman — Resident in Ophthalmology, beginning October 1, 1962;
- Dr. Allan G. Edwards, Jr. — Resident in Otolaryngology, beginning July 1;
- Dr. Simmons Lessell — Resident in Ophthalmology, beginning October 1, 1963;
- Dr. Saiichi Mishima — Fellow in Ophthalmology, to work with Dr. Sweebe on corneal transparency, beginning October 1, 1960;
- Dr. Anthony B. Nesburn — Resident in Ophthalmology, beginning January 1, 1962;
- Dr. Richard M. Robb — Resident in Ophthalmology, beginning October 1, 1962;
- Dr. Anwar Shah — Fellow in Ophthalmology, attached to the Retina Service, for one year, beginning January 1.

At the Annual Meeting of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held on December 14, 1960, the appointment of Dr. Philip E. Meltzer was changed from Acting Chief of Otolaryngology to Chief of Otolaryngology for the remainder of his period of service.

At the meetings of the Executive Committee of the Board of Managers of the Massachusetts Eye and Ear Infirmary, held in November and on January 16 and February 27, the following appointments were made:

- Dr. Frank W. Brady—Assistant in Otolaryngology;
- Dr. Margaret Daly—Fellow in Anesthesiology;
- Dr. Raniero DiPiero—reappointed Fellow in Anesthesiology;
- Dr. Kamil Ergin—reappointed Fellow in Anesthesiology until July 1;
- Dr. John R. Gehring—Assistant in Ophthalmology;
- Dr. Fred Gottlieb—Fellow in Ophthalmology, assigned to the Retina Service, beginning March 1;
- Dr. Donald G. Keamy—Resident in Otolaryngology—beginning July 1;
- Dr. Roger C. Lindeman—Resident in Otolaryngology, beginning July 1, 1962;
- Dr. Daniel J. Reagan—Assistant in Otolaryngology;
- Klaus D. Scherrer, Ph.D.—Fellow in Otolaryngology, assigned to the Otolaryngological Biochemistry Laboratory, for six months, beginning April 1;
- Dr. William S. Tassman—Fellow in Ophthalmology, assigned to the Retina Service, beginning June 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Parker, C. J., Jr., and Gergely, J.
The role of calcium in the adenosine triphosphatase activity of myofibrils and in the mechanism of the relaxing factor system of muscle.
J. Biol. Chem. 236:411.

Endoscopy

Benedict, E. B., and Nardi, G. L.
Dysphagia and esophageal obstruction.
In Current therapy—1960, p. 230.

General Medicine

Kelley, R. M., and Baker, W. H.
Progestational agents in the treatment of carcinoma of the endometrium.
New England J. Med. 264:216.

Neurosurgery

White, J. C., and Ballantine, H. T., Jr.
Intrasellar aneurysms simulating hypophyseal tumours.
J. Neurosurg. 18:34.

Orthopedic Surgery

Rowe, C. R., and Lowell, J. D.
Prognosis of fractures of the acetabulum.
J. Bone & Joint Surg. 43-A, no. 1:30.

Sakellarides, H.
Pseudarthrosis of the clavicle: A report of twenty cases.
J. Bone & Joint Surg. 43-A, no. 1:130.

Otolaryngology

Pullen, F. W., II, and Montgomery, W. M.
A clinical evaluation of the combination of dexbrompheniramine and d-isoephedrine (Disophrol).
Current Therapeut. Res. 3:51.

Psychiatry

Binger, C.
The pressures on college girls today.
Atlantic Monthly, Feb.:40.

Radiology

Potsaid, M. S.
Medical progress: Kineradiography.
New England J. Med. 264:178 and 232.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American Association of Clinical Chemists.
Standard methods of clinical chemistry, vol. 3.
New York, Academic Press, Inc., 1961.
(7H)

American Institute of Biological Sciences.
The biology of aging.
Washington, D.C., American Institute of Biological Sciences, 1960.
(13Po)

American Medical Association. Council on Drugs.
New and nonofficial drugs, 1961.
Philadelphia, J. B. Lippincott Company, 1961.
(22F)

American Physiological Society.
Handbook of physiology, sec. I, vol. 3.
Baltimore, The Williams and Wilkins Company, 1960.
(19C)

Association of American Medical Colleges.
Financial assistance available for graduate study in medicine, ed. 5.
Chicago, Association of American Medical Colleges, 1960.
(1N)

Bakulev, A. N. (Editor)
Surgical treatment of mitral stenosis.
Moscow, State Publishing House for Medical Literature, 1958.
(15E)

Bass, A. D., and Moe, G. K. (Editors)
Congenital heart disease.
Washington, D.C., American Association for the Advancement of Science, 1960.
(15E)

Best, C. H., and Taylor, N. B.
Physiological basis of medical practice, ed. 7.
Baltimore, The Williams and Wilkins Company, 1961.
(4A)

Biochemical Society Symposia, no. 18.
The biosynthesis and secretion of adrenocortical steroids.
Cambridge, Mass., At the University Press, 1960.
(5A)

Biochemical Society Symposia, no. 19.
Steric aspects of the chemistry and biochemistry of natural products.
Cambridge, Mass., At the University Press, 1960.
(5A)

Bourne, G. H. (Editor)
International review of cytology, vol. 10.
New York, Academic Press, Inc., 1960.
(2Am)

Bourne, G. H. (Editor)
The structure and function of muscle, vol. 3.
New York, Academic Press, Inc., 1960.
(18A)

Brachet, J., and Mirsky, A. E. (Editors)
The cell, vol. 4.
New York, Academic Press, Inc., 1960.
(2Am)

Broda, E., and De Hevesy, G.
Radioactive isotopes in biochemistry.
New York, Elsevier Publishing Company, 1960.
(5A)

Burger, A. (Editor)
Medicinal chemistry, ed. 2.
New York, Interscience Publishers, Inc., 1960.
(7D)

Camac, C. N. B. (Compiler)
Classics of medicine and surgery.
New York, Dover Publications, Inc., 1959.
(1J)

Conference of Biological Editors.
Style manual for biological journals.
Washington, D.C., American Institute of Biological Sciences, 1960.
(1Aa)

Farnsworth, P. R. (Editor)
Annual review of psychology, vol. 12.
Palo Alto, Annual Reviews, Inc., 1961.
(19L)

Fourman, L. P. R.
Calcium metabolism of bone.
Springfield, Ill., Charles C. Thomas, 1960.
(18C)

Freud, S.
The standard edition of the complete psychological works of Sigmund Freud, vol. 6.
London, The Hogarth Press, 1960.
(19Op)

Hardy, J. D., and others.
Biopsy manual.
Philadelphia, W. B. Saunders Company, 1959.
(23D)

Henry Ford Hospital Symposium.
The biology of pyelonephritis.
Boston, Little, Brown and Company, 1960.
(17E)

Herbert, V.
The megaloblastic anemias.
New York, Grune & Stratton, 1959.
(14C)

International who's who, ed. 24.
London, Europa Publications Ltd., 1960.
(1E)

Lawrence, J.
Polycythemia.
New York, Grune & Stratton, 1955.
(14G)

Osborne, R. H., and De George, F. V.
Genetic basis of morphological variation.
Cambridge, Mass., Harvard University Press, 1959.
(2Am)

Paul, J.
Cell and tissue culture, ed. 2.
Baltimore, The Williams and Wilkins Company, 1960.
(8C)

Paul, J. R.
Epidemiology of rheumatic fever, ed. 3.
New York, American Heart Association, 1957.
(12B)

Pitt-Rivers, R.
The chemistry of thyroid diseases.
Springfield, Ill., Charles C. Thomas, 1960.
(14V)

Raven, R. W. (Editor)
Cancer, Progress volume 1960.
London, Butterworth & Co., Ltd., 1961.
(13V)

Roberts, K. E.
Clinical physiology, vol. 1.
San Francisco, Filmer Publishing Company, 1960.
(4A)

Rodd, E. H. (Editor)
Chemistry of carbon compounds, vol. 4C.
New York, Elsevier Publishing Company, 1960.
(5T)

Schaffer, A. J.
Diseases of the newborn.
Philadelphia, W. B. Saunders Company, 1960.
(26E)

Segrè, E. (Editor)
Annual review of nuclear science, vol. 10.
Palo Alto, Annual Reviews, Inc., 1960.
(36Jn)

Semmes, J., and others.
Somatosensory changes after penetrating brain wounds in man.
Cambridge, Mass., Harvard University Press, 1960.
(19J)

Smith, K. M. (Editor)
Advances in virus research, vol. 7.
New York, Academic Press, Inc., 1960.
(8G)

Stanbury, J. B., and others. (Editors)
The metabolic basis of inherited disease.
New York, McGraw-Hill Book Company, Inc., 1960.
(13A)

Stein, I., and others.
Living bone in health and disease.
Philadelphia, J. B. Lippincott Company, 1955.
(18C)

Szent-Györgi, A.
Introduction to a submolecular biology.
New York, Academic Press, Inc., 1960.
(2Am)

Taussig, H. B.
Congenital malformations of the heart, ed. 2, 2 vols.
Cambridge, Mass., Harvard University Press, 1960.
(15E)

United States Pharmacopeia, ed. 16.
Washington, D.C., United States Pharmacopeial Convention, Inc., 1960.
(22G)

Willmer, E. N.
Cytology and evolution.
New York, Academic Press, Inc., 1960.
(2Am)

Wolfrom, M. I. (Editor)
Advances in carbohydrate chemistry, vol. 15.
New York, Academic Press, Inc., 1960.
(5D)

Wolstenholme, G. E. W., and O'Connor, M. (Editors)
Ciba Foundation symposium on haemopoiesis.
Boston, Little, Brown and Company, 1960.
(14Am)

World Health Organization.
World directory of medical schools, rev. ed.
Geneva, World Health Organization, 1960.
(1O)

Zamenhof, S.
The chemistry of heredity.
Springfield, Ill., Charles C. Thomas, 1959.
(2Am)

* * *

VOLUNTEER GROUPS

MGH STAFF WIVES ASSOCIATION

A true sign of spring was the annual Morning Coffee which the Staff Wives Association of the M.G.H. gave on April 4. The Staff Wives group, which includes friends of the General who are not necessarily doctors' wives, sent out invitations to all our visitors from other lands who are at present associated with Boston's "Hospital-on-the-Charles". These doctors and their wives, these nurses, technicians, research chemists, dietitians, these medical and postgraduate students in many fields, come from all over the world. They share with us their knowledge and energy, and receive, in exchange, new knowledge and techniques and fresh energies in this Hospital and in this city where medical pioneering never comes to an end. The April 4 Morning Coffee gathered together, for coffee, cakes, and conversation, visitors and MGH friends and colleagues in the pleasant, informal atmosphere of the Walcott House living room.

One of Boston's most distinguished music groups, the Marlboro Quartette of the Boston Recorder Society, will give a concert in the Chapel on May 10, under the auspices of the Music Committee of the MGH Staff Wives. It should be an interesting concert, as not everyone is as familiar with the recorder (forerunner of the flute, made of wood, and played from one end, like a clarinet) as he is with other musical instruments.

Dr. Stewart Sell, Intern in Pathology—born in Pittsburgh, Pennsylvania, January 20, 1935; B.S., College of William and Mary, Williamsburg, Virginia, 1956; M.D., University of Pittsburgh School of Medicine, 1960; married.

Dr. Leonard B. Shulman, Intern on the Dental Service—born in Boston, Massachusetts, March 29, 1934; graduated from Boston Latin School, 1951; A.B., Harvard College, 1955; D.M.D., Harvard School of Dental Medicine, 1960.

Dr. William B. Stason, Intern in Medicine—born in Ann Arbor, Michigan, August 24, 1931; B.S., University of Michigan, Ann Arbor, 1953; military service: Lieutenant (jg), U.S. Navy, aboard U.S.S. *Valley Forge*, 1953-56; M.D., Harvard Medical School, 1960.

Dr. Samuel O. Thier, Intern in Medicine—born in Brooklyn, N. Y., June 23, 1937; Cornell University, Ithaca, N. Y., 1953-56; M.D., State University of N. Y. College of Medicine, Syracuse, N. Y., 1960; married; one child.

Dr. Jacob C. Wolterbeek, Resident in Psychiatry, McLean Hospital, Belmont, Massachusetts—born in Kimberley, British Columbia, Canada, September 17, 1929; Gymnasium Haganum, The Hague, Holland, 1940; A.B., Hope College, Holland, Michigan, 1950; M.D., Northwestern University Medical School, Chicago, Illinois, 1954; Intern (rotating), Chicago Wesley Memorial Hospital, 1954-55; military service: Eleventh Field Hospital, U.S. Army, Augsburg, Germany, 1955-57, Ob-Gyn Service, Assistant Chief, General Practice, 1957-59.

Dr. Richard J. Wurtman, Intern in Medicine—born in Philadelphia, Pennsylvania, March 9, 1936; A.B., University of Pennsylvania, Philadelphia, 1956; M.D., Harvard Medical School, 1960; married.

New addresses:

Dr. Rodney F. Atsatt (*Or.* 1926), 88 C Thacher Rd., Ojai, Calif.
Dr. Florosa A. Bautista (a.r.p. *C.M.* 1958), Veterans Memorial Hospital, Quezon City, Philippine Islands
Dr. John A. Benson, Jr. (a.*M.* 1959), 3181 S.W. Sam Jackson Park Rd., Portland 1, Oreg.
Dr. Henry J. Carney (a. oral. s.), 403 Commonwealth Ave., Boston 15, Mass.
Dr. Thomas Cavanaugh (assoc. s. *Oph.*), 403 Commonwealth Ave., Boston 15, Mass.
Dr. Frederick A. Coller (*W.S.* 1914), St. Joseph's Mercy Hospital, Ann Arbor, Mich.
Dr. Diane Croll (r.p. *Path.* 1948), Veterans Administration Hospital, Oakland, Calif.
Dr. R. Clement Darling (*C.M.* 1954), 1180 Beacon St., Brookline 46, Mass.
Dr. James H. Duxbury (r.s.*U.* 1960), 624 Fort St., Victoria, British Columbia, Canada
Dr. Gerald M. Edelman (*M.* 1955), Rockefeller Institute for Medical Research, York Ave. and 66th St., New York, N. Y.
Dr. Sidney W. Ellery (*E.S.* 1943), 1090 Atlantic Ave., Long Beach, Calif.
Dr. Harry C.-H. Fang (a.r.p. *Psychiat.* 1952), 1919 7th Ave., South, Birmingham 3, Ala.

Dr. Ira A. Ferguson, Jr. (*S.* 1953), 1364 Clifton Rd., N.E., Atlanta 22, Ga.

Dr. Vassilike A.-C. Forbes (*C.M.* 1956), University of Buffalo School of Medicine, 3435 Main St., Buffalo, N. Y.

Dr. Clarence J. Gamble (*W.M.* 1922), 73 Adams St., Milton 87, Mass.

Dr. Phillip H. Gates (r.p. *Psychiat.* (*McL.*) 1942), 51 Brattle St., Cambridge, Mass.

Dr. Elvira Goettsch (*C.M.* 1931), University of Hawaii, Honolulu 14, Hawaii

Dr. Arnold M. Gordon (*C.M.* 1929), 4406 Greenwood Drive, Des Moines 12, Iowa

Dr. Hugh P. Greeley (*W.M.* 1910), 1901 Monroe St., Madison 5, Wis.

Dr. Frederick A. H. Greenwood (a.r.s. *Or.* 1959), Montreal General Hospital, Montreal, Canada

Dr. John B. Griggs (*C.M.* 1929), Breezy Hill Rd., Canton, R.F.D., Collinsville, Conn.

Dr. Walter C. Guralnick (a. oral s.), 328 Washington St., Wellesley Hills, Mass.; 29 Commonwealth Ave., Boston, Mass.

Dr. Howard B. Hamilton (*C.M.* 1945), 764 S. Emerson Ave., Indianapolis, Ind.

Dr. John W. Hammond, Jr. (*C.M.* 1911 and *W.M.* 1914), Orford, N. H.

A. Paul Hare, Ph.D. (assoc. sociol. *Psychiat.* 1961), Haverford College, Haverford, Pa.

Dr. Wayne M. Hebertson (r.p. *N.* 1957), 975 E. 1st St., South, Salt Lake City, Utah

Dr. Thomas F. Henley (*C.M.* 1939), 7 E. 78th St., New York 21, N. Y.

Dr. Robert J. Herm (a. *Oph.*), 42 Weston St., Waltham 54, Mass.

Dr. J. Mark Hiebert (*C.M.* 1933), 1450 Broadway, New York 18, N. Y.

Dr. Lawrence B. Hobson (*M.* 1944), Squibb Institute for Medical Research, 745 5th Ave., New York 22, N. Y.

Dr. W. Richard Hochwalt (*Or.* 1931), 2300 Far Hills Ave., Dayton 19, Ohio

Dr. William L. Holt, Jr. (r.p. *N.* 1937), Albany Hospital, Albany, N. Y.

Dr. Charles E. Hopkins (a.r.p. *C.M.* 1948), 113 N. Carroll St., Madison, Wis.

Dr. Robert S. Hormell (*Or.* 1942), 1152 Beacon St., Brookline 46, Mass.; 8 Porter St., Melrose, Mass.

Dr. William H. Horwitz (r.p. *Psychiat.* (*McL.*) 1951), 220 Bushkill St., Easton, Pa.

Dr. Jeannette A. Hovsepian (a.r.p. *R.* 1958), Johns Hopkins Hospital, Baltimore 5, Md.

Dr. Fred H. Howard (*C.M.* 1949), Dhahran Health Center, Dhahran, Saudi Arabia

Dr. William M. Huber (r.p. *D.* 1937), 512 Beacon St., Boston 15, Mass.

Dr. Harry C. Hughes (*Or.* 1937), 1750 Race St., Denver 6, Colo.

Dr. Alfred L. Hurst (a. *Otolar.*), 98 Adams St., Milton 87, Mass.

Dr. Gilbert T. Hyatt (*W.S.* 1931 and *Or.* 1934), 1106 W. Franklin St., Evansville 10, Ind.

Dr. James P. Isaacs (a.r.p. *An.* 1952), Johns Hopkins Hospital, Baltimore 5, Md.

Dr. Lionel M. Ives (r.p. *Psychiat.* (*McL.*) 1933), 130 Maple St., Springfield, Mass.

Dr. Henry Jackson, Jr. (*E.M.* 1919), Tryon, N. C.

Marie A. Jakus, Ph.D. (biol. *Oph.*), Retina Foundation, 30 Chambers St., Boston 14, Mass.

Dr. G. Watson James, III (*M.* 1944), Medical College of Virginia, Richmond 19, Va.

Dr. M. T. Jenkins (a.r.p. *An.* 1948), University of Texas Southwestern Medical School, Dallas, Tex.

Dr. Norman P. Johnson (*E. M.* 1925), 1409 Willow St., Minneapolis, Minn.

Dr. Edward V. Johnston (*W.S.* 1947), Rockwood Clinic, 312 W. 8th, Spokane, Wash.

Dr. Thomas B. Jones (*Thd. S.* 1924), 1351 Mount Hope Ave., Rochester 20, N. Y.

Dr. William N. Jones (*Or.* 1947), Massachusetts General Hospital, Boston 14, Mass.

Dr. William R. Jordan (*W.M.* 1930), 1631 Monument Ave., Richmond 20, Va.

Dr. A. Bradford Judd (*S.* 1955), 1170 Massachusetts Ave., Cambridge 38, Mass.

Dr. Raymond A. Justi (r.p. *Path.* 1956), Jackson Memorial Hospital, Miami 36, Fla.

Dr. Martin Kantor (a.r.p. *Psychiat.* 1960), Stanford University Medical Center, Palo Alto, Calif.

Dr. M. Ralph Kaufman (r.p. *Psychiat.* (*McL.*) 1933), Mount Sinai Hospital, New York 29, N. Y.

Dr. Robert P. Kennedy (*Thd. S.* 1924), Route 1, Box 262, Richmond, Ind.

Dr. Beatrice R. Kershaw (r.p. *Psychiat.* (*McL.*) 1939), 29 Louise Rd., Belmont 78, Mass.

Dr. William A. Key (*Or.* 1927), 23 Baldwin Ave., San Mateo, Calif.

Dr. Brian Kiely (*M.* 1952), University Hospitals, 1300 University Ave., Madison 6, Wis.

Dr. Richard M. Kilfoyle (a.r.s. *Or.* 1951), 457 Main St., S. Weymouth 90, Mass.

Dr. W. Bradley King, Jr. (a.r.p. *Path.* 1956), 700 Fleet St., Baltimore 2, Md.

Dr. Donald C. Klein (assoc. psychol.), Human Relations Office, 11 Abbott Rd., Wellesley, Mass.

Dr. M. Robert Knapp (a.r.p. *An.* 1955), 4601 E. Douglas, Wichita, Kan.

Dr. John J. Kneisel (*E.M.* 1940), 15 W. 12th St., New York 11, N. Y.

Dr. Margaret Single Kosek (a.r.p. *C.M.* 1958), Palo Alto Medical Clinic, 300 Homer Ave., Palo Alto, Calif.

Dr. Herbert L. Kraut (a.r.p. *D.* 1957), 1742 Summer St., Stamford, Conn.

Dr. Arthur R. Kravitz (*M.* 1955), Beth Israel Hospital, Boston, Mass.

Philip E. Kubzansky, Ph.D. (a. psychol.), Boston University, 308 Bay State Rd., Boston, Mass.

Dr. John G. Kuhns (*Or.* 1926), 416 Marlborough St., Boston, Mass.

Dr. J. Peter Kulka (a.r.p. *Path.* 1947), Robert Breck Brigham Hospital, 125 Parker Hill Ave., Roxbury 20, Mass.

Dr. Cornelius Lansing (*C.M.* 1948), North Carolina Memorial Hospital, Chapel Hill, N. C.

Dr. Jefferson Larkey (*W.S.* 1928), 431 30th St., Oakland, Calif.

Dr. Robert F. Legge (*Or.* 1935), Gorgas Hospital, Balboa Heights, Canal Zone

Dr. A. Denis Leigh (r.p. *Psychiat.* 1948), 150 Harley St., London W. 1, England

Dr. Joseph Leighton (r.p. *Path.* 1949), University of Pittsburgh School of Medicine, Pittsburgh 13, Pa.

Dr. Anthony T. Licciardello (*M.* 1948), 2875 Main St., Stratford, Conn.

Dr. George R. Livermore, Jr. (*W.S.* 1943), Baptist Memorial Hospital, 899 Madison Ave., Memphis 3, Tenn.

Dr. William K. Livingston (*W.S.* 1922), Camp Sherman, Oreg.

Dr. Herbert B. Locksley (*S.* 1950), University Hospital, University of Iowa, Iowa City, Iowa

Dr. Charles U. Lowe (*C.M.* 1948), 219 Bryant St., Buffalo 22, N. Y.

Dr. Alfred O. Ludwig (*E.M.* 1932), 2 W. Cedar St., Boston, Mass.

Dr. Alfred J. Luessenhop (r.s. *N.S.* 1957), Georgetown University Hospital, 3800 Reservoir Rd., Washington 7, D.C.

Dr. Ralph H. Luikart, II (*M.* 1944), 1532 Anacapa St., Santa Barbara, Calif.

Dr. Charles C. Lund (*E.S.* 1922), 319 Longwood Ave., Boston, Mass.

Dr. Lawrence K. Lunt (*W.M.* 1916), 1125 Pecos Rd., Santa Fe, N. M.

Dr. William B. Lytton (r.p. *Psychiat.* (*McL.*) 1937), St. Vincent's Hospital, St. Louis 14, Mo.

Dr. Andrew R. MacAusland (*W.S.* 1911), 218 Commonwealth Ave., Boston 16, Mass.

Dr. Samuel M. McCann (*M.* 1949), University of Pennsylvania School of Medicine, Philadelphia 4, Pa.

Dr. William K. McClelland (clin. assoc. *S.*), 497 Main St., Greenfield, Mass.

Dr. William D. McElroy (*Or.* 1932), 3716 Market St., Youngstown, Ohio

Dr. John B. McKenna (r.p. *Psychiat.* (*McL.*) 1932), Hitchcock Clinic, Hanover, N. H.

Dr. William B. McLaughlin (*Or.* 1931), 6077 Jenkins Arcade, Pittsburgh 22, Pa.

Dr. John D. McLean (a. podiatrist *Or.*), 38 Church St., Winchester, Mass.

Dr. Allan B. McNie (a.r.p. *Path.* 1957), 353 30th St., Oakland, Calif.

Dr. Stephen A. Mahoney, Jr. (*E.S.* 1926), 727 Dwight St., Holyoke, Mass.

Dr. Harry P. Makel (c.r.p. *An.* 1949), 2217 Webster St., San Francisco, Calif.

Dr. Joseph K. Maloy (*E.S.* 1947), 120 W. Ravine Rd., Kingsport, Tenn.

Dr. Elliott L. Mancall (a.r.p. *Path.* 1957), Jefferson Medical College of Philadelphia, 1025 Walnut St., Philadelphia 7, Pa.

Dr. Alfonso Mangoni (a.r.p. *Psychiat.* 1960), Medical Research Council, Woodmansterne Rd., Carshalton, Surrey, England

Dr. Clyde S. Marshall (r.p. *N.* 1927), Dept. of Public Health, Halifax, Nova Scotia, Canada

Dr. Foster L. Matchett (*Or.* 1934), 1830 Williams St., Denver 18, Colo.

Dr. Thomas J. Mathieu (r.s. *U.* 1954), 1120 W. Spruce St., Yakima, Wash.

Dr. Richard F. Mayer (a.r.p. *N.* 1957), Boston City Hospital, Boston 18, Mass.

Dr. James A. Meath (r.p. *N.* 1947), 1114 St. Paul St., Baltimore 2, Md.

Dr. Mortimer L. Mendelsohn (*M.* 1949), Hospital of the University of Pennsylvania, Philadelphia 4, Pa.

Dr. Bruce R. Merrill (a.r.p. *Psychiat.* 1941), 22 Peninsula Rd., Belvedere, Calif.

Dr. D. Franklin Milam, Jr. (*S.* 1949), 27 103rd Ave., N.E., Bellevue, Wash.

Dr. Ralph B. Miller (r.p. *R.* 1932), Box 12335, Laurel Heights Station, San Antonio 12, Tex.

Dr. Lloyd Mills, Jr. (*M.* 1944), 1136 W. 6th St., Los Angeles 17, Calif.

Dr. George Mixter, Jr. (*W.S.* 1943), Flower and Fifth Ave. Hospital, 5th Ave. at 106th St., New York 29, N. Y.

Dr. S. Halcuit Moore, Jr. (*C.M.* 1937), 4105 Live Oak St., Dallas, Tex.

Dr. Henry D. Moorman (*W.S.* 1943), 635 E. Union St., Pasadena, Calif.

Dr. John E. Moran (*N.* 1928), 219 Federal St., Greenfield, Mass.

Dr. John R. Moreton (*W.S.* 1944), Peter Bent Brigham Hospital, Boston, Mass.

Dr. Arthur M. Morrissey (a.s. *Oph.*), 24 Rural Ave., Medford 55, Mass.

Dr. E. James Morrissey (*Or.* 1935), 1121 Penn Ave., Wyomissing, Reading, Pa.

Dr. Harry L. Mueller (*C.M.* 1935), Children's Medical Center, Boston 15, Mass.

Dr. Jeannette Munro (*C.M.* 1929), 2 Queenston Place, Princeton, N. J.

Dr. Joseph E. Murray (clin. assoc. *S.*), Peter Bent Brigham Hospital, Boston, Mass.

Dr. Charles W. Neville, Jr. (r.p. *Psychiat.* (*McL.*) 1959), Mental Hygiene Consultation Service, U.S. Army Hospital, Fort George G. Meade, Md.

Dr. James W. Newell (*W.S.* 1943), Medical Plaza, Palo Alto, Calif.

Dr. Arnold P. Nicosia (a.r.p. *C.M.* 1949). 1554 Northern Blvd., Manhasset, Long Island, N. Y.

Dr. Frederick W. O'Brien, Jr. (a.r.p. *R.* 1951), Cleveland Clinic, 2020 E. 93rd St., Cleveland 6, Ohio

Dr. Richard G. O'Brien (clin. assoc. *R.*), Medical Arts Bldg., 697 Cambridge St., Brighton 35, Mass.

Dr. Denis S. O'Connor (*Or.* 1925), 237 Edwards St., New Haven 11, Conn.

Dr. Bertha Offenbach (a. *Oph.*), 51 Homer St., Newton Centre, Mass.

Dr. Austin F. O'Malley (a.r.s. *U.* 1957), 496 South St., Hyannis, Mass.

Dr. Joy A. Omer (*Or.* 1912), 2648 E. 7th St., Tucson, Ariz.

Dr. Robert L. Patterson, Jr. (*Or.* 1935), 166 E. 63rd St., New York 21, N. Y.

Dr. Harold O. Peterson (a.r.p. *R.* 1936), University of Minnesota Hospitals, Minneapolis 14, Minn.

Dr. William Pfeffer, Jr. (a.p. *C.M.*), 3 Seaward Rd., Wellesley, Mass.

Dr. Edgar B. Phillips, II (*C.M.* 1948), American Child Guidance Foundation, 18 Tremont St., Boston, Mass.

Dr. Nicholas S. Pickard (*Or.* 1940), 411

No. 96 in a series of Staff photographs
Oscar E. Starobin, M.D. — Clinical Assistant in Medicine

Nichols Rd., Kansas City 12, Mo.

Dr. Arthur S. Pier, Jr. (*W.M.* 1941), 266 Beacon St., Boston, Mass.

Dr. Theodore C. Pratt (*E.S.* 1929), 454 Brookline Ave., Boston 15, Mass.

Dr. Jan-Henrik Probst (a.r.p. *C.M.* 1957), Rigshospitalet, Copenhagen, Denmark

Dr. Charles R. L. Putnam (*S.S.* 1895), 35 Park Ave., New York 16, N. Y.

Dr. Henry M. Putnam (*E.M.* 1937), 1025 High St., Dedham, Mass.

Dr. Murray Rabinowitz (a.r.p. 1955), Dept. of Medicine, University of Chicago, Chicago 37, Ill.

Dr. Robert G. Rae (dn. s.), 129 W. Elm St., Brockton, Mass.

Dr. Carson R. Reed, Jr. (*Or.* 1936), 2520 Line Ave., Shreveport, La.

Dr. Charles D. J. Regan (a. *Oph.*), 99 W. Cedar St., Boston 14, Mass.

Dr. John F. Register (*Or.* 1936), 1008 Professional Village, Greensboro, N. C.

Dr. William R. Richardson (*W.S.* 1945), Children's Memorial Hospital, 800 N.E. 13th St., Oklahoma City, Okla.

Dr. David H. Riege (*C.M.* 1947), 576 Farmington Ave., Hartford, Conn.

Dr. Augustus Riley (*S.S.* 1909), 50 Marshal St., Brookline, Mass.

Dr. Charles D. Roberts (a.r.p. 1938), 151 E. Palisade Ave., Englewood, N. J.

Dr. Carl M. Robinson (*W.S.* 1913), Waites Landing, Falmouth, Maine

Dr. Robert B. Rosen (*C.M.* 1953), Children's Hospital of Michigan, Detroit 2, Mich.

Dr. Milton Rosenbaum (r.p. *Psychiat.* (*McL.*) 1937), Albert Einstein College of Medicine, Bronx, N. Y.

Dr. Earl H. Rosenberg (*Dn.* 1958), 328 Washington St., Wellesley Hills, Mass.; 29 Commonwealth Ave., Boston, Mass.

Brief bits:

Dr. Carl Binger has been appointed Visiting Professor of Psychiatry at the Medical School of the University of Cincinnati. This will mean two visits a year for three days each.

Dr. Gordon L. Brownell presented a paper at the 46th Annual Meeting of the Radiological Society of North America, held in Cincinnati, December 5-7, 1960. He attended the 5th Annual Meeting of the Biophysical Society, in St. Louis, February 16-18.

Dr. Oliver Cope was guest lecturer at the Postgraduate Course of the Honolulu County Medical Society, held on February 15-27, and gave lectures arranged by the Island County Medical Societies of Hawaii. Mrs. Cope went with him to Hawaii. Dr. Cope was Visiting Professor at the St. Louis City Hospital, under the auspices of the Institute of Medical Education and Research, and gave the Hodgen Lecture for the St. Louis Surgical Society on March 7. The title of his address was "Hyperparathyroidism: The experience in the diagnosis and treatment of 245 cases".

Dr. Churchill received a letter from Dr. Ben Eiseman, in which he said: "I thought you might like to know that last week I accepted the Chairmanship of the Department of Surgery at the new University of Kentucky Medical School in Lexington."

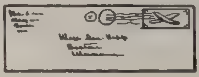
Dr. George Kelemen has returned from a three-month lecture tour to seven European countries. Twenty-one lectures were delivered on subjects in otolaryngic pathology and in comparative phonetics. The tour was sponsored by grants, from the Wenner-Gren Foundation for Anthropological Research and from the Swedish Research Council.

Dr. William V. McDermott presented a paper entitled "Perfusion and replacement of the canine liver" at the Society of University Surgeons meeting, held in Kansas City, Kansas, February 8-12.

Dr. Carter R. Rowe and B. David Grant, M.B. presented a paper at the American Academy of Orthopedic Surgeons' Meeting in Miami Beach, February 12. Its title was "Motor paralysis of the extremities in herpes zoster".

Dr. Harilaos Sakellarides presented a paper entitled "A long-term follow-up study of 180 cases of civilian peripheral nerve injuries" before the meeting of the American Society for Surgery of the Hand, held in Miami Beach on January 6.

Last December, Dr. John B. Stanbury gave a lecture, rounds, and CPC at the All-India Institute for Medical Sciences in New Delhi, a paper at the annual meeting of the Indian Society of Pathologists in Hyderabad, and a few days later attended a meeting of the International Atomic Energy Agency, in Bangkok, on "Endemic and tropical diseases", and presented a paper there. On the way home, he visited the Medical Department of the University of Kyoto.



The following letter has arrived from Dr. Harriet L. Hardy:

I know how much interest I take in reading about other people's trips and speeches. Quite frankly, I want the Hospital not to forget Occupational Medicine, so I am sending along a recount of the things I have been doing in the last six months.

1. I attended the International Conference on Sarcoidosis, sponsored by the National Academy of Sciences, in Washington, D.C., June 1-3, 1960, and presented a paper on "The definition of sarcoidosis".

2. I was Chairman of a session at the Thirteenth International Congress on Occupational Health, held at the Waldorf Astoria in New York in July 1960.

3. I read a paper on "Therapy of lead poisoning" at the Metal-Binding Conference of the National Academy of Sciences, held at the Pennsylvania State College in September 1960.

4. On November 7 and 8, 1960, I gave the annual Dearholt Lectures at Marquette University and the University of Madison, in Wisconsin, on "Occupational lung disease".

5. I read a paper on "Beryllium poisoning" at the Air Force-sponsored conference at the Kettering Laboratory of the University of Cincinnati on January 5.

A brief but informative letter has come from Major General Richard Collins (*E.S.* 1933), in reply to our inquiry regarding his current address:

I have enclosed the official address card in accordance with your request. Perhaps a little more information would be helpful in keeping your Archives records straight.

Here in Korea, I am serving as the Senior Member of the United Nations Command Element of the Military Armistice Commission. I have been here since the first of November and shall return to Washington about the first of May. At that time my official address will change, but I do not yet know what it will be, nor what my duties will be.

My present home address is 5111 8th Road, South, Arlington 4, Virginia. Mail can always get to me at that address.

Kindest regards to all at the "General".

The News

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 204 Boston, Mass. May 1961

THE RESEARCH ACTIVITIES OF THE THYROID CLINIC AND LABORATORY

The Thyroid Clinic is an outgrowth of the studies of oxygen consumption in patients, which were begun in 1913 in this Hospital by Dr. J. H. Means. The Clinic has always been primarily concerned with diagnosis and care of patients with thyroid and related diseases, but, in addition, has become increasingly occupied with studies of the metabolism of the thyroid gland in health and disease. Just now, as the Thyroid Group is moving into its new laboratory quarters, it seems fitting to review the research activities of the unit.

The thyroid gland performs its function of supplying the thyroid hormones by means of a complex matrix of interrelated biochemical events. These include not only the accretion of the elements which form the hormones, including the specific amino acids involved, but also the synthesis, storage, and degradation of the principal thyroid protein — thyroglobulin. In addition, the gland must perform those metabolic functions which it shares in common with other tissues, such as glycolysis, nucleotide synthesis, and the whole complex of steps which relates to the storage and expenditure of energy. It has been our working hypothesis that many inborn and acquired errors may occur at various points in this complex matrix to impair the function of the gland. Thus, a genetic deletion of an enzyme may critically limit the synthesis of hormone and cause a compensatory growth of the gland. One may equally well imagine that a specific impairment in a negative feed-back control system for a rate-limiting step might actually increase the rate at which a certain reaction is moving. It must also be assumed that thyroid disease can derive from errors in extrathyroidal control of thyroid function or in peripheral utilization of the thyroid hormones. Understanding thyroid disease in these terms, therefore, becomes a task in exploring the normal function of the thyroid and in defining the pathological physiology of thyroid disease states as exemplified in clinical experience.

For a dozen years the problems of patients with congenital hypothyroidism and goiter have been studied, and these patients have been categorized according to quite specific inborn errors of thyroid metabolism. Although the clinical end-result is more or less the same, the biochemical abnormality in each category is unique. Five biochemically distinct but clinically similar types of patients have been defined by workers in this laboratory. Members of each category have relatives who have thyroid disease, but without hypothyroidism. If one assumes that the type patients are homozygous for a rare recessive gene which leads to a specific enzymatic defect, then it seems quite clear that these relatives are heterozygous for the same genetic defect for which the type patients are homozygous. An interesting problem has been that of devising tests for demonstrating the heterozygous state for these genetic defects, and some success has attended efforts to develop these tests. Solution of this general problem could provide us with means for specifically categorizing those patients who now are lumped under the waste-basket terms, simple or nodular goiter, provided our hypothesis is true that these patients are heterozygotes for definable abnormal genes.

Recent developments in studies of the fine structure of hemoglobin in relation to disease have suggested that analogous changes in thyroglobulin might be related to thyroid disease. Thus it seems possible that altered thyroglobulin structure or its degradation could have consequences analogous to the consequences of altered structure of the hemoglobin molecule. Dr. Augusto Litonjua, from the Philippines, has just now completed an intensive study of proteolysis of the thyroglobulin molecule. This substance is peculiarly resistant to degradation by any proteolytic enzyme obtained from the thyroid gland. Dr. Mary Jane Spiro has adapted the methods of peptide analysis, or "finger-printing", to a study of thyroglobulin, has identified the terminal amino acids, and has begun a study of thyroglobulin from abnormal human glands, with the expectation that specific abnormalities of thyroid peptides might emerge. She has been ably assisted by Miss Visitacion Manipol of the University of the Philippines. The problem is a particularly difficult one because the thyroglobulin molecule has a molecular weight of over 600,000 whereas that of hemoglobin is only 68,000.

The oxidative step in the thyroid gland wherein iodide is converted to iodine has always been presumed to result from the action of a specific iodide peroxidase. Dr. Leslie J. DeGroot has recently been successful in solubilizing this enzyme and in obtaining it in far higher concentrations than in the native state. Certain patients appear to lack this enzyme on a genetic basis.

Thyroglobulin synthesis has been approached from quite another point of view by Dr. Provan Murray, a Rockefeller Fellow from Glasgow. Dr. Murray has studied the incorporation of C^{14}-labeled leucine by thyroid slices. Analysis of the resulting labeled protein has indicated that labeled thyroglobulin is indeed formed by these slices. Dr. José Barzelatto, a Kellogg Fellow from Santiago, Chile, has joined forces with Dr. Murray to study the effects of high energy radiation on slices, in terms of their capacity to incorporate leucine, oxygen, and iodine. The leucine incorporation was vastly more sensitive to radiation than was any other measured function. In addition, radiation produced a soluble and dialyzable product in the suspending fluid medium which specifically impaired the incorporation of iodine into an organic molecule but had no effect on other measured functions of the slices. This substance has been partially characterized, but not yet identified. Dr. Barzelatto has also recently completed a study of the effects of high energy gamma radiation on several iodinated amino acids. Under these conditions these amino acids are rapidly degraded.

Since the nucleic acids are so important in the synthesis of all proteins, Dr. Reginald Hall, a Commonwealth Fellow from Newcastle, England, has just begun a study of nucleic acid synthesis in thyroid slices. He has found that labeled formate is incorporated into nucleic acids by these slices. He intends to apply his techniques to slices obtained from the diseased thyroid glands, since it is possible that deficient or altered nucleotide synthesis might be related to certain kinds of thyroid disease.

Since enzymes determine function and genes determine enzymes, it has seemed promising to look for chromosomal abnormalities in thyroid disease. A section of the Thyroid Laboratory is devoted to the recently developed technique for the demonstration and study of the human chromosomes. Dr. Eric Engel of Switzerland, working jointly with the Thyroid Group and the Endocrine Unit, has established this technique here and is beginning this investigation.

Over the years the Thyroid Laboratory has had a close association with Dr. Gordon Brownell of the Physics Laboratory. The study of the kinetics of iodine and of calcium metabolism has been actively pursued. A puzzling and difficult problem has been the mathematical analysis of data obtained from labeled tracer doses in these experiments. Dr. Brownell and his group are active in the development of computer techniques for the analysis of metabolic data which have been obtained in the study of patients on Ward 4 with tracers of iodine, strontium, and calcium.

One of the most important practical

research activities of the Thyroid Clinic has been the study of the long-term effects of radiation on the thyroid gland, and on the patient as a whole. Interest in this derives from the fact that, beginning in 1941, increasingly large numbers of patients have been given radioactive iodine for the treatment of their thyroid disease. Follow-up of these patients is the primary interest of Dr. Earle M. Chapman and Dr. Farahe Maloof. This study includes a careful clinical follow-up of all patients treated, the encoding of an enormous amount of information obtained from these patients, and a statistical analysis of these results. In this project, Dr. Chapman is assisted by our statistician, Mrs. Irene Nobrega. It is important that careful study and follow-up of our 1500 patients treated with I^{131} over the past nineteen years has failed to disclose neoplastic changes attributable to this agent.

The introduction of the thyroxine analog triiodothyronine in 1951 by Dr. Rosalind Pitt-Rivers, who worked in our laboratory in 1954, highlights the principal research activity of Dr. Jacob Lerman, who has studied the metabolic activity of a large series of thyroxine analogs. These painstaking studies have been done in large part on Ward 4, and have been instrumental in defining the relationship of structure to function in these compounds.

Several other problems have occupied the attention of various members of the Thyroid Group. For example, over the years Dr. Edward Hamlin, Jr. has developed the technique of needle biopsy of the thyroid. This has been of invaluable aid as a diagnostic tool, as well as in the study of the long-term evolution of such thyroid diseases as Hashimoto's thyroiditis. In the interpretation of the pathological material, Dr. Hamlin has had Dr. Austin Vickery as a colleague. Drs. William McDermott and Oliver Cope, as well as others, have had a long interest in thyroid carcinoma, its occurrence, and its treatment. Dr. Cope has been especially interested in the involutionary effects of thyroid medication on various kinds of thyroid nodules.

Finally, a significant contribution of the Thyroid Laboratory to clinical practice in the Hospital should be noted. This is the development of new techniques for the study and diagnosis of patients with thyroid disease. A number of years ago, under the guidance of Dr. Douglas Riggs, the protein-bound iodine estimation was developed and has since been transferred to the Chemistry Laboratory. Techniques of radioactive iodine uptake, turnover, excretion, and scanning which began as investigations have developed to the practical stage. At the present time, the laboratory is setting up methods for I^{131} resin uptake determinations and for tanned red cell agglutination. These will be ready for routine clinical use at an early date.

One is always astonished by the ever-widening pathways for investigation in the thyroid field. There seems to be no limit, and there certainly is ample opportunity for clinical application of the information as it is developed. As the Thyroid Unit moves into its new quarters, optimal facilities for continued research are at hand, and possibilities for increased understanding of thyroid disease are within our grasp.

John B. Stanbury, M.D.,
Associate Physician

The Board of Trustees, at their meetings on February 17, and March 3 and 17, voted:

That William T. Irvine, M.D., F.R.C.S., Professor of Surgery at St. Mary's Hospital, London University, be invited to give a Richardson Lecture on February 17;

That Dr. Gunnar Sevelius, Chief of the Cardiovascular Section of Civil Aeronautical Research Institute, Oklahoma City, Oklahoma, be invited to give a Richardson Lecture on March 2;

To grant Dr. Howard Ulfelder leave of absence for the month of July, in order that he may accept an invitation to serve as McIlrath Visiting Professor of Gynecology at the Royal Prince Alfred Hospital in Sydney, Australia;

That Dr. Henry deF. Webster, now holding the position of Assistant Neurologist, be given the additional title of Assistant Neuropathologist in the Department of Pathology.

To accept the resignations of:

Dr. Willis H. Bower, Associate Psychiatrist at McLean Hospital, as of March 19, with regret;

Dr. John Q. Durfey from the position of Assistant in Anesthesia, effective March 31;

Dr. Gilman W. Haven from the position of Dental Surgeon at McLean Hospital, as of February 17.

To promote:

Dr. Francis L. A. de Marneffe from Assistant Psychiatrist to Associate Psychiatrist at McLean Hospital, effective March 20;

Dr. Richard H. Sweet to the position of Consulting Visiting Surgeon, effective July 1.

To appoint:

Dr. Barbara L. Aeschliman as Assistant Attending Psychiatrist at McLean Hospital;

Dr. Daniel C. Allensworth, III, as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. George E. Battit as Clinical Fellow in Anesthesia, beginning April 1;

Dr. Hector V. Berezowski as Assistant Resident in Neurosurgery, for a period of three months, beginning April 1;

Dr. John H. Bowker as Clinical and Research Fellow in Orthopedic Surgery for one year, beginning July 1;

Dr. William G. Bush as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Ock S. Choi as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Paul A. Crabbé as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Brian C. Dalton as Clinical Fellow in Anesthesia, to begin on or about February 17;

Dr. John T. Dunn as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Jon B. Glazier as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Richard N. Goldman as Assistant Resident in Urology, on assignment from the V.A. Hospital, for the period March 1 through May 31;

Dr. Walter Gruen as Associate Psychologist at McLean Hospital, as of January 9;

Dr. Andrew Huvos as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Raymond N. Kjellberg as Assistant in Neurosurgery;

Dr. Howard M. Kravetz as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Charles S. Lambdin as Clinical Fellow in Orthopedic Surgery, for the period January 15 through February 20;

Dr. John P. Lavender as Clinical Fellow and Acting Resident in Radiology, beginning October 1;

Dr. Margaret H. MacGillivray as Clinical and Research Fellow on the Children's Medical Service, beginning September 1;

Dr. Ira Marks as Exchange Assistant Resident on the Children's Medical Service, for the period March 2 through April 10;

Dr. Leonard A. Moroz as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robson S. Newbold as Acting Assistant Resident in Surgery, for the period February 20 through April 30;

Dr. John E. Salvaggio as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Harold Simon as Clinical Fellow in Radiology, for the period April 1 through June 30;

Dr. Paul M. Stevens as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. William H. Sweet as Chief of the Neurosurgical Service, beginning July 1.

To appoint the following Interns for the period of one year, beginning July 1:

Medicine

Dr. Robert E. Burke
Dr. Norman R. Cohen
Dr. Howard B. Corning
Dr. Shalom Z. Hirschman
Dr. Axel Hoffer
Dr. Newton E. Hyslop, Jr.
Dr. Alan S. Keitt
Dr. John N. Loeb
Dr. Philip W. Majerus
Dr. John C. Parker
Dr. Kenneth I. Shine
Dr. James F. Spann, Jr.

Surgery

Dr. William M. Abbott
Dr. William B. DeLong
Dr. Josef E. Fischer
Dr. Elwin E. Fraley
Dr. Thomas R. Hakala
Dr. Charles A. Rodman, II
Dr. Dale E. Wenlund
Dr. Bruce E. Zawacki

Children's Service

Dr. Robert M. Kline
Dr. Stephan M. Marcy
Dr. Lester F. Soyka
Dr. Richard C. Talamo

In addition to the above votes, the General Director presented a recommendation, approved by the General Executive Committee, on a reorganization of the Children's Medical Service, which included changing the name to "The Children's Service", creating a Children's Service Executive Committee, and the use of Burnham 5 primarily as a surgical floor, and it was VOTED to approve this recommendation as presented.

At their meetings during March, the General Executive Committee voted:

To reappoint:

Dr. Anton T. Appels as Clinical and Research Fellow in Medicine for one year, beginning April 1;

Dr. Peter A. Freeman as Clinical Fellow in Orthopedic Surgery, for the period March 12 through May 31;

Dr. Jorgen G. Jacobsen as Clinical and Research Fellow in Medicine for one year, beginning April 1;

Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning April 28;

Gerald L. Mechanic, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning March 1;

Dr. Kenneth G. Potee, with a change of title to Clinical Fellow in Medicine, for one year, beginning March 1;

Dr. Edward J. Riseborough as Clinical Fellow in Orthopedic Surgery and Orthopedist-in-Charge of the Orthopedic Ambulatory Clinic for one year, beginning May 1;

Dr. Isadore Starr as Clinical Fellow in Medicine for one year, beginning April 15.

To appoint:

Dr. F. William Bora, Jr. as Clinical Assistant in Orthopedic Surgery, for the period March 15 through May 31, with the privilege of caring for the patients of Dr. William R. MacAusland, Jr., under the supervision of Dr. Richard A. Mayo;

Dr. Charles M. Lapiere as Research Fellow in Medicine for one year, beginning October 1;

Dr. C. Norman Shealy as Research Fellow in Neurosurgery, for nine months, beginning April 1.

* * *

MEMORIES OF THE M.G.H.

As a student in the Class of 1905 at the Harvard Medical School, the Massachusetts General Hospital gradually assumed in my mind a position akin to Heaven, Valhalla, or the Elysian Fields—a Paradise to be hoped for by all but attained by few. Examinations for the position of House Pupil were held in the late winter or early spring, and those were coveted positions. Reflecting that if nothing was ventured nothing was gained, I decided to try my luck, and so one evening I found myself sitting on a bench on a stair-landing in the Bulfinch Building, together with a group of fellow students waiting to be examined for the surgical House Pupil appointments for the coming year. These examinations were held in the Treadwell Library, then situated on the second floor of the central section of the Bulfinch Building. As I remember it, about six members of the Surgical Visiting Staff constituted the examining board. They were seated around a long mahogany table in the Library, and one by one the candidates were admitted, told to sit in a chair facing their inquisitors, and were grilled. The junior surgeon asked most of the questions, although any member of the board could add his bit. The questions were fair, basic, and practical; but, to the perspiring candidate, the ordeal was the equivalent of a session at the Spanish Inquisition. When dismissed, the departing candidate passed by his waiting companions, honor bound not to divulge in any way anything about the questions he had been asked, and fled into the night to compose his fears and nourish his hopes. It was not unusual for a man to have to make more than one try for the appointment, but, happily, I was successful in my first venture and was appointed to the South Surgical Service.

At that time there were twelve surgical House Pupils, four assigned to each of the Surgical Services—East, West, and South, and eight medical House Pupils, four for the East Medical and four for the West Medical Service. There was a fine *esprit de corps* in all the Services, each House Pupil being sure that his was the best, with the best physicians or surgeons and the best House Pupils, and that they took superior care of their patients. Surgical House Pupils looked down upon medical House Pupils, and vice versa. Each strove to write the best records, to have the greatest number of correct diagnoses, and to obtain the best results.

Bandaging was a fine art in those days. A fractured femur, put up in a Buck's extension, required bandaging from foot to crotch, with each V, where the bandage crossed, accurately spaced and with the edges turned in. The nurses vied with each other to see who could make the neatest charts, with perfect dots and connecting lines recording temperature, pulse, and respiration, and with the accompanying notes carefully printed or finely written. Such time-consuming perfection would not be countenanced now, but then it reflected a consecration to duty and service. It was a happy close-knit family, all intensely interested in their work in spite of long hours, and the patients were given the best care possible with all the medical knowledge which that period afforded. I was supremely happy and completely under the spell of the M.G.H.

Fate willed that after finishing my House Officership I should be separated from the M.G.H. until 1919, when I returned, fresh from World War I, as an Assistant Resident Physician (or Assistant Director, as the position is now called). Dr. Frederic A. Washburn was then and until 1934 the administrative head of the Hospital. Many thought him a cold, military martinet, but I remember him as a kind, loyal friend and teacher, the effect of whose wise government and prophetic vision is still in evidence in the Hospital he served and loved.

My duties as an Assistant Resident Physician introduced me to a new sphere of hospital life. As a House Pupil, all my attention had been focused on patients and professional matters. Now I was part of the organization that made the Hospital function and provided the doctors and nurses with the facilities with which to care for the patients. I was privileged to go anywhere, even to the rat-infested storage basement under the old Accident Room. Miss Clark, the housekeeper, with a huge ring of keys chained to her ample waist, showed me the hogsheads of sauerkraut which she laid down each year in the Bulfinch basement. Eric Frankson, the storekeeper, initiated me into the mysteries of the Store, where he roasted the green coffee beans himself, not trusting Chase and Sanborn to do a proper job. From Joe Godsoe I learned how to beat the pharmaceutical detail man. Real military inspections were held in rotation on the wards, where the head nurse presented a book containing a written inventory and everything was checked. Once, while counting the spoons (a despised chore), I discovered two coin silver dessert spoons which somehow had escaped pilfering. They were transferred to the Hospital safe. Mrs. Myers, the Librarian, who had boasted that all the Hospital medical records since 1821 were safely housed in the Treadwell vault, was somewhat nonplussed when I presented her with two full volumes of early medical records which I had discovered in a cupboard in the Bulfinch attic, where the records had been stored previously and which had been overlooked when the transfer to Treadwell was made. I read the Bowditch and Myers histories of the Hospital, all the Annual Reports and the minutes of the General Executive Committee, and absorbed much of the fascinating history and atmosphere of this wonderful institution. Of course, there was some drudgery—requisitions and checks to sign, and all that. But there was also much that dealt with medical problems, and there were no dull days. Just as I would think I had been confronted with every possible situation, a new one would pop up. It was a stimulating experience to feel that I was helping to make it possible for 350 in-patients and 1,000 out-patients to be cared for daily by the 150 doctors on the staff. It was something like being the navigator on a battleship, with the doctors and nurses being the fighting groups. In a slightly different way, the MGH spell was working just as it had done before.

Then came an earthquake. In 1922, Dr. Washburn figuratively pushed me, like a fledgling bird with (in my opinion) inadequate administrative wings, out of my comfortable MGH nest, to become the Director of the proposed hospital for the University of Rochester. At that time there was no medical school there, no hospital, only the money with which to build them. It was the responsibility of Dr. George H. Whipple, as Dean of the Medical School, to produce a school with faculty, and for me as Director, to produce a hospital with staff, nurses, and personnel. At the very outset I resolved to make the Strong Memorial Hospital as nearly like my beloved M.G.H. as was humanly possible. I think I succeeded to some extent, and the hospital was opened in January 1926. It was great fun and an exciting experience to plan this new venture. The University connection was exhilarating and Rochester was a friendly city. I settled down to spend the rest of my days there.

Earthquake number two arrived in 1935 in the form of an invitation to return to the M.G.H. as Director. It was hard to leave the Strong Memorial—my own child, as it were—but Boston and the M.G.H. won. To become Director of the finest hospital in the world was an honor that could not be refused. So, on July 1, 1935, here I was back in the Massachusetts General Hospital.

It was good to be home. Some of the old faces were still there: Sally Johnson was still Superintendent of Nurses; Miss Carstenson was at the Information Desk, with Conner on the night shift; Ripley was in the Purchasing Office; Decker and Parsons were in the shops; Barry and Henderson still headed the orderlies; Frankson called me "Dotter" as of old; and although Lee no longer drove the ambulance, son Willie ran a taxicab. The Baker Memorial had been added, and there were more doctors, more nurses, more laboratories, more employees, and the M.G.H. was bigger and busier.

Of course, my outlook now was different from what it had been as a House Pupil or as an Assistant Resident Physician. Now I was responsible for decisions. As a House Pupil, there was always the Visiting Surgeon to appeal to; as an Assistant Resident Physician, there was Dr. Washburn. At first I was scared, but I soon found there was a wonderful Board of Trustees who guided and sustained Directors; that there were competent, loyal, devoted persons everywhere—on the wards, in the offices, the shops, the kitchens—who really bore the burdens. A Director merely coordinated their activities. Again I found I was in the midst of a happy family. That characteristic of the M.G.H. had not changed.

Certain periods and events stand out above the routine. First came the thrill of planning and building the George Robert White Building—the present largest MGH unit. The Hospital was fortunate in having Henry R. Shepley as architect and Francis V. Bulfinch, the great-grandson of the Hospital's first architect, as engineer. They built well.

Next came World War II, with blackouts, rationing, and shortages of almost everything—the shortage of people being the most serious. The 6th General Hospital—the MGH unit—took a heavy toll. Altogether, 123 doctors, 158 nurses, and 175 employees joined the Armed Forces. Retired Staff members partially filled the gap in the Staff, but the shortage of nurses and employees would have been fatal had it not been for the Volunteers.

Dr. Frederick A. Coller, M.G.H. 1914, in his 1939 Ether Day Address, pointed out that it was the intimate association of the public and the doctors that had made and maintained the Hospital—the Staff giving of their time and skill and the public contributing their money, their interest, and their support. Only in a Democracy are humanitarian needs met by the self-sacrifice of individuals. As a result, people have a pride and confidence in institutions that are representative of their good impulses. He saw the M.G.H. as a logical outgrowth of this humanitarian spirit of Democracy.

That this is true was shown by the response of the community to the Hospital's cry for help. Volunteers poured in. In 1944, 2,000 persons gave 150,000 hours of service—the equivalent of 50 people a day. This did not replace those who had gone to war, but it helped, and their spirit helped even more. Business men worked as orderlies and cleaners; secretaries, clerks, and housewives as maids. The M.G.H. was their Hospital and they were bound to keep it going.

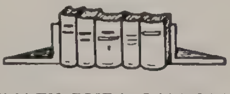
Right in the midst of the war effort came the Cocoanut Grove disaster. Fortunately, the Hospital had spent a year in developing a program of Civil Defense and so was able to meet the emergency. Within two hours, 114 casualties were received. Of the 59 living, all showed burns of varying degree, shock, and asphyxia. The Staff, nurses, and Hospital personnel responded gallantly and bore the first shock. Before they collapsed, Volunteers again came to the rescue—nurses from other hospitals, medical students, college students, members of our Ladies' Visiting Committee, Red Cross workers. Everybody wanted to help. Again the people demonstrated their love for their Hospital. As the result of their experience and research, the Staff prepared a special report on the treatment of burned persons that was adopted by the Armed Forces—a real contribution to the war effort.

I have detailed, perhaps *ad nauseam,* my association with the M.G.H. which has lasted, with several breaks in continuity, for over fifty years. First as House Pupil, next as an Assistant Director, then as Director, and now as Director Emeritus. The traditions and personality of the Massachusetts General Hospital have permeated my whole life. The influence of the Hospital upon me has been experienced in a similar manner by countless others—doctors, nurses, residents, interns, social workers, and employees of all grades and in all departments.

While I recognize the importance of this Hospital's performing competently the traditional functions of a hospital (as most hospitals do), while I am proud of the care it gives to patients, of its role in education, of its scientific contributions to medicine, of its influence on social welfare, I would select the influence of its personality upon the lives of all who have been connected with it as its greatest asset and contribution. It takes a great hospital to build character along with a knowledge of science, medical skill, and manual technique.

Everyone who spends any length of time within the walls of the Massachusetts General Hospital feels the impact of something he cannot readily explain—a spiritual quality, a soul existing in a material institution which has influenced and exalted him and has led to a deep devotion. It is this something—this spiritual quality—that has made this Hospital more than a refuge for the sick, a school, and a laboratory. It is this personality, which all who serve within its walls absorb and which affects their future lives, that makes the Massachusetts General a great and beloved Hospital.

Nathaniel W. Faxon, M.D.,
Director Emeritus



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the hospital department with which you are affiliated.

The following new titles have been received:

General Medicine

Dawson, A. M., and Isselbacher, K. J.
Fat absorption.
Arch. Int. Med. 107:305.

Isselbacher, K. J.
Fat absorption and the esterification of fatty acids by intestinal mucosa. (Editorial)
Gastroenterology 40:259.

Willocx, R. G., and Isselbacher, K. J.
Chronic liver disease in young people: Clinical features and course in thirty-three patients.
Am. J. Med. 30:185.

Laboratory Science

Jeanloz, R. W., Glazer, Z. T., and Jeanloz, D. A.
2-amino-2-deoxy-D-idose (D-idosamine) and 2-amino-2-deoxy-D-talose (D-talosamine).
J. Organ. Chem. 26:532.

Jeanloz R. W., and Jeanloz, D. A.
3-amino-3-deoxy-D-idose and 3-amino-3-deoxy-D-gulose.
J. Organ. Chem. 26:537.

Morgan, W. S., and Hultin, T.
Chromatographic fractionation of liver "pH-5 fraction" and "S_{50}-protein" on TEAE-cellulose columns.
Biochim. et biophys. acta 47:190.

Neurology

Pearson, C. M., Waksman, B. H., and Sharp, J. T.
Studies of arthritis and other lesions induced in rats by injection of mycobacterial adjuvant. V. Changes affecting the skin and mucous membranes. Comparison of the experimental process with human disease.
J. Exper. Med. 113:485.

Waksman, B. H.
Experimental study of diphtheritic polyneuritis in the rabbit and guinea pig. III. The blood-nerve barrier in the rabbit.
J. Neuropath. & Exper. Neurol. 20:35.

Webster, H. deF., Spiro, D., Waksman, B., and Adams, R. D.
Phase and electron microscopic studies of experimental demyelination. II. Schwann cell changes in guinea pig sciatic nerves during experimental diphtheritic neuritis.
J. Neuropath. & Exper. Neurol. 20:5.

Physical Medicine

Watkins, A. L.
New name needed. (Editorial)
Arch. Phys. Med. 42:129.

Radiology

Potsaid, M. S., Irie, G., and Griscom, N. T.
Motility changes revealing esophagogastric junction.
Radiology 76:262.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Abramson, H. (Editor)
Resuscitation of the newborn infant.
St. Louis, The C. V. Mosby Company, 1960.
(23V)
Academy of Sciences of the Ukrainian SSR.
Problems of the physiology of the processes of fatigue and recovery.
Kiev, Academy of Sciences of the Ukrainian SSR, 1958.
(4E)
Alexander, P., and Block, R. J. (Editors)
A laboratory manual of analytical methods of protein chemistry, vol. 3.
New York, Pergamon Press, 1960.
(5B)
Biochemical Society Symposia, no. 20.
The biochemistry of mucopolysaccharides of connective tissue.
Cambridge, Mass., At the University Press, 1961.
(5A)
Boisen, A. T.
Out of the depths.
New York, Harper & Brothers, 1960.
(1Ea)
Brachet, J., and Mirsky, A. E. (Editors)
The cell, vol. 5.
New York, Academic Press, Inc., 1961.
(2Am)
Brain, Sir R.
The nature of experience.
London, Oxford University Press, 1959.
(1Hbs)
Colby, F. H.
Essential urology, ed. 4.
Baltimore, The Williams & Wilkins Company, 1961.
(17A)
Cold Spring Harbor Symposia on Quantitative Biology, vol. 25.
Cold Spring Harbor, The Biological Laboratory, 1961.
(2As)
Comar, C. L., and Bronner, F. (Editors)
Mineral metabolism, vol. 1b.
New York, Academic Press, Inc., 1960.
(5M)
Corner, G. W.
Anatomist at large.
New York, Basic Books, Inc., 1958.
(1Ea)
Dicks, R. L.
Toward health and wholeness.
New York, The Macmillan Company, 1960.
(615.851) (Cabot Memorial Room)
Fairley, Sir N. H., and others.
Recent advances in tropical medicine, ed. 3.
London, J. & A. Churchill Ltd., 1961.
(21M)
Gardner, L. I. (Editor)
Molecular genetics and human disease.
Springfield, Ill., Charles C. Thomas, 1961.
(2Am)
Garland, J. E.
Every man our neighbor: A brief history of the Massachusetts General Hospital, 1811-1961.
Boston, Little, Brown and Company, 1961.
(39Am)
Hanahan, D. J.
Lipide chemistry.
New York, John Wiley & Sons, Inc., 1960.
(5D)
Henderson, I. F., and Henderson, W. D.
Dictionary of scientific terms, ed. 7.
New York, D. Van Nostrand & Co., Inc., 1960.
(1D)
Kobler, J.
The reluctant surgeon: A biography of John Hunter.
Garden City, Doubleday & Company, Inc., 1960.
(1Ea)
Laurence, D. R., and Moulton, R.
Clinical pharmacology.
Boston, Little, Brown and Company, 1960.
(22A)
Lectures on the scientific basis of medicine, vol. 8, 1958/59.
London, The Athlone Press, 1960.
(6A)
Levine, H. D.
Cardiac emergencies.
New York, Landsberger Medical Books, Inc., 1960.
(15E)
Medawar, P. B.
The uniqueness of the individual.
New York, Basic Books, Inc., 1957.
(1Ha)
Noordenbos, W.
Pain.
New York, Elsevier Publishing Company, 1959.
(7E)
Ongley, P. A., and others.
Heart sounds and murmurs.
New York, Grune & Stratton, 1960.
(15E)
Parkes, A. S. (Editor)
Marshall's physiology of reproduction, ed. 3, vol. 1, pt. 2.
New York, Longmans, Green and Company, 1960.
(4G)
Peeters, H. (Editor)
Protides of the biological fluids, 6th Colloquia.
New York, D. Van Nostrand & Co., Inc., 1960.
(5B)
Smith, C. H.
Blood diseases of infancy and childhood.
St. Louis, The C. V. Mosby Company, 1960.
(14B)
Smithdas, R. J.
Life at my fingertips.
Garden City, Doubleday & Company, Inc., 1958.
(1Ea)
Solomon, P., and others. (Editors)
Sensory deprivation: A symposium held at Harvard Medical School.
Cambridge, Mass., Harvard University Press, 1961.
(19L)
Swank, R. L.
Biochemical basis of multiple sclerosis.
Springfield, Ill., Charles C. Thomas, 1960.
(19E)
Talbot, B. B.
Beachy.
Boston, Privately Printed, 1961.
(B) (Cabot Memorial Room)
Vickery, B. C.
Faceted classification.
London, Association of Special Libraries and Information Bureaux, 1960.
(1Ca)
Voino-Yasenetskii, A. V.
Evolutionary regularities as reflected in the epileptiform reaction of animals to higher partial oxygen pressure.
Moscow, The Academy of Sciences of the USSR, 1958.
(19Fe)
Willis, R. A.
Pathology of tumours, ed. 3.
Baltimore, The Williams & Wilkins Company, 1960.
(23K)
The world of learning, ed. 11.
London, Europa Publications Ltd., 1961.
(1A)
Zhdanov, V. M., and others.
The study of influenza.
Moscow, Medgiz, 1958.
(11S)

Brief bits:

Dr. Henry K. Beecher has just been made an Honorary Member of the Society of Anaesthetists of Finland.

Dr. Gordon L. Brownell gave a talk at the meeting of the Visiting Scientist Committee, held at the B. M. C. Durfee High School in Fall River on March 6.

Drs. Evan Calkins, Edgar S. Cathcart, George Fite, and Ralph C. Williams recently visited Guadalajara, Jalisco, Mexico, for the purpose of conducting a study on leprosy patients in the Instituto Dermatologico.

Dr. Oliver Cope spoke at the South Nassau Communities Hospital Teaching Day, in Oceanside, N. Y., on April 26. His subject was "Metabolism of calcium, phosphorus, and magnesium: Tests of parathyroid function". He also gave the Hale-McMillan Lecture at the Meharry Medical Hospital in Nashville, Tennessee, on April 27.

Dr. John Gergely gave a seminar on "The molecular basis of the control of muscle contraction and relaxation" in the Biophysics Department of Johns Hopkins University on March 20. He also acted as Chairman of the Intersociety Session on Muscle at the meeting of the Federation of the American Society of Experimental Biology, held on April 13 in Atlantic City.

Dr. Earl A. Glicklich presented a paper written by himself and Dr. Lewis W. Kane entitled "The use of tetracycline and demethylchlor-tetracycline in the treatment of 590 cases of acne vulgaris" before the 4th Annual Meeting of the Noah Worcester Dermatological Society, held in Nassau, BWI, on March 23.

Dr. Robert S. Schwab went to the Island of Guam for the month of April. He had an appointment, under the National Institute of Neurological Diseases and Blindness, for research among the native Chamorros, in whom there is a phenomenal incidence of amyotrophic lateral sclerosis and a Parkinsonism-presenile dementia syndrome. His research included clarification of the electroencephalographic characteristics of patients and unaffected members of their families.

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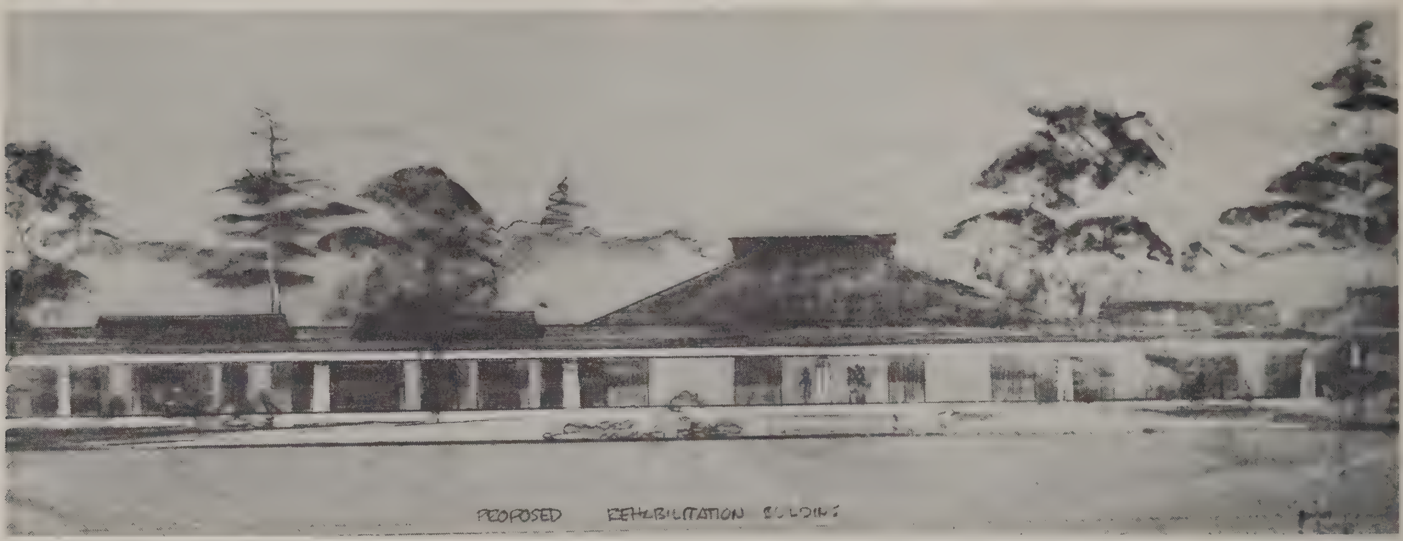
New addresses:

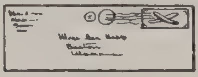
Dr. Scott Adler (sr. r.s. *Or.* 1959), 4105 Silver St., S.E., Albuquerque, N. M.
Dr. George B. Beaman (r.p. *Psychiat.* (*McL.*) 1936), 63 Nichols Rd., Cohasset, Mass.
Dr. Stanley Berlow (*C.M.* 1951), 710 E. Silver Spring Drive, Milwaukee, Wis.
Dr. Charles Boller (*E.M.* 1929), 267 Alexander St., Rochester, N. Y.
Dr. F. William Bora, Jr. (sr. r.s. *Or.* 1961), 15 Hannum Drive, Ardmore, Pa.
Dr. Willis H. Bower (r.p. *Psychiat.* (*McL.*) 1949), Colorado State Hospital, Pueblo, Colo.
Dr. Joseph L. Braudo (a.r.p. *C.M.* 1953), 904 Medical Center, Jeppe St., Johannesburg, South Africa
Dr. John F. Bresnahan (past Assistant Director), 4670 Pine St., Omaha 6, Nebr.
Dr. Robert N. Buchanan, Jr. (r.p. *D.* 1941), 706 Church St., Nashville, Tenn.
Dr. Sydney M. Bunker (past Assistant Director), 655 High St., Westwood, Mass.
Dr. C. Ethelyn Chapman (*An.* 1937), Veterans Administration Hospital, 13th and Harrison Sts., Oakland 12, Calif.
Dr. John S. Chase (*E.S.* 1940), 392 Pleasant St., Brockton, Mass.
Dr. ~~John~~ Josep F. Ciano (*Dn.* 1954), 1159 Hancock St., Quincy, Mass.
Maj. Gen. Richard Collins, MC, USA (*E.S.* 1933), 5111 8th Rd., South, Arlington 4, Va.
Dr. Charles D. Cook (a.r.p. *C.M.* 1949), Children's Medical Center, 300 Longwood Ave., Boston, Mass.
Dr. Thomas A. Devan (past Assistant Director), 325 19th Ave., N.E., St. Petersburg 4, Fla.
Dr. Carol C. Dickson (*M.* 1948 and *C.M.* 1949), 2 5th Ave., New York, N. Y.
Dr. Richard S. Dodge (a.r.s. *Or.* 1946), 4767 Kahala Ave., Honolulu, Hawaii
Dr. William L. Dunn (a.r.p. *Path.* 1960), University College Hospital Medical School, Gower St., London N.W. 1, England
Dr. John Q. Durfey (a. *An.* 1961), Kaiser Foundation Hospital, 2425 Geary Blvd., San Francisco, Calif.
Dr. Effie O. Ellis (*C.M.* 1951), 1514 Division St., Baltimore, Md.
Dr. James T. Fallon (*C.M.* 1925), 86 Whitmarsh St., Providence, R. I.
Dr. Harold J. Freedman (*C.M.* 1928), 454 Brookline Ave., Boston 15, Mass.
Marc A. Fried, Ph.D. (assoc. psychol.), Center for Community Studies, 50 Beacon St., Boston, Mass.
Dr. Leonard J. Friedman (*M.* 1956), 11 Huntwood Place, Mount Vernon, N. Y.
Mudlagiri K. Gaitonde, Ph.D. (a. biochem. (*McL.*)), Neuropsychiatric Research Institute, Woodmansterne Rd., Carshalton, Surrey, England
Dr. Alastair J. Gillies (a.r.p. *An.* 1952), 789 Howard Ave., New Haven, Conn.
Dr. Donald J. Glotzer (*S.* 1953), New England Medical Center, 171 Harrison Ave., Boston, Mass.
Dr. Lauren H. Goldsmith (*C.M.* 1923), 220 College Ave., Athens, Ga.



ARTIST'S SKETCH OF THE NEW REHABILITATION CENTER AT MCLEAN HOSPITAL

This building will provide for an admission unit, day-care program, civic center, coffee shop, Occupational and Recreational Therapy, art and music facilities, classrooms and meeting rooms, and office space for related professional services.

Dr. Charles P. Gore (a.r.p. *Psychiat.* 1952), Menston Hospital, Ilkley, England
Dr. John E. Gorrell (past Assistant Director), Electronic Associates, Inc., North Long Branch, N. J.
Dr. Lester H. Grant (a.r.p. 1957), Johns Hopkins University School of Medicine, 710 N. Washington St., Baltimore, Md.
Dr. John W. Grover (*S.* 1957), Boston Lying-in Hospital, 221 Longwood Ave., Boston, Mass.
Dr. Adolf L. Gundersen (*S.* 1950), Gundersen Clinic, 1836 South Ave., La Crosse, Wis.
Dr. Sigurd B. Gundersen, Jr. (*S.* 1949), Gundersen Clinic, 1836 South Ave., La Crosse, Wis.
Dr. T. Stewart Hamilton (past Assistant Director), Hartford Hospital, 80 Seymour St., Hartford 15, Conn.
Dr. Marlow B. Harrison (*E.M.* 1938), 2000 Van Ness Ave., San Francisco, Calif.
Dr. Donald Harting (*C.M.* 1947), USPHS. 330 Independence Ave., S.W., Washington 25, D.C.
Dr. William F. Havemeyer (a.r.s. 1948), 2509 E. Elm St., Tucson, Ariz.



A short but very welcome note has arrived from our past Chaplain—now The Very Rev. William B. Spofford, Jr., Dean of Saint Michael's Cathedral Parish in Boise, Idaho. Mr. Spofford enclosed a copy of his weekly Parish publication, in which he quoted from Dr. Jack E. Tetirick's letter, written from aboard the S.S. *Hope,* which appeared in the January issue of THE NEWS. Mr. Spofford says, in part:

> Just thought you would like to see that I'm plagiarizing from THE NEWS. We get homesick when it arrives. We are having fun, but it is sort of like trying to run General Motors. Much too busy.
>
> It is good to be back in pastoral ministry; but you have to take a lot that you are spared in chaplaincy. Also, you miss a lot of friends.
>
> Sorry to have missed the 150th celebration. Meet an occasional doctor round here who has had a course or so at M.G.H., and that makes it homey.

We received this note from Dr. James C. White:

> I am turning over the enclosed letter which has just reached me from Dr. Paul Spangler in Indonesia. It is one of the most fascinating surgical experiences I have read about for a long time.
>
> Paul Spangler was an H.M.S. classmate of mine, vintage 1923, and we both served as Interns on the Surgical Service here at M.G.H. during the next two years. He then went to Portland, Oregon, finally joined the Navy during World War II, and continued in the regular Naval Medical Corps. Now that he has retired, he has joined the S.S. *Hope* on its medical mission to the Far East.
>
> Use as much of the letter as you like, and please return the original to me.

Here is Dr. Spangler's letter:

> Dear Jim:
>
> Greetings from Indonesia! We are having a real trip out here and a wonderful experience. I thought it might be interesting to some back there to have a report.
>
> The last issue of the MGH NEWS which we have seen reported the fact that Jack Tetirick and I were aboard. What it did not tell is that all of the general surgeons we have had aboard are not only Harvard graduates but also MGH trained. No other school or hospital is as well represented as we are. This was by no design; but isn't it interesting that our surgeons would be the ones to respond to such a challenge as this. In the first group of rotators we had Jack Tetirick and John Ratcliffe. Now I am fortunate to have Dr. Tetirick's partner, Walt Haynes. Believe me, I am very fortunate and ever grateful to have three such fine associates with me on this venture. They are all men Harvard and M.G.H. can be proud of, and I am delighted to have them. I only hope their replacements will be up to their caliber. They are tremendous, not only professionally but they also have the personality and the devotion to the project which are so necessary in promoting goodwill and understanding which we are out here to generate.
>
> The clinical material here is unlimited and grandiose. The pathology is so neglected that everything which we have seen heretofore only in old textbooks is in the extremes here. It is fantastic. Dr. Haynes took out a parotid tumor today that weighed nearly three pounds. We see thyroids that literally hang down on the chest like supernumerary breasts. Fibroids the size of a term pregnancy. One ovarian cyst in a little woman weighed 48 pounds, and the poor girl had to lean over backward to ambulate. After her operation she had to learn to walk all over again. I had one lad with a lipoma of the back that made him look like the Hunchback of Notre Dame. And so it goes. Medically, besides the usual things we have at home, we see yaws, tuberculosis, malaria, leprosy, protein- and vitamin-malnutrition. They are making rapid progress in the control of yaws and it will soon be stamped out here by mass shots of penicillin. Leprosy they are handling well. They treat all but the most severe cases as out-patients and no longer make an effort to isolate them. There are thousands of lepers, but they can cure them now with the newer sulfones if the patients will stay with the treatment. They experience only about 5% recurrences in the arrested cases. They are making good progress in the control of malaria, too; but that is more difficult, as this is a big country and there is a lot of water to be sprayed and drained and there is lots of rain. Malaria is still a major problem and almost everybody has had it. It is still the great killer. We lost one of our crew who refused to take his antimalaria pills. Tuberculosis is a tremendous problem, and if anyone wants to study t.b., this is the place to do it.
>
> All the men who come out here are astounded at the pathology and the clinical opportunities that exist here. I am sure that if more people knew what a "ball" we are having, we would be swamped with doctors wanting to come out here. Dr. Walsh sends these men in the various specialties out here for periods of two or three months and, believe me, we keep them busy, for they are so badly needed by these people. One island we visited had one doctor for 500,000 people. We had our best stop there. Believe me, these people are really grateful to the S.S. *Hope* for giving them the opportunity to have their troubles attended to. Everywhere we go the need is most urgent. Many of the doctors here are well trained, but they are terribly handicapped by the lack of supplies and equipment and by the shortage of not only doctors but also of paramedical help.
>
> The people are most friendly and appreciative, and we have encountered nothing but the warmest pro-American feeling. People will stop us on the street and say "Amerika bagouse", which means "America, good, O.K." I know we are gaining in mutual friendship and understanding through the medium of health and the exchange of medical ideas and practices. It is all very much worth while and I only hope that a steady stream of young, ambitious Harvard and MGH men will continue to appear. If any are interested, have them call up Dr. Walsh in Washington, D.C. The telephone number is Metropolitan 8-3136. Tell them to call collect, and Dr. Walsh will put them on a plane and have them on their way.
>
> Give my best to all the old-timers still around.
>
> P.S. John Rock and Joe Meigs will be interested to know that choriocarcinoma is almost epidemic out here. One hospital had five cases in the house when we were there. We have had three on the ship. This high incidence has been only since 1952. These are the sorts of challenges we see all about us. Bladder stones very common, even in babies. You can scarcely believe what we see.

The News

No. 205 Boston, Mass. June 1961

THE ANESTHESIA LABORATORY IS TWENTY-FIVE YEARS OLD

On May 6, 1961, the Anesthesia Laboratory of the Harvard Medical School, at the Massachusetts General Hospital, was 25 years old. This quarter century has been notable for many developments in anesthesia. Some have made it less unpleasant for the patient and more satisfactory for the surgeon; some have made it safer, and a few have made heretofore impossible procedures possible. Leaving aside for the moment questions of safety, it must be agreed that it is far easier now for the less-than-expert anesthetist to give the surgeon satisfactory working conditions as far as surgical technique is concerned than it was a quarter of a century ago. At times this has seemed to be a mixed blessing; but improvement anywhere is reflected all along the line, and the expert who could, 25 years ago, give the surgeon as satisfactory conditions for his surgical performance as he now can, can today do it more easily. More safely? Eventually yes, and probably now, but the proof is not yet in. It is an ancient and regrettable tradition that violent controversies have raged, and still do, concerning anesthesia. The laboratory is the proper place for the resolution of many of them—not, as so often still is the case, through polemics.

This Laboratory was the first in the world to be established by an anesthetist and devoted solely to the study of anesthesia and its related problems. Its record has been published in 260 papers and several books, and in 11 languages: English, French, German, Italian, Spanish, Portuguese, Danish, Swedish, Greek, Russian, and Japanese. In other places many illustrious men have worked in this field: In 1799, 12 years before the founding of this Hospital, Davy, in Beddoes's Pneumatic Institution, carried out what A. J. Clark has called "a model of pharmacological research complete in all its stages" on nitrous oxide. Others who come easily to mind are Claude Bernard, H. H. and K. H. Meyer, Overton, John Snow, Warburg; the list is long and distinguished. And, more recently, Cullen, Dripps, Faulconer, Haugen, Dennis Jackson, Lundy, Papper, Waters, to name a few, and after them a still younger and impressive group. But the Laboratory here was *de novo* an anesthesia creation not only intellectually but physically, with the fine quarters (now crowded) we have occupied for a decade, paid for from private patients' fees.

It is evident that we and others have learned a great deal about the metabolic—and toxic—effects of anesthesia, about the "physiological trespass" of anesthesia, in John Gillies's memorable phrase. But anybody who has followed the literature knows that we are scarcely one whit further advanced in understanding the nature of the anesthesia process than Morton was when he carried out the first public demonstration of clinical anesthesia. With investigators like Linus Pauling turning their attention to this basic problem, it is likely that the next 25 years will have more to show than we now have. If, as I believe, the irritability of a cell—the response of a living cell to a stimulus—is the basic characteristic of life, then here is the central problem not only of anesthesia but of all biology, a problem deserving the attention of the ablest scientists.

For 15 years a principal interest has been to study the pain process as prototype for subjective responses in general. An understanding of the factors involved in the production and the relief of pain is essential to an understanding of anesthesia, for just as one cannot understand sleep without understanding wakefulness, I believe, one might gain insight into the anesthesia process by study of the problems of pain and its relief. (It is accurate to add that this view has not been universally held by my anesthesia colleagues over the country, but at least it has, after some stormy early years, been adopted by the pharmacologists.) As a long-time follower of Lord Kelvin's view that science has not been approached until one can place meaningful numbers in front of his observations, I have been interested in measuring subjective responses and, in particular, the quantitative effects of drugs on subjective responses. It was a puzzle years ago, and still is, why able pharmacologists would all agree that their proper field included study of the effects of drugs on the liver, or the kidneys, or the heart, but not on the mind. The situation is now changed. I would like to think that our Laboratory had something to do with this change. Here and there one can now find professors of neuropharmacology and committees on neuropharmacology who admit they are interested really in psychopharmacology (but they have been too shy so to label the matter). Progress continues, and it is now proper for pharmacologists to study the "psychotomimetic" agents. A principal interest of our Laboratory is in devising a quantitative approach to study of these fascinating but confusing agents. There is great and obvious relevance of such matters to anesthesia. Particularized as the Anesthesia Laboratory is, it does not stand apart from the fundamental biological sciences.

I like the symbolism one can draw from the fact that the first office of the Anesthesia Laboratory was in a windowless 7-by-9-foot room on an air-shaft in the attic of the Bulfinch Building, only a few yards from the room where Morton, after experimentation on one dog and several fish, made the first public demonstration of clinical anesthesia on an October morning in 1846. There are many places for laboratories, but for me the one in proximity to the sick man takes first place. This deep interest came to a public fruition in the recent series of Lowell Lectures—incidentally, the first event in the celebration of the Hospital's 150th Anniversary—on "Disease and the Advancement of Basic Science", wherein the view was set forth that for some kinds of advance in basic or conceptual science (its name is not important) one must go to the sick man. The fact that twenty of the busiest and most distinguished scientists in America enthusiastically participated in this venture of the Anesthesia Laboratory is proof that many thoughtful men share this view. The anesthetist has an extraordinary opportunity for significant studies in man; it is a pity that he so seldom utilizes it.

* * *

I gladly acknowledge that it was Dr. Edward D. Churchill, John Homans Professor of Surgery at Harvard University, who first had the vision of a scholarly approach to anesthesia in this Hospital. Whether or not his vision has been realized is beside the immediate point. His was the spark which ignited the tinder; how dully or brightly we have burned is for other men to judge in other years. Dr. Means, as well as Dr. Churchill, had a great deal to do with interesting me in respiration and this led quite naturally to my interest in anesthesia.

I am grateful for the wholehearted support of the Hospital's Trustees over the full 25 years. How is it possible that this group of men could have understood our needs so well, gathered as they were, and are, from the Church, the law, banking, and commerce, from men and women of affairs, with a distinguished scientist added only in recent years? I suspect that the answer lies in their perceptiveness and understanding of the Hospital and its needs as a whole, not in just this one Laboratory where, nonetheless, the need for their support has been crucial.

However brave the vision may have been, it could not have led to concrete events without money, and lots of it, supplied over many years by the Medical Research and Development Board of the

United States Army, the Air Force, the Public Health Service's National Institutes of Health, and the National Research Council through its Committee on Drug Addiction and Narcotics.

I am very proud to have in my study a photograph signed "From a long-time friend". Mr. Edward Mallinckrodt has been just that for many years, not only in the sums he has given our Laboratory each year, but in the warmth of his continuing interest in all things to do with anesthesia. It is quite possible that his unrestricted funds, freely given, have made the difference between success and failure of the Laboratory.

I cannot close these acknowledgments without mention of Charlotte Ford. Mrs. Ford over many years has kept me, by virtue of her unique knowledge of the history of anesthesia, from many a mistake. I am grateful to her.

It is impossible for me to express my debt to the extraordinary colleagues who have given life to this Laboratory over its 25 years. The record of their activities is here, in papers published; it needs no further comment from me. A few remarks may be added, however, for I should like to emphasize the inseparability of this Laboratory from our Clinical Department. The existence of the Laboratory has attracted better residents than we otherwise could have had. The best residents have brought problems to the Laboratory for solution. The result of this symbiosis is that, of the 172 residents and fellows trained clinically, 90 continue in academic institutions. Of these, 22 hold professorships, or the equivalent, in anesthesia in medical schools in Europe and in America. In addition, a source of strength to the Laboratory has been the considerable group who have chosen to work here, even though they never had any intention of becoming anesthetists. Of them, 14 now hold university professorships in fields other than anesthesia: 2 in anatomy, 1 in pharmacology, 1 in physiology, 2 in neurophysiology, 1 in biophysics, 1 in chemistry, 2 in medicine, and 4 in surgery.

Henry K. Beecher, M. D.,
Chief of the Anesthesia Service

* * *

JESSIE W. HARDING

(1880—1961)

The tall, regal figure of Mrs. Harding will no longer be seen in our corridors, but the remembrance of her vital personality will always be treasured here in the Massachusetts General Hospital.

Mrs. Harding was a volunteer at the Hospital from 1943 until the time of her last illness, early this year. Her record of service is an outstanding one. She was here on the job from nine to one, three days a week, fifty-two weeks in the year.

It was always a joy to meet her. She hailed some of us as "Sweetie" and others with a "Hi, there!" She very frequently had something amusing and interesting and pertinent to say. Fortunate were we who heard her funny stories—some of them a bit salty if she knew you very well, but never rude, and almost always with herself as the ridiculous butt of the joke.

I recall a question asked by one of the young Ward Helpers when Mrs. Harding was a volunteer in the Errand Service (formerly War Service). After Mrs. Harding had left the office for home one day, the young girl asked me, "Is it true that Mrs. Harding is the richest woman in Boston?" There was no time or reason for an answer at that time. But the answer today is, "Yes, in a very special way. And we, too, at the Massachusetts General will always be the richer for having had her with us."

She was never too busy to help solve the perplexities and problems of the many. Often, a lonely and bewildered person, lost in the maze of our corridors, has heard her ask," Where do you want to go?" or "What can I do for you?" Her questions were always to the point and her directions or explanations always clear and concise.

When more help was needed in the X-ray Department on White 2, Mrs. Harding was one of the first to suggest that the Volunteers meet this need and solve the difficulties. Their duties were manifold, and everyone in the Department will always remember their help.

Mrs. Harding gave unselfishly of her time and effort and was always ready to give kind and understanding comfort to anyone who might be troubled or in pain. She was loved and respected by all who knew her, and she will be greatly missed.

M. W. A.

The Board of Trustees, at their meetings on March 31, and April 14 and 28, voted:

That Dr. A. Earl Walker, Professor of Neurological Surgery at Johns Hopkins, be invited to be Chief of Service Pro Tempore during the first week of May 1961, and that he also be asked to give a Richardson Lecture while here.

To appoint:

Dr. Arthur K. Asbury as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1;

Dr. Edward P. Baker, Jr. as Junior Resident on the Neurosurgical Service, assigned to the Boston V.A. Hospital, beginning July 1;

Dr. Bob Bullwinkel as Assistant Resident in Anesthesia, beginning May 15;

Dr. Sheldon Cooperman as Clinical Fellow and Acting Resident in Pathology for one year, beginning July 1;

Dr. T. Corwin Fleming as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Jónas Hallgrímsson as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Peter R. Huttenlocher as Exchange Assistant Resident on the Children's Service, for the period April 11 through May 21;

Dr. Kewal K. Jain as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Herman M. Kalckar as a permanent ex officio member of the Committee on Research;

Dr. David M. Klein as Clinical Assistant in Neurosurgery, for the period May 1 through December 31, this appointment to run concurrently with his appointment as Resident in Neurosurgery;

Dr. Robert W. Lukens, Jr. as Clinical Fellow in Orthopedic Surgery, for the period May 15 through June 30;

Dr. William T. McCoy as Clinical Fellow in Radiology, retroactive to January 1, to act as Resident in Radiology;

Dr. Alexander M. McPhedran as Resident on the Neurology Service for one year, beginning July 1;

Dr. Denis R. Miller as Exchange Assistant Resident on the Children's Service, for the period May 22 through June 30;

Dr. Carl V. Moore as James Howard Means Visiting Physician, for the week of April 17;

Dr. Robert G. Ojemann as Assistant in Neurosurgery, beginning May 1;

Dr. Beale H. Ong as Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Arthur L. Prensky as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Edwin W. Salzman as Assistant in Surgery, effective July 1, and that he be granted a Dalton Scholarship for the period July 1, 1961 through June 30, 1962;

Dr. William H. Tingey, Jr. as Assistant Dental Surgeon at McLean Hospital;

Dr. Herman Turndorf as Assistant in Anesthesia, beginning September 1;

Dr. Karl H. Wegner as Clinical Fellow and Acting Resident in Pathology for one year, beginning July 1.

At their meetings on March 15, during April, and on May 3, the General Executive Committee voted:

To promote:

Dr. Khalil Abi-Torbey to the position of Resident in Urology for one year, beginning July 1;

Dr. Alphonse M. Prus to the position of Chief Resident in Anesthesia, beginning April 1.

To extend the appointments of:

Dr. Dorothy E. Ford as Clinical Fellow in Physical Medicine, from July 1 through August 31;

Dr. Hans Hacker as Clinical and Research Fellow in Neurosurgery, from August 1 through December 31.

To reappoint:

Dr. Barry G. W. Arnason, with a change of title to Clinical Fellow in Neurology, to act as Resident in Neurology, for one year, beginning July 1;

Dr. Monroe Cole, with a change of title to Clinical and Research Fellow in Neurology, for one year, beginning July 1;

Dr. John Hedley-Whyte as Clinical Fellow in Anesthesia for one year, beginning July 1;

Dr. John B. Isom, with a change of title to Clinical and Research Fellow in Neuropathology, for one year, beginning July 1;

Dr. Richard T. Johnson, with a change of title to Clinical Fellow in Neurology, to act as Resident in Neurology, for one year, beginning July 1;

Dr. Earl F. Jordan as Assistant Resident in Neurosurgery, but assigned to Neuroradiology, for the period July 1 through December 31;

Dr. Guy M. McKhann, with a change of title to Clinical Fellow in Neurology, to act as Resident in Pediatric Neurology, for one year, beginning July 1;

Albert F. Parlow, Ph.D. as Research Fellow in Biology, in the Department of Surgery, for one year, beginning March 1;

Dr. Ernest H. Picard, with a change of title to Clinical and Research Fellow in Neuropathology, for one year, beginning July 1;

Dr. Vincent W. Steward, with a change of title to Clinical Fellow in Neuropathology, for one year, beginning July 1;

Dr. William L. Strickler as Assistant Resident in Urology for one year, beginning July 1;

Dr. R. Lewis Wright as Assistant Resident in Neurosurgery, assigned to the private service, for the period April 1 through December 31;

Dr. Gilbert F. Young, with a change of title to Clinical Fellow in Neurology, to act as

Resident in Pediatric Neurology, for one year, beginning July 1.

To appoint:

Dr. Yoshitaka Shimizu as Research Fellow in Medicine for one year, beginning October 1;

Dr. Nicholas T. Zervas as Senior Resident in Neurosurgery, assigned to the Boston V.A. Hospital, for the period May 1 through December 31.

This interesting address was delivered a short time ago, at a meeting of the Advisory Committee to the Volunteer Department of the Hospital, by Mrs. C. Chauncey Gray of the Vincent Club.

THE VINCENT CLUB—ITS AIMS AND PURPOSES

The Vincent Memorial Hospital is considerably your junior, it being a mere seventy years ago that Phillips Brooks consecrated the ten-bed Vincent Memorial Hospital around the corner on Chambers Street. The then Board of Managers was called the Working Committee, and, incidentally, one of its members was Mrs. John Lowell, whose daughter, Mrs. Augustus Thorndike, is a member of the Vincent Hospital's Board of Managers today. The purpose of the Working Committee was the same as that of the present Board of Managers: the care and comfort of the patients. In the past, the ladies of the Working Committee gave most generously of their time in visiting patients, and in gifts to the Hospital. There were many other contributors in those early days. Miss Caroline Staples, one of the Vincent Hospital's earliest benefactors, gave us two and a half tons of coal in February of 1892; the "Young Ladies in Dedham" sent four flannel nightingales and six wash cloths; the Young Men's Christian Union contributed fifty-six tickets for streetcar rides and twenty-six harbor trip tickets for invalids. The list of gifts is long. Those from its most important contributor, the Vincent Club, were listed separately.

The Vincent Memorial Hospital's first annual report stated that the Vincent Club had been formed in March of 1892, with the aim of helping the Hospital. The instigator of the Vincent Club and for many years a member of the Hospital's Working Committee was also the young woman "with whom the idea first originated of founding and naming this Hospital in memory of the beloved actress, Mary Ann Vincent of the Boston Museum Stock Company; by her untiring efforts she raised much of the first money subscribed to it and was a faithful friend to the Hospital for many years". These phrases are engraved on the brass plaque directly opposite the door to the Vincent Club Room on the first floor of the present Vincent Memorial Hospital. The lady, Miss Lucy Derby, later Mrs. S. R. Fuller, was a woman with many friends and interests. She was active as a member of the Board of the Trinity Church Dispensary, from which this Hospital is an outgrowth, was an intimate friend of Phillips Brooks, and also had many friends in the theatrical world, including Edwin Booth and E. A. Sothern, whose son, E. H. Sothern, was her godchild.

In the winter of 1892, she brought together a small group of young girls to discuss the possibility of a club, its purpose to be the support of the Vincent Memorial Hospital. By March 25 of that same year, they were ready for their first formal meeting. A constitution was accepted, officers were elected, and the sixty-three charter members of the Vincent Club were ready to roll. Included in the second annual report of the Hospital, in 1893, is a report from the Vincent Club which says, in part: "The object of this Club shall be to give two or more entertainments annually to raise funds in aid of the Vincent Hospital." . . .

Now, I want to make one thing quite clear. The Vincent Club is not quite the usual hospital auxiliary. The first indication of this appears in the Hospital's fourth annual report in 1895, when the Club was barely three years old: "Some confusion having arisen in the public mind regarding the connection of The Vincent Club and the Hospital, the Club wishes to state that it is an entirely independent body, organized solely to benefit the Hospital, but unconnected with its management and working as a free agent for a good cause, without being responsible to the chief organization in any way." These remarks are softened by the final paragraph, when the Club says: ". . . It wishes to acknowledge the courtesy of the Vincent Memorial Hospital managers in kindly printing this brief report and the following lists." These were the lists of officers and members. Several years later, a member of the Board of Managers of the Vincent Memorial Hospital became President of the Vincent Club, and from then on the President of the Club has remained an ex officio member of the Hospital's Board of Managers. The officers and roster were printed in the Hospital's annual report until 1918. That year the Club's report was extremely brief: "In December, 1917, the Treasurer sent $500 extra to the managers for immediate expenses." . . .

The Club now has a membership of over 1700, 300 of whom live outside Greater Boston—by which I include Europe, Asia, and Africa. There is another group of about 500 who are still in college or graduate school. Others of our members are quite elderly; two of the original members died during the past year. To all of the inactive members we are most grateful, in that they maintain their membership—the $10 of their $15 going directly to the Hospital, while the remaining $5 is used for the general operating expenses and maintenance of the Club's headquarters.

To paraphrase Lerner and Loewe: What do the active folk do? First, they may become advisors to the 100 provisional members who are required to secure a certain number of advertisements for the Vincent Show program. Last year the program contained 440 pages, with over 1200 advertisements. These new members are not experienced saleswomen, and the mechanics of space, types, line cuts, and halftones need clarification. An additional requirement is that each provisional member must visit the Vincent Memorial Hospital, it having been arranged that someone will show her about. Still other members are needed to follow up and procure the advertising contracts that some of the provisionals are unable to complete during their brief time away from college. Incidentally, this provisional group procured nearly $15,000 of last year's total of $40,012 in advertising contracts. The advertiser's copy must be collected and sometimes even prepared for the printer. Then there is the job of proof reading, editing, and preparing the dummy for our telephone book. Typists are needed to type indexes, both alphabetical and classified. And, finally, there must be girls who sign up to sell these programs at the Show, and, later, others to deliver a program, with cuts, if any, to each of the 1200 or so advertisers. . . .

Tryouts are approximately five weeks before the opening curtain. It is then that the Third Vice President, in charge of public relations, gets into full speed, although many dates for feature articles, rotogravure, and society spreads, together with magazine articles, have already been lined up. Radio and TV interviews also are arranged.

The costume chairman and her committee take over the back room, for measuring, sewing, and pinning. The Scenery Committee designs and paints scenery, while the Property Committee scours the countryside for props. Its plea "Where can I find . . .?" is almost always answered successfully—one advantage of a large membership. . . .

In 1960 the Club equalled its previous year's gift of $45,000 to the Vincent Memorial Hospital. Since 1893 it has contributed $1,156,630, not including many gifts of equipment and supplies.

While continuing to function as a separate entity, one of the pleasantest occasions on the Club's calendar is a cooperative venture with the Hospital's staff. The House Committee is galvanized into action in early September, and fall cleaning is rushed through in order to be ready for the Club's annual cocktail party for the fifty doctors attending the Harvard Medical School's Postgraduate Course in Gynecology, given at the Vincent Memorial Hospital. The members of the Club's Board of Managers serve as both caterers and hostesses, and naturally are only too delighted to show off their Club house to these doctors who come from all over the world and who are given this opportunity to meet with their faculty, headed by Dr. Francis M. Ingersoll, and Dr. Howard Ulfelder, the Chief of Staff.

A portrait of Dr. James C. White, painted by Arthur Polonsky, was presented to the Hospital on Saturday afternoon, May 6. Drs. Jost J. Michelsen, H. Thomas Ballantine, Jr., and William H. Sweet had arranged for a simple unveiling ceremony in the Ether Dome in the name of a large group of Dr. White's former neurosurgical residents and fellows, associates on the Staff, and Harvard Medical School classmates, who had contributed toward the portrait.

Representing the donors were a number of MGH alumni and former fellows from out of town, including Drs. William B. Scoville of Hartford, Connecticut; Raymond M. P. Donaghy of Burlington, Vermont; Jack L. Ulmer of Richmond, Virginia; William J. James of Ventura, California; Howard J. Bagnall of Ottawa, Canada; John D. McQueen of Baltimore, Maryland; Alfred J. Luessenhop of Washington, D.C.; Richard L. Rovit of Montreal, Canada; and Edgar L. Gasteiger, Jr. of Rochester, N. Y. Among the guests were also members of the Society of Neurological Surgeons, who had just concluded their annual meeting in Boston with Dr. White as host.

Dr. Sweet introduced the speakers. Dr. Stanley Cobb gave an account of Dr. White's contributions to the Hospital and to the field of neurosurgery. Mr. Polonsky spoke of his rewarding experience in painting the portrait. After the unveiling, Dr. White mentioned with appreciation the pleasant hours of conversation with the artist while the painting progressed, and also the deep satisfaction he has derived from his 35 years on the Surgical and Neurosurgical Services here. Finally, Dr. Churchill, as Chairman of the General Executive Committee, accepted the portrait for the Hospital.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it.

The following new titles have been received:

Anesthesia

Levy, M. L., Palazzi, H. M., Nardi, G. L., and Bunker, J. P.
Hepatic blood flow variations during surgical anesthesia in man measured by radioactive colloid.
Surg. Gynec. & Obst. 112:289.

Behavioral Sciences

Farnsworth, D. L.
Mental health education: Implications for teachers.
Teachers College Record 62:263.

Laboratory Science

Jeanloz, R. W.
3, 6-di-*O*-methyl-D-glucosamine hydrochloride (2-amino-2-deoxy-3, 6-di-*O*-methyl-D-glucose hydrochloride).
J. Organ. Chem. 26:905.

Schmid, K., and Bürgi, W.
Preparation and properties of the human plasma Ba-α_2-glycoproteins.
Biochim. et biophys. acta 47:440.

Stearns, D. K., Naves, R. G., and Jeanloz, R. W.
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General Medicine

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General Surgery

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Physiology

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Radiology

Dreyfuss, J. R.
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BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

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Hall, V. E. (Editor)
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Harris, R. S., and Ingle, D. J. (Editors)
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Lydenberg, H. M., and Archer, J.
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Marble, H. C.
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Meister, A. (Editor)
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Ramey, E. R. (Editor)
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Simon, H. J.
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Brief bits:

Dr. Benjamin Castleman was the guest speaker at the 50th Jubilee Annual Meeting of the Japan Pathology Society, held in Tokyo during the first week of April. He also visited and lectured at the Nihon, Keio, and Jikei Universities, all in Tokyo, and conducted a Seminar before the Japanese American Society of Pathology. Outside Tokyo, he visited and lectured at the Osaka, Kyoto, and Kyushu Universities. During the two and a half weeks' stay in Japan, Dr. and Mrs. Castleman were royally entertained and given the full VIP treatment. Before returning to Boston, Dr. Castleman attended the meeting of the International Academy of Pathology, held in Chicago, where he was inducted as President.

Dr. Edwin F. Cave delivered four lectures during the period of April 20 to 24—one at the Postgraduate Course in Fractures and Other Trauma at the American College of Surgeons meeting in Chicago, two before the Texas Medical Association and Texas Orthopedic Association in Galveston, and a fourth before the Houston Orthopedic Club in Houston. His subjects were "Management of nonunion of long bones", "Injuries to the ankle", and "Knee derangements in the middle aged or older adult".

Dr. Earle M. Chapman gave a lecture on "The treatment of hyperthyroidism" at the Albany College of Medicine on April 6.

Dr. Reed Harwood lectured on "Diabetes" at the Centro Medico in Guatemala City on April 26.

From April 8 until April 15, Dr. William V. McDermott, Jr. participated in the newly established Visiting Professors Program at St. Joseph Hospital in Lancaster, Pennsylvania, and at Hamot Hospital in Erie, Pennsylvania. He spent several days at each hospital. On April 22, Dr. McDermott was guest speaker at a Senior Seminar of the University of Pennsylvania. His subject was "Cirrhosis and hepatic insufficiency".

Dr. J. Howard Means served as Visiting Professor, April 3 through 7, at the University of Illinois College of Medicine, in Chicago. On the way back he spent a day at the University of Rochester, Rochester, N. Y., visiting with Dr. Robert L. Berg and lecturing to the first year medical class on "Social and economic problems of medicine". Dr. Means took off again on April 13 for New Haven, where he gave the first Sigerist Lecture at the Yale University School of Medicine. His subject was "Urgent tasks confronting medicine". This lecture was sponsored by The Yale Medical Democrats—a student society which greatly admires the late Dr. Henry E. Sigerist.

Dr. Laurence L. Robbins was guest speaker at the 94th Annual Session of the Texas Medical Association, held in Galveston on April 24 and 25.

Dr. Byron H. Waksman delivered a lecture at the Annual Meeting of the American College of Physicians, held in Miami, Florida, on May 9. His subject was "Autoimmune mechanisms in disease". From June 25 to 28, Dr. Waksman will give a course at the University of Vermont on "Horizons for research in neuropathology", sponsored by the Pathology Study Section of USPHS. He will also speak on the subject "Immunologically induced demyelinating disease".

* * *

New addresses:

Dr. Henry N. Claman (r.p. 1958), University of Colorado Medical Center, Denver, Colo.

Dr. Edward B. Dewey (*E.S.* 1921), Box 2029, Pebble Beach, Calif.

Dr. Mark Exley (r.s. *U.* 1938), 206 Wainwright Bldg., Norfolk 10, Va.

Dr. Clark W. Heath (*W.M.* 1928), Health Service, Tufts University, Medford 55, Mass.

Dr. Robert B. Higgins (a.r.s. *U.* 1951), University of Oregon Medical School, Portland, Oreg.; Veterans Hospital, Portland, Oreg.

Dr. T. Wiley Hodges (*Or.* 1941), 9323 Garland Rd., Dallas 18, Tex.

Dr. Myron A. Hofer, II (*M.* 1959), New York Hospital, 525 E. 68th St., New York, N. Y.

Dr. Gerald F. Houser (past Assistant Director), 26 Overlook Circle, New Rochelle, N. Y.

Dr. Storer P. Humphreys (*Or.* 1936), 266 Beacon St., Boston, Mass.

Dr. Richard T. N. Hunt (*Path.* 1957), 555B Forney Loop, Fort Belvoir, Va.

Dr. Louis G. Johnson (*Path.* 1940 and *E.M.* 1942), Royal Victoria Hospital, 687 Pine Ave., West, Montreal, Canada

Dr. Edward Karian (a.r.p. *D.* 1955), 270 Commonwealth Ave., Boston, Mass.

Capt. William E. Karnes, MC, USAF (r.p. *N.* 1958), Box 25, USAF Hospital, Travis Air Force Base, Calif.

Dr. Herbert E. Kaufman (*M.* 1957), Massachusetts Eye and Ear Infirmary, Boston, Mass.

Dr. John W. Keller (a. *M.*), 266 Beacon St., Boston, Mass.

Dr. Reginald D. Kernan (*Path.* 1945), 3 rue Edouard Nortier, Neuilly-sur-Seine, France

Dr. William J. Kerr (*W.M.* 1916), Box 338, Blue Lake, Humboldt County, Calif.

Dr. William F. Ketchum (*C.M.* 1948), 11 Main St., Cooperstown, N. Y.

Col. Henry A. Kind, MC, USA (*C.M.* 1935), U.S.A. Dispensary, Fort Hamilton, Brooklyn 9, N. Y.

Dr. Hanna Klaus (a.r.p. *Path.* 1953), Medical Mission Sisters, 8400 Pine Rd., Philadelphia 11, Pa.

Dr. Leon R. Lezer (past Assistant Director), Crotched Mountain Foundation, Greenfield, N. H. (after Aug. 1)

Dr. John L. McClung (r.p. *An.* 1952), 5522 Tolman Terrace, Madison 5, Wis.

Dr. Pembroke N. MacDermot (*C.M.* 1930), 580 Grosvenor Ave., Westmount, Montreal, Canada

Dr. Hugh Alexander MacMillan (a.r.p. *Path.* 1950), 205 Kent St., Charlottetown, Prince Edward Island, Canada

Dr. Elizabeth Sprague Manson (*C.M.* 1953), 1030 Sir Francis Drake Blvd., Kentfield, Calif.

Dr. John W. Maroney (r.p. *C.M.* 1932), 1207 Delaware Ave., Wilmington, Del.

Dr. William K. Massie (*Path.* 1938), 304 S. Limestone St., Lexington, Ky.

Dr. Charles N. Meader (*E.M.* 1912), 755 Josephine St., Denver, Colo.

Dr. Alexander J. Michie (*Path.* 1943), University of Pennsylvania School of Medicine, Philadelphia, Pa.

Dr. William L. Morgan, Jr. (*M.* 1953), Henry Ford Hospital, Detroit, Mich.

Dr. Harvey F. Newhall (*E.S.* 1906), Lynnfield, Mass.

Dr. Jesse T. Nicholson (r.s. *Or.* 1933), 419 S. 19th St., Philadelphia 46, Pa.

Dr. Richard G. Nilges (r.s. *N.S.* 1951), 700 N. Michigan Ave., Chicago, Ill.

Dr. Harrison O'Connor (a.r.s. *Or.* 1953), 591 Morton St., Dorchester, Mass.

Dr. George F. Odland (*M.* 1947), 1523 Medical and Dental Bldg., Seattle 1, Wash.; University of Washington, Seattle, Wash.

Dr. Arthur F. O'Keeffe (a.r.s. 1951), 648 Canton Ave., Milton, Mass.

Dr. John R. Paul, Jr. (*C.M.* 1943), Medical College Hospital, 55 Doughty St., Charleston, S. C.

Dr. Homer D. Peabody, Jr. (*M.* 1945), 2001 4th Ave., San Diego 1, Calif.

Dr. George M. Perrin (*C.M.* 1953), Massachusetts General Hospital, Boston 14, Mass.

Dr. John W. Perry (r.p. *Psychiat.* (*McL.*) 1947), 2206 Steiner St., San Francisco 15, Calif.

Dr. James A. Petersen (r.p. *R.* 1956), 16 Clarke St., Lexington 73, Mass.

Dr. Gardiner Pier (*W.S.* 1943), Box 68, Truckee, Calif.

Dr. James A. Pittman, Jr. (*M.* 1953), University of Alabama Medical Center, Birmingham, Ala.

Dr. Philip J. Porter (*C.M.* 1957), 3820 Weyburn Drive, Fort Worth, Tex.

Dr. Thomas J. Quinn, Jr. (r.p. *An.* 1950), 2217 Webster St., San Francisco 15, Calif.

Dr. Luney V. Ragsdale (past Assistant Director), Union Hospital, Fall River, Mass.

Major Russell E. Randall, Jr. (a.r.p. 1956), U.S. Air Force Hospital, APO 406, c/o Postmaster, New York, N. Y.

Dr. Jane S. Rasmussen (*C.M.* 1954), 50 Rockledge Rd., Hartsdale, N. Y.

Dr. Elizabeth Aub Reid (*M.* 1952), 51 Brattle St., Cambridge 38, Mass.

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Dr. Dexter N. Richards, Jr. (*W.S.* 1943), 3031 Telegraph Ave., Berkeley, Calif.

Dr. Richard S. Rodgers (r.s. *U.* 1947), 825 Nicollet Ave., Minneapolis 2, Minn.

Dr. Albert L. Rosenthal (a.r.p. *D.* 1956), 724 W. State St., Trenton 8, N. J.

Dr. James L. d'A. Roth (*M.* 1945), 419 S. 19th St., Philadelphia 46, Pa.

Dr. J. Max Rukes (*M.* 1950), 3905 Sacramento St., San Francisco, Calif.

Dr. Henry N. Russell, Jr. (*C.M.* 1939), 1221 Lincoln St., Lincoln Park, Mich.

Dr. Rondall W. Rutherford (*C.M.* 1933), 21 Herrick Rd., Newton Centre 59, Mass.

Dr. Kenneth J. Ryan (*M.* 1953), University Hospitals, Cleveland 6, Ohio

Dr. Kevin G. Ryan (*M.* 1960), 11 Chiswick Rd., Brighton, Mass.

Dr. Farrokh Saidi (a.r.s. 1960), Frenchay Hospital, Bristol, England

Dr. Juan J. Salamanca (*An.* 1943), Calle 25A, No. 13A-35, Bogotá, Colombia

Dr. Frederick Sanborn (*N.S.* 1939), Barnstable County Hospital, Pocasset, Mass.

Dr. Gordon A. Saunders (*E.M.* 1937), 94 Pleasant St., Arlington, Mass.

Dr. Worthington G. Schenk, Jr. (*E.S.* 1946), 164 Doncaster Rd., Kenmore 17, N. Y.

Dr. Gerold L. Schiebler (*C.M.* 1955), University of Florida College of Medicine, Gainesville, Fla.

Dr. Truman G. Schnabel, Jr. (a.r.p. 1947), Philadelphia General Hospital, Philadelphia, Pa.

Dr. Adolph G. C. Schnack (*E.M.* 1917), Box 336, Corona, Calif.

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Dr. Frederick G. Shaffer (*S.* 1952), 1343 Locust Ave., Fairmont, W. Va.

Dr. James G. Shannon (*Or.* 1931), 1414 Drummond St., Montreal 25, Canada

Dr. James M. Shannon (*S.* 1948), 79 Highland Ave., Salem, Mass.

Dr. Edward B. Shaw (r.p. *C.M.* 1924), University of California School of Medicine, San Francisco 22, Calif.

Dr. William R. Shelton (a. *Psychiat.*), 575 Mount Auburn St., Cambridge, Mass.

Lewis J. Sherman, Ph.D. (assoc. psychol. (*McL.*)), McLean Hospital, Belmont, Mass.

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Hospitals Medical Center, 750 Harrison Ave., Boston, Mass.

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Dr. Marion L. Smith (a.r.p. *An.* 1951), Mid State Medical Center, Nashville 3, Tenn.

Dr. Richard H. Smith (a.r.p. *Psychiat.* 1958), 104 Chestnut St., Boston 8, Mass.

Dr. Richard M. Smith (*W.M.* 1909), 401 Beacon St., Boston 15, Mass.

Dr. Robert P. Smith (*M.* 1943), Vermont Rehabilitation Center, Burlington, Vt.

Dr. W. Pierce Smith (r.p. 1956), Henry Ford Hospital, Detroit 2, Mich.

Dr. Monica H. Snyder (r.p. *An.* 1935), 10883 Whipple St., North Hollywood, Calif.

Dr. William H. Snyder, Jr. (*W.S.* 1933), 1400 N. Vermont Ave., Los Angeles 27, Calif.

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Dr. James Solomon (r.p. *N.* 1944), 8820 Wilshire Blvd., Beverly Hills, Calif.

Dr. John L. Sosman (a.r.p. *R.* 1952), Robert Breck Brigham Hospital, Boston 20, Mass.

Dr. J. Robert Spencer (*E.M.* 1943), 1829 High St., Denver, Colo.

Dr. Lucy F. Squire (a.r.p. *R.* 1944), 1 Gracie Terrace, New York 28, N. Y.

Dr. Bernard G. Stall, III (*M.* 1947), University of Tennessee Memorial Research Center and Hospital, Alcoa Highway, Knoxville, Tenn.

Dr. John D. States (a.r.s. *Or.* 1955), 15 Prince St., Rochester 7, N. Y.

Dr. Byron W. Steele, Jr. (a.r.s. 1952), Utica Square Medical Center, Tulsa, Okla.

Dr. Donald B. Steenburg (*E.S.* 1915), 1107 8th St., Aurora, Nebr.

Dr. John B. Stetson (a.r.p. *An.* 1953), Children's Medical Center, Boston 15, Mass.

Dr. Richard P. Stetson (*W.M.* 1928), Veterans Administration Area Medical Office, 30 Cornhill, Boston 8, Mass.

Dr. Harold W. Stevens (*C.M.* 1914 and *E.M.* 1916), 369 Ferry Rd., Saco, Maine

Dr. Horace P. Stevens (W.S. 1907), Boothbay Harbor, Maine

Dr. Allan J. Stinchfield (a.r.s. *Or.* 1949), 16 E. Chestnut St., Augusta, Maine

Dr. James K. Stoddard (*E.M.* 1917), R.D. 4, Easton, Md.

Dr. Joseph M. Stolman (*Dn.* 1956), 18 Asylum St., Hartford 3, Conn.

Dr. Alan A. Stone (r.p. *Psychiat.* (*McL.*) 1958), Fitzsimons General Hospital, Denver 30, Colo.

Dr. Hugh A. Stout (*Path.* 1938), 1200 N. Walker St., Oklahoma City 3, Okla.

Dr. John O. Strom (r.p. *N.P.* 1955), 150 Lloyd Ave., Providence, R. I.

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Dr. Morris Swartz (a. *Otolar.*), 18 Broad St., Lynn, Mass.

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Dr. Chung-Chang T'an (*Or.* 1943), Fresno Community Hospital, Fresno, Calif.

Dr. John B. Taylor (*Dn.* 1957), 571 High St., Westwood, Mass.

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Dr. John B. Thomas (*M.* 1953), 124 Jefferson St., Hartford, Conn.

Dr. Wilbur A. Thomas (a.r.p. *Path.* 1951), Albany Medical College, Albany, N. Y.

Dr. Samuel B. Thompson (a.r.s. *Or.* 1947), 5520 W. Markham St., Little Rock, Ark.

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Dr. P. Macdonald Tow (a.r.p. *Psychiat.* 1954), 111 Balaam St., London E. 13, England

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Dr. Victor C. Vaughan, III (*C.M.* 1943), Medical College of Georgia, Augusta, Ga.

Dr. Paul M. Veazey (*C.M.* 1956), 20119 Van Aken Blvd., Cleveland 22, Ohio

Dr. A. Burgess Vial (*E.S.* 1943), University Hospital, Ann Arbor, Mich.

Dr. Dorothy B. Villee (*C.M.* 1956), 43 Cottage Farm Rd., Brookline, Mass.

Dr. John T. Walke (a.r.p. *C.M.* 1948), Children's Clinic, 303 Washington Ave., S.W., Roanoke, Va.

Dr. Eugene Walker (past Assistant Director), The Rubicon, Fairyland, Pembroke, Bermuda, British West Indies

Dr. Edward P. Wallace (a.r.p. *C.M.* 1948), 71 Parker Ave., Meriden, Conn.

Dr. John H. Warner (*W.M.* 1937), Student Health Service, Oberlin College, 200 W. Lorain St., Oberlin, Ohio

Dr. Charles Fletcher Warren (*W.S.* 1915), 490 N. York Rd., Hatboro, Pa.

Dr. J. Laxton Watson (r.s. *U.* 1930), 2571 S.W. 37th Ave., Miami 33, Fla.

Dr. James W. Watson (*M.* 1944), 307 E. 44th St., New York 17, N. Y.

Dr. Richard H. Watson (*C.M.* 1952), 8 Porter St., Melrose, Mass.

Dr. Arthur B. Watts (*E.S.* 1943), 103 E. Holly St., Bellingham, Wash.

Dr. James W. Watts, II (*N.* 1928 and *N.S.* 1929), 1911 R St., N.W., Washington 9, D.C.

Dr. Barbara E. Waud (a.r.p. *An.* 1959), 1490 Banbury Rd., Oxford, England

Dr. Earl M. Wedrow (r.p. *Psychiat.* 1953), 479 Beacon St., Boston, Mass.

Dr. Edgar W. Weigel (*Or.* 1928), 523 Jersey Ave., Elizabeth, N. J.

Dr. Marvin S. Weinfeld (a.r.s. *Or.* 1961), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. David R. Weir (r.p. *Path.* 1938), Highland View Hospital, 3901 Ireland Drive, Cleveland 22, Ohio

Dr. Louis L. Weiss (a.r.p. *An.* 1956), 1225 N. Madison Ave., Anderson, Ind.

Dr. Henry H. Wescott (*Or.* 1924), Irvington, Va.

Dr. Francis J. West (a.s. *Oph.*), Peabody Chambers, 195 Ashmont St., Dorchester, Mass.

Dr. James T. Wheeler (*M.* 1956), Medical Arts Bldg., Dallas 1, Tex.

Dr. Warren E. Wheeler (*C.M.* 1934), Children's Hospital, Columbus 5, Ohio

Dr. Frederick E. Whiskin (r.p. *Psychiat.* (*McL.*) 1952), 160 Commonwealth Ave., Boston 16, Mass.

Dr. Laurens P. White (*M.* 1950), Children's Cancer Research Foundation, 35 Binney St., Boston, Mass.

Dr. Warren Whitford (*Or.* 1931), 80 Sherman Ave., New Haven 11, Conn.

Dr. James P. Whittemore (*C.M.* 1946), 1130 S.W. Morrison St., Portland, Oreg.

Dr. John C. Wilcox (*C.M.* 1937), 328 N. Indian Hill Blvd., Claremont, Calif.; 146 Nemaha St., Pomona, Calif.

Dr. Charles A. Williams (*E.S.* 1920), Box 246, Woodstock, Vt.

Dr. Edward H. Wilson (*S.* 1948), 2000 Van Ness Ave., San Francisco, Calif.

Dr. John L. Wilson (*E.S.* 1940), School of Medicine, American University of Beirut, Beirut, Lebanon

Dr. Philip D. Wilson (*E.S.* 1914), 535 E. 70th St., New York 21, N. Y.

Dr. Carl T. Wolff (*M.* 1958), 3 N–202, National Institute of Mental Health, National Institutes of Health, Bethesda, Md.

Dr. Jan Wolff (*M.* 1954), National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Md.

Dr. Louis Wolff (*W.M.* 1924), 1101 Beacon St., Brookline 46, Mass.

Dr. Benjamin S. Wood (*E.S.* 1933), Veterans Administration Hospital, North Little Rock, Ark.

Dr. Howard P. Wood (*M.* 1948), Lankenau Medical Bldg., Philadelphia 31, Pa.

Dr. James A. Wood (*C.M.* 1915), Box 325, Sea Island, Ga.

Dr. Howard W. Woodbury (*Dn.* 1948), 218 S. Maryland Parkway, Las Vegas, Nev.

Dr. E. Jane Herring Wooten (a.r.p. *C.M.* 1944), 2512 Fairview Rd., Raleigh, N. C.

Dr. Thomas C. Worth (*W.M.* 1938), Rex Hospital, Raleigh, N. C.

Dr. Morey Wosnitzer (a.r.s. *U.* 1960), U.S. Naval Hospital, Key West, Fla.

Dr. Edwin T. Wyman, Jr. (sr. r.s. *Or.* 1960), 1110 Beacon St., Brookline, Mass.

Dr. Otto C. Yens (*C.M.* 1930 and *W.M.* 1932), Fort Belvoir, Va.

Dr. David A. Young (*E.M.* 1933), North Carolina Memorial Hospital, Chapel Hill, N. C.; 714 St. Mary's St., Raleigh, N. C.

Dr. Robert A. Young (r.p. *Psychiat.* (*McL.*) 1934), Judge Baker Guidance Center, 295 Longwood Ave., Boston, Mass.

Dr. Peter M. Yurchak (*M.* 1958), Peter Bent Brigham Hospital, 721 Huntington Ave., Boston 15, Mass.

Dr. Sumner I. Zacks (*Path.* 1956), Pennsylvania Hospital, 8th and Spruce Sts., Philadelphia, Pa.

Dr. Edward L. Zarsky (a. attend. psychiat. (*McL.*)), 201 Buckminster Rd., Brookline 46, Mass.

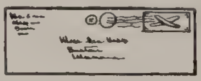
Dr. Harvey F. Zartman (*C.M.* 1954), 825 L St., Anchorage, Alaska

Dr. John W. Zeller (*W.M.* 1935), Tufts University School of Medicine, 136 Harrison Ave., Boston 11, Mass.

Dr. Irving Zieper (a.r.p. *N.* 1958), Neurology Section, Division of Medicine, Keesler Air Force Base Hospital, Box 1912, Biloxi, Miss.

Dr. Bernard Zonderman (assoc. s. *Otolar.*), 285 Commonwealth Ave., Boston 15, Mass.

Dr. Henry J. Zukowski (a.r.p. *An.* 1948), Grace Hospital, 4160 John R St., Detroit 1, Mich.



This interesting letter has come from Dr. Reed Harwood:

I recently went on an unusual mission to St. Croix, Virgin Islands, and I thought it of sufficient interest to report it to you. Perhaps you might want to use it in THE NEWS.

Early in March, I was consulted by the relatives of a seventy-two-year-old patient of mine who had fallen ill in St. Croix and had been hospitalized there with a serious illness. There were several features of the case, not the least of which were the anxiety of his relatives and my long association with the family, to make me wish to help out if I could. I had a long-distance telephone talk with the doctor in charge down there, who felt that the patient had acute congestive heart failure and some pneumonitis which was perhaps secondary to malignancy of the left lower lobe of his lung. It seemed to me that the local physician, a Dr. Evans, was doing everything possible under the circumstances, but that the situation, nevertheless, was deteriorating. The patient had become restless, confused, and disoriented. Before deciding to accompany the patient's daughter to St. Croix, I had to assure myself, first, that he was not moribund and, second, that he was not getting well; and because the local doctor was not available until ten minutes before flight time, I was obliged to make my decision from a phone booth at the Logan Airport. There, it was apparent that the patient's condition fell between these two extremes and that the family badly wanted me to go—so I went.

We spent the night at San Juan, Puerto Rico, and took an early plane to St. Croix. The son, who had already flown down and had been on duty with his father for seventy-two consecutive hours, seemed in good shape and took me promptly to the hospital—the Charles Harwood Memorial Hospital. When I saw the name of the hospital, I could not but feel that this was a good omen. The son left me in the car while he went in to see if Dr. Evans was there, and returned, saying that Dr. Evans was conducting his weekly Friday morning Grand Rounds and would very much like to have me join him.

Grand Rounds at the Charles Harwood Memorial Hospital are quite different from those at the M.G.H. They constitute a quick review of the important cases in the hospital at the moment. The doctor in charge leads the group into the patient's bedroom, where a simple introduction to the patient takes place. The doctor in charge then presents the salient features of the case outside the patient's closed door and a brief discussion follows, after which the group moves quickly on to the next case. In this way twenty or thirty cases are covered in the space of a couple of hours. I was interested to note that my opinion was not sought on a single case, but the group was very eager to show me that it was alert and took its job seriously. These doctors were glad to answer my questions, and I found that they were treating a good many conditions which I do not encounter in Boston, among them, filariasis, of which they still have a few—a very few—cases. It happened that they were having a mild epidemic of hepatitis at the time. The cases were widely spread geographically and no contact had been established between the various victims.

I found that I quickly tired on Grand Rounds, what with my long flight and only four hours of sleep. I was also quick to discharge my jacket, which someone unobtrusively hung up in a safe place, and to loosen my collar and roll up my sleeves, thereby approaching in costume that of the rest of the group. From this you can gather that in St. Croix that morning it was both hot and humid.

The relatives of my patient did not seem to mind the delay in examining him. I myself felt that the delay was justified and that the good will established thereby between the doctors and me would prove to be invaluable (as indeed it did). When the group had dispersed, Dr. Evans and I together examined my patient most thoroughly and, though our conference was interrupted countless times because Dr. Evans is a much-harried Commissioner of Health and Chief of Service and private practitioner, it was productive. The patient's mental state was somewhat improved, he was afebrile, but he had signs not only of fluid at the left base but of compression of the lung on that side. The X-ray showed a solid mass with a smoothly rounded contour in the left costophrenic angle and the rest of the left lung field was quite hazy.

Unfortunately, I had neglected to bring with me Dr. Stanley Wyman or some other radiologist on the MGH staff; and the local radiologist was making the rounds of the islands and would not be back on St. Croix for several days. By chance, I recalled at this point the old radiological trick of taking a PA view of the chest with the patient lying on his left side, and demonstrated to everyone's satisfaction that the "solid mass", obeying the well-known rule that water seeks its own level, had moved up toward the apex. That afternoon Dr. Evans made three unsuccessful attempts to withdraw fluid from the left pleural cavity. He was about to give up when I prevailed upon him to try a final tap closer to the spine and a little higher up. I was sure that fluid was present and that very likely, in addition, there was an empyema. We were gratified to strike "pay dirt" on the fourth attempt: pus was encountered immediately and 10 ml. was withdrawn for bacteriological tests. Subsequently, Dr. Evans was able to withdraw 500 ml. of straw-colored fluid, and a considerable improvement in the patient's respiratory exchange resulted. Despite this, his condition remained unsatisfactory, the chief difficulties being tachycardia, spells of disorientation with some hallucinations, and an obvious need for continued oxygen therapy. Three days later the X-ray maneuvers were repeated and it was again demonstrated that fluid was present, though there was less than on the previous X-ray. Again, several unsuccessful attempts at tapping it were made—this time by a Dr. Karell, a former professor of surgery in Estonia. However, when he finally placed the patient on his left side and tapped higher near the spine, 300 ml. of straw-colored fluid was easily removed. The cultures of both fluids proved that the infection was due to staphylococcus which was sensitive to Staphcillin, but to no other antibiotic. This drug was exhibited immediately in doses of 1 gram intramuscularly every four hours. Despite this, the patient continued to need oxygen, ran a high white count without any fever, and looked like a sick man. When he was removed from the oxygen tent, he quickly became cyanotic, with elevated pulse and respiration—all of them relieved when he was returned to the tent.

We now had to decide if the patient needed a thoracotomy and drainage of his empyema cavity, and if he could survive the trip either to San Juan (where facilities for such procedures are available) or to the M.G.H. It was a difficult decision for Dr. Evans and me, but we finally decided that the patient could safely be brought to Boston if proper precautions were taken. Emergency oxygen equipment was provided for the trip in a four-seater Piper plane to San Juan and for the trip from New York to Boston by private plane. On the jet flight from San Juan to New York a large tank of oxygen was roped underneath the patient's seat and the plane flew at a level of 31,000 feet with the cabin pressurized for 6,000 feet. There was a rule that no one might smoke while the oxygen apparatus was in use, but for the comfort of the passengers, I stopped the oxygen for about ten minutes out of every forty minutes. The cooperation of the captain and the crew and the 100 passengers left nothing to be desired; and at my request toward the end of the flight, one of the pretty hostesses blushingly made an impromptu speech over the squawk-box, thanking the passengers for their cooperation and patience.

During the oxygenless minutes, my patient's pulse and respirations went up perceptibly and he became moderately cyanotic. This was quickly relieved as soon as the oxygen was resumed. He tolerated the arduous eight-hour trip from the Charles Harwood Memorial Hospital to the Phillips House remarkably well and, at this writing, is steadily improving.

There are several additional observations which I'm sure will be of interest to your readers. First of all, I noted that where racial discrimination does not exist, the relationships between black and white can be normal and natural. I took an instant liking to Dr. Evans, who is a Negro, and to several others on his staff, and, I'm glad to say, they reciprocated these feelings. I could put my hand on Dr. Evans's shoulder unaffectedly, unself-consciously, and without any feeling of condescension. My relationships with the staff and the nurses and the laboratory were uniformly friendly. Everybody was cooperative in every possible way, and was eager to carry out any suggestions which I wished to make—and I made them as tactfully as possible.

The doctors are mostly Negroes, and have had a variety of training, but all are earnestly and diligently coping with the problems of their Island and its 13,000 inhabitants. They have all but stamped out filariasis and they have the ambition to eradicate tuberculosis. The people are becoming used to the advantages of good medical care, so that now they prefer to have their babies in the hospital and are willing to stand (since there are not even hard benches) in the corridors of the ambulatory clinic, which is even more crowded than our own. Their laboratories, like ours, are much overworked. They are run by a Miss Jardine, 62, white, who used to work at the Hitchcock Clinic in Hanover, New Hampshire, and then at the Hinton Laboratory in Boston, and who went to the Virgin Islands to retire. Judging from what I saw, she has another eight or ten years of hard work ahead of her.

There is a shortage of nurses on St. Croix. They are willing and sensible and good-natured. For a case like my patient, special nurses are not obtainable. He was "specialled" by his devoted son, a most level-headed, intelligent manufacturer whose dedication to his father should be an example to the relatives of patients brought to the Baker Memorial or the Phillips House. Once he reluctantly allowed me to be his father's special nurse for a period of three hours. For the most part, the son was "spelled" for brief periods by his sister; and the only night that I caught him off duty was the night he elected to sleep in the bed beside his sister, who was suffering from an attack of pancreatitis, while I was enjoying a respite.

Several of the doctors were political refugees. I have mentioned Dr. Karell, who performed the second chest tap with the utmost skill and patience. Another was a Dr. Por from Budapest. One night when I was nearly fainting from fatigue, he gave me an account of the retreat of the Hungarian Army which occupied a 100-mile sector of the Stalingrad front during World War II—a retreat which took place on foot, with the temperature at forty degrees below zero. He also told how his wife nearly lost her life in the bombing of Budapest, when a girder from another building was hurled into their patio a moment after she had crossed it. And, finally, he told me of his hair-raising escape to freedom when the Russian tanks returned during the revolt of 1956. He is Chief Resident there at the Charles Harwood Memorial, but back in Budapest, with the degrees D.M.D. and M.D., he had a thriving dental practice—a fact which today he prefers not to have advertised. He found that in order to get a license to practice dentistry outside Hungary, he would have had to undertake a great deal more training; whereas, by becoming a medical house officer, he was able to shift without trouble into a new and gratifying field. He is in his fifties, and is very humble about his ability to speak English, but I thought he did very well. I utilized his previous dental experience by having him treat my patient's daughter, who had ulcers on either side of her tongue and was very uncomfortable.

As might be expected, the cost of medical care is considerably less in the Virgin Islands than it is in Boston. The hospital in St. Croix is government-supported because the government is greatly interested in improving the conditions of the Islanders. Like other hospitals the world over, the Charles Harwood Memorial Hospital has its financial problems. For example, Dr. Evans was unable to obtain an auxiliary power plant, so necessary to the operation of any hospital (particularly one where the power keeps failing), until he had been appointed Commissioner of Health. He is very proud of the plant and gets a pleasurable excitement every time he hears it start. He is adding a wing to the hospital and in every way is trying to improve the facilities and the

Members of our Dental Staff—1961

services which can be rendered. I was much impressed by the efforts he is making, the demands on his time, and the responsibilities which he could share with so few people.

Your readers may also like to get a bit of warning from me. They should never drink a Planter's Punch without first making sure that their fluid losses have been replaced. I was appalled at what *one* Planter's Punch did to me, and only later that first day did I realize that there were certain unmistakable signs of fluid deficit from sweating, and that the alcohol in the Planter's Punch must have been absorbed as avidly as was the water in the drink. I stayed on my feet, but just barely.

This letter has come from Dr. James A. Halsted (*W.M.* 1932):

On June 1, I am leaving the office of the Vice President of the University of Kentucky Medical Center to take the position of Chief of the Department of Medicine of the Metropolitan Hospital and Clinics, which provides service for members of the Community Health Association of Detroit. This is a prepayment group health plan which is now getting under way after a considerable time of careful planning. My home address will be 32766 Bingham Lane, Birmingham, Michigan; office address, Metropolitan Hospital, 1800 Tuxedo Avenue, Detroit 6, Michigan.

I have not been receiving The News, presumably because I did not answer your kind note of September 22, requesting that I write you something for your paper regarding my experiences in Iran—a letter I have had in a "pending" file for such a long time I am afraid that anything I might write now would be out of date. I would, however, like to receive The News again at the above home address after June 1. [Dr. Halsted allowed his subscription to The News to expire, but it is now renewed. We still would like to have him tell us about his experiences in Iran. It is not too late.—Editor]

Dr. Frederick T. Hatch handed over to us this letter from Dr. Chiu-an Wang (*W.S.* 1944) which, as Dr. Hatch says, shows the "long reach" of The News.

I read with great interest your account which appeared in the March issue of The News on the work you and your associates have undertaken in the Arteriosclerosis Unit at the General. It suddenly dawned upon me that I must write you this note and tell you about some of the observations I have made from the work I have been doing out here.

First, arteriosclerosis is not a common disease among the average Chinese of any age or either sex. But it is fairly commonly encountered among the people of the higher social economical standing, such as business executives, bankers, etc.

Thrombosis, especially postoperative venous thrombosis, is very rarely encountered. I have not found one single case in all these years among the hundreds of my surgical patients.

Total cholesterol is as a rule very low among the average Chinese, but it is high, usually over 250 mg. per 100 ml. among the better-off group. I found that the average figure for the average Chinese is below 150 mg. per 100 ml. quite frequently.

Vegetarians and Buddhist priests showed practically no evidence of hypertension or arteriosclerotic heart disease. Their teeth were in the best shape (no regular dental care), and the body odor was sweet and pleasant.

What do all these observations mean? I wonder.

As I am to return to the General this summer, possibly you can enlighten me with your opinion on these observations. Perhaps I can take advantage of my presence there to carry out some more studies along this line.

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IMPORTANT NOTICE

It is one of the duties of the Archives Department to revise the Directory section of the Hospital's *Annual Report* each year. A very simple request has appeared in The News many times, asking all our alumni and members of our professional staff, of all categories, to inform the Hospital promptly of any change of address. These appeals have been disregarded by a discouraging number of individuals. Unless each one of you cooperates in this respect, much extra work is entailed to keep our Directory up to date.

Members of the House Staff who are about to finish their services at the Hospital on June 30 are especially urged to comply immediately with this request. If you are planning on traveling about for a while, or have not made definite arrangements for the opening of your office or your future association with an institution, please give us an address from which mail may be forwarded to you until your plans for the future are determined. Send your new address to either the Archives Department or the Secretaries' Office, after which it will appear in The News and in the following year's Directory.

The News

No. 206 Boston, Mass. October 1961

THE LANGUAGE CLINIC AND THE CORTICAL FUNCTION TEST LABORATORY

History. It was at the suggestion of Dr. James B. Ayer, at that time head of the Neurology Service at the Massachusetts General Hospital, that the writer went to New York to observe and participate in the work of Dr. Samuel T. Orton of the Language Research Unit at the New York Neurological Institute. It was there that Dr. Orton (a pioneer among neurologists investigating the relationships between speech and reading disorders and neurological make-up, who first pointed out the importance of hereditary factors) was working. As a result of this experience and again with the encouragement of Dr. Ayer, I opened during the summer of 1934 what came to be known as the Language Clinic. At that time this was a very informal set-up, as part of the Nerve Out-Patient Department, consisting of a doctor and a few patients. The Clinic met once a week, and all that could be done was a certain amount of evaluation of patients. Very soon, however, volunteers who thought this would be an interesting field in which to work presented themselves. The volunteers were largely teachers who, for one reason or another, felt that individual work with speech and learning problems of various sorts would be more satisfying to them. At this time, the Clinic received considerable encouragement from Dr. Stanley Cobb, who had been interested in speech problems. Throughout the early years of the Clinic's existence, much stimulation and encouragement was received from Dr. Charles A. McDonald, at that time a consultant in the Neurology Department.

At the outset, the work of the Clinic was dependent entirely on volunteer help. Patients having speech problems were referred largely from other departments in the Hospital. These cases consisted of children with delayed speech, children having articulatory defects of varying etiology, young people who were troubled by stuttering or stammering, and aphasic patients. This latter group was predominantly an adult group. In addition to these speech problems, a number of learning problems in school children were presented to the Clinic. These were children who were suffering from what Dr. Orton had described as "specific reading disability". It was interesting to see that most generally they were referred in their early years by the Eye Clinic. The child failed to learn to read in school and the school referred him to the Eye Out-Patient Department as a solution of his problem.

The Language Clinic, of course, benefited tremendously from the rich opportunity for consultation which the Out-Patient staff provided at that time, and still provides. This made it possible to have a pretty thorough work-up of a patient in spite of a rather limited staff and a very limited time schedule.

Even in the early days, training was provided for teachers who wanted to enter the field of remedial speech or remedial reading or language training, as the therapy was called. In return for training, these trainees gave many hours of therapy to Clinic patients who could not otherwise have received any help at all. However, the Clinic suffered very much from having no permanent staff, and it became increasingly clear that the usefulness of the Clinic would be much curtailed without more of a dependably regular staff than it was possible to have on a purely volunteer basis.

During the early years of the Clinic's existence, it became apparent that there was a very great demand for a carefully conducted testing service. Again we were fortunate in having the encouragement of both Dr. Ayer and Dr. Cobb, and, as a consequence, the Cortical Function Test Laboratory was established at that time. At first, it consisted of a room for testing and for the storage of materials, and of one part-time psychologist. Demands on the Clinic grew rapidly as a result of requests for psychological testing of all types of neurological patients, as well as the regular Language Clinic patients, and soon the staff was increased. The first few years of activity gave the Laboratory a very valuable opportunity for learning to make accurate evaluations in all types of brain-injured patients, as well as evaluations in the various types of hereditary language difficulties. These consisted of the developmental speech handicaps, such as motor speech delay, articulatory defects and stuttering, and the over-all learning defects referred to as specific reading disability.

World War II made quite specialized demands on the activities of the Language Clinic. The Veterans Administration was faced with the problem of providing adequate care and applying the correct rehabilitative measures for large numbers of head-injured veterans who were suffering from some forms of aphasia. Techniques of therapy were not understood, and possibly, even more important, outstanding therapists with experience and training in the field did not exist. Consequently, several training centers for therapists, which also would serve as centers for therapy for veterans, were established by the Veterans Administration. The Boston area was one of these centers. As a matter of fact, it was the chief center in the eastern section of the United States, and the Language Clinic at the M.G.H. became the chief Out-Patient Clinic for veterans in this vicinity who were discharged from hospital care in a veterans' hospital. The M.G.H. also became the center for the development of techniques for therapy in aphasia and for procedures for the training of would-be therapists, and in these various ways the work of the Language Clinic was multiplied very rapidly in this much-needed field.

One result of this increased demand for the services of the Clinic was that the Clinic obtained for the first time a fixed and discrete space within the Hospital and a permanent staff. During these busy times the Clinic benefited by the participation in its work of various physicians who had recently completed training or were completing training at the Hospital. Among them I would mention Dr. Preston Robb of the Montreal Neurological Institute, Dr. Gardner Quarton, Dr. William Timberlake, Dr. Edwin Goodall, and finally Dr. Vincent Perlo who, I am glad to say, has remained a member of the Language Clinic staff.

With the end of the war, came a decrease in demand from the Veterans Administration for therapy for aphasic veterans. The Veterans Language Clinic contracted considerably and finally was closed by the Veterans Administration, as the demand did not seem to justify its continuation.

During the postwar years, as the population pressure was exerted on the schools, both public and private, this pressure began to be transmitted to the Language Clinic. We began to see large numbers of children who were handicapped in learning, either in speech or in reading and sometimes in both. Crowded schools and inadequate teaching staffs were perhaps some of the factors which prompted parents to bring children to hospitals, such as the M.G.H., for a clarification of their educational problems. Very rapidly the Language Clinic and the associated Cortical Function Test Laboratory were overwhelmed by cases requiring help. Similarly, there was an increase in the demand for trained language therapists who would be versed in the field of appropriate teaching techniques designed to aid children who were having specific reading disabilities. I am very certain that part of the problem stemmed from the inadequate reading techniques which were current in schools quite generally in those days and which, unfortunately, are still very common. Children's learning problems could not be understood or could not be remedied in many schools. As a result, many teachers came to the Language Clinic for training, in order to become proficient in helping children who required extra teaching.

As a natural outgrowth of our Clinic activity, departments for language therapy were established in a number of schools, such as Phillips Academy in Andover, the Phillips Exeter Academy, St. George's School in Newport, Rhode Island, Dana Hall School in Wellesley, the Cambridge School in Weston, and others. These departments were staffed and supervised by therapists and staff members who had been trained and were experienced in the Language Clinic at the Massachusetts General. At the same time, numbers of therapists who trained here at our Clinic worked with children in neighboring public schools, and, as far as was possible, in our Language Clinic itself. In addition to intensive work during the school year, schools felt the need for language therapy during a summer program, and, as a result of this, those trained in the Language Clinic were working intensively in several summer schools within easy reach of Boston. Pupils have come to these summer schools from all over the country to benefit from the Language Clinic evaluation and the intensive, individual therapy which trained therapists from our Clinic are able to administer. During the summer of 1960, over 80 pupils were enrolled in this work with graduates from our own Language Clinic.

Recent developments. Two years ago, the therapeutic services of our Language Clinic, now situated on the third floor of the Out-Patient Building, were opened to patients of all income levels. This move seemed desirable because no service of this nature was available elsewhere in the community. Since that time, aphasic patients, a certain number of speech problems and a few reading problems of pupils who were above the original Clinic income level but who could not otherwise have the assistance of the Clinic service, have been cared for in the Language Clinic. We feel that this has worked out well. One large group is a college-age group of stutterers, referred by several of the colleges and the universities in the Greater Boston area. These students could not ordinarily have had help in the Language Clinic because of the income restriction. I am glad to report what I think all of us would expect: that there has been no obstacle in implementing this broader spectrum of patient approach—broader spectrum from the point of view of income.

The Speech Clinic, which is part of the Language Clinic, has shown very rapid growth during the past few years. Problems ranging from infantile speech, delayed speech, sound substitutions, omissions of sounds, stuttering, aphasia, the speech of those suffering from Parkinson's disease and multiple sclerosis and cerebral palsy, are handled regularly in the Clinic. Referrals come from within our own Hospital, from public schools, and from other hospitals, as well as from practising physicians and from nearby colleges and universities. The speech staff is headed by Mr. Robert Weinberg, who is the Supervisor. He is ably assisted by Miss Gail Plotkin and Mr. Don Sandy who are with us full time, and Miss Judith Nemzoff part time. All our therapists are working in graduate study beyond the Masters degree. Speech therapy within the Clinic employs individual and group approaches. Patient demand has made a Thursday evening Clinic a very active one. Three groups of adult stutterers are now being seen on that evening. Saturday morning Clinics, for both children and adults, seem near at hand because of the increased demand. During the past two years, the Language Clinic has cooperated with the Boston University Speech Department in providing training for a certain number of graduate students at B.U. whose field is in speech. These university trainees come to us for between twelve and eighteen hours a week to work in the Clinic. Their program calls for observation and actual therapy administered under the close supervision of our regular staff. We feel that this program has been most successful for both the Clinic and the trainees who have come to us. It has increased the teaching and the service to speech patients which the Clinic can provide.

The Reading Clinic, also a part of the Language Clinic, has grown very rapidly during the past few years. Reading cases are referred largely from a number of neighboring schools, mostly public schools, and from other departments in the Hospital. The first job for the Reading Clinic in each case is to make a careful evaluation of just what the problem is. Such evaluations are made by Dr. Perlo or me, in conjunction with testing procedures carried out by the Cortical Function Test Laboratory. Occasionally therapeutic programs for patients in the neighboring area can be set up in the Language Clinic. In other instances, a therapist with some teaching experience is discovered in the neighborhood where the patient lives and supervision is given for a training program outside the Clinic, but supervised by the Language Clinic staff.

The Reading Clinic staff consists of two full-time workers and two part-time, well-trained reading therapists. In addition to this regular staff, a program for teachers who wish to become proficient in this sort of work is arranged for at the Language Clinic. During the school year as many as six teachers in training work regularly in the Clinic. They are supervised by the reading supervisor, and they devote their time in the Clinic to the teaching of children who are handicapped by specific reading disabilities and who are dependent on the Clinic for the therapy they must have in order to overcome their disabilities. This training program is carefully worked out in seminars, discussions, and lectures, as well as in the actual day-to-day work with the patients. Each trainee gives 300 hours in the Clinic to complete the training course. Needless to say, this training program serves a two-fold purpose: It provides a skilled personnel to go out into the community to continue with this sort of work where it is needed, and it gives training to children who are handicapped by reading disabilities and who could not otherwise have help.

In addition to these programs, the Reading Clinic is engaged in an active consultation program. Members of the Clinic staff act as consultants in a number of schools—more recently in public schools, also. The supervisor goes to the public school to act as a consultant and also to aid in the evaluation of difficult pupils who, as need arises, can be referred to the Language Clinic. In addition, the supervisor advises and aids in the therapeutic program at the school, consulting with members of the regular school staff. Still further, the supervisor is available for general talks and discussions covering the subject of reading disabilities. We feel that in this way many children can have the advantages of the experience of the Language Clinic who otherwise could not benefit from this help. Mrs. Alice Garside is an able and competent supervisor of the reading part of the Language Clinic program, and she is ably aided by Mrs. Frank Plunkett, long a member of our staff, and Mrs. Caroline Peck.

Since a previous article about the work of the Cortical Function Test Laboratory appeared in the December 1953 issue of the Massachusetts General Hospital News, the work of this Laboratory has practically doubled. At the present time, the staff is headed by Miss Elisabeth E. White, the chief clinical psychologist in charge, with her assistants, Miss Wilma French, Miss Elaine Stella, and Mrs. Elizabeth Mack. Their work is greatly aided through the efforts of Miss Jessie McMeekin, secretary in the Laboratory. The Cortical Function Test Laboratory is still actively engaged in evaluations of neurological patients as they are referred either privately or from the Neurology Ward. It is also actively engaged in the evaluation of aphasic patients, carrying out tests that help to determine which avenues of communication are most and which are least impaired in order to aid therapists in planning the course of retraining.

Approximately 40% of the referrals to the Laboratory in the last three years have come through the Language Clinic, either for Clinic cases or for private cases in the language field. Referrals come from a number of private physicians who want to investigate school problems of their patients.

The purpose of testing in the Language Clinic is twofold. The initial testing is diagnostic, to evaluate the language problem, to help decide if it is the type which can be handled in the Clinic, and, if it is, to give the language therapists some preliminary suggestions about what direction the work might take. Secondly, periodic retesting is carried out to give an objective measure of progress and to help decide when the work has achieved optimal results and can be discontinued with an individual patient.

Our patients include a wide range of ages, from preschool children with speech problems through elderly aphasics. In the former cases, the purpose of testing is to determine whether the delayed speech is one aspect of generally slow mental development or whether the retardation is limited to speech. A large proportion of the older children are referred to us because of specific reading disability. In such cases, the testing must determine whether or not the child is mentally capable of learning and whether he has, in fact, been able to learn in areas other than reading but has been handicapped in learning language subjects by directional confusion. Our adult patients are usually stutterers, or aphasics such as those already referred to. With stutterers, an attempt is made in testing to get at the dynamics of the problems. Though the testing in the Cortical Function Test Laboratory is strictly individual, members of the Laboratory staff have carried out work with groups in various independent schools in this area. For example, group testing is carried out with the incoming class and all new students in one nearby school each fall, to help screen out those pupils who will need extra strengthening in language subjects in order to make full use of their abilities in school work. Such group testing, of course, is followed up by individual testing, to evaluate mental abilities and different aspects of language usage in those who are selected as needing language training. Members of the Laboratory staff also participate in the summer school programs referred to above.

Needless to say, the chief problems of the Language Clinic and the Cortical Function Test Laboratory are problems common to most hospital departments. By that I mean space problems. Many more patients could be taken care of, much more creative work could be done, and much better teaching could be carried out if we had more adequate space. Fortunately, due to the able administrative work of Mrs. Jean Yarborough, our secretary in the Language Clinic, the best possible use is made of our facilities. The Clinic has grown very rapidly, as the following statistics indicate: Five years ago, in May 1956, there were 86 visits from reading cases and 259 visits from speech cases. In May 1960, there were 413 visits from reading cases and 264 visits from speech cases. Since January 1955, each of 42 trainees has completed 300 hours of language training courses. During the past two years, 5 speech trainees from Boston University have done clinical work in our Clinic.

During the past two years, approximately one-quarter of the speech cases have been private Language Clinic patients, while three-quarters remain regular Clinic patients. Of the reading cases, approximately one-sixth have been private Language Clinic patients, and five-sixths have been regular Clinic patients.

What the future holds for the Language Clinic is hard to say. There is a very heavy demand for the sort of work that is being carried out here, and we are glad to be able to meet the demand with a well-trained and experienced Clinic staff. There are, of course, many other problems in the over-all field of communication which have not yet been approached by our Clinic and which we hope to have the opportunity of tackling. We see this field as a unique area of interaction between medicine, in the form of neuropsychiatry, and the field of education, in which many questions remain quite unanswered. Indeed, many have probably not even been asked.

Edwin M. Cole, M.D.,
Neurologist

* * *

Dr. Henry K. Beecher was awarded the honorary degree of Doctor of Medicine by the University of Lund, in Sweden. The citation which accompanied the award reads:

> Your exciting journeys of discovery into the vast, frightening and largely unknown space of unconsciousness to explore fundamentals of human physiology have been planned with inspiring originality and have been carried out with far-sighted capability and a breath-taking vitality under the strictest rules of medical consideration.
>
> You have shared your stimulating ideas, your remarkable results and your wide clinical experience with medical men from all over the world with that generosity characteristic of your country and specific of your frank personality to the benefit of many also of this country and this university. It was a pleasure therefore for the Medical Faculty today to bestow upon you, in accordance with rules guarding our old traditions, the insignia that will open to you the embracing arms of Alma Mater Carolina Lundensis.

On June 15, Dr. Edward D. Churchill received from Harvard University an honorary degree of Doctor of Science. The citation given by President Pusey was:

> The skill and humanity of this illustrious surgeon have inspired generations of students of the healing art.

Each of the only four medical students to graduate from Harvard Medical School *summa cum laude* since 1940 was awarded the prized Boylston Medal and $1000 at the 150th anniversary dinner of the Boylston Medical Society of Harvard University, given on May 25 at the Harvard Club. One of the four was Dr. Zanvil A. Cohn (*M.* 1954), Class of 1953, research associate at the Rockefeller Institute for Medical Research and assistant physician at the Rockefeller Hospital.

Dr. John H. Gibbon (res. fel. *S.* 1930-31, 1934-35) was given an honorary degree of Doctor of Science at the Two Hundred Fourteenth Commencement at Princeton University last June. The text of the citation is:

> Professor of Surgery at the Jefferson Medical College of Philadelphia, a fifth-generation physician whose professional skill and bold pioneering initiated a direct approach to open heart surgery, an epoch-making achievement in the relief of suffering and the saving of lives. Such technical mastery and dedication of spirit make shine with new meaning the Prayer-Book's injunction to lift up our hearts.

Dr. John N. Loeb, another of the four medical students who have graduated from Harvard Medical School *summa cum laude* since 1940, also was awarded the Boylston Medal and $1000 at the 150th anniversary dinner of the Boylston Medical Society of Harvard University, given on May 25 at the Harvard Club. Dr. Loeb is a member of the Class of 1961, and began his internship in Medicine on July 1 here at Massachusetts General Hospital.

Dr. Robert F. Loeb (*W.M.* 1920), father of the above Dr. John H., was awarded the honorary degree of Doctor of Science at the 207th Commencement exercises at Columbia University on June 6. The text of his citation, conferred by Dr. Grayson Kirk, president of the university, reads:

> As a beloved teacher, skilled investigator, able administrator and wise physician, you have brought rare gifts to this university and to the great vocation of medicine. No man of your profession in this generation has been more greatly or more justly honored. Your four decades of association with Columbia have been rich in achievement and rich in benefit to mankind. Generous in spirit and broad in your interests, you hold not merely the respect but the warm affection of all who have had the privilege of your friendship. It is with pride that the university bestows upon you the Doctorate of Science, *honoris causa*.

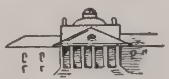
Dr. Joe V. Meigs was the recipient of the honorary degree of Doctor of Medicine, conferred by the University of Turin, Italy, last June, for "service rendered to science and humanity".

Miss Ruth Sleeper was made an Honorary Fellow of the College of Nursing of Australia last April. She addressed the annual meeting of the college in Melbourne on April 26.

Dr. Paul D. White was awarded the New York University medal for distinguished service in his field. More than 500 graduates of the university school of medicine attended the special program at which the award was presented.

The Soviet News Agency Tass reported in Moscow on May 30 that the Soviet Academy of Sciences had elected Dr. White its first American member, at the 15th session of the Academy's general meeting. Academy membership is purely honorary. Dr. White has been working actively to become acquainted with Russia's leading heart specialists since he first went to Moscow in 1956. In 1957 small groups of Russian cardiologists came here to this country, and in 1958 Dr. White met them again at the Third World Congress of Cardiology in Brussels. "We established a very pleasant entente," Dr. White said. In 1959 an agreement was signed between the U.S.A. and the U.S.S.R. to join forces against heart disease, cancer, and polio. "It was an historic event," Dr. White said. Last May five Russian cardiologists came to the United States and, with American doctors (of whom Dr. White was one) began to prepare a program. The Russians visited medical schools and hospitals in Washington, New York, Cleveland, and Boston, where Dr. White was their host. "It was a very successful series of visits," Dr. White said. Regarding his election to the Soviet Academy of Sciences, Dr. White is reported to have said that he had "a little suspicion that something might be in the offing" when he was asked about details of his life during a visit to Russia earlier in May.

In addition to the above distinctions, Dr. White received an honorary degree of Doctor of Laws at St. John's University in New York on June 11.



The Board of Trustees, at their meetings during May, June, July, and August, voted:

That Mr. Harold Dodd of London be invited to give a Richardson Lecture at the Hospital on October 9;

That the Dental Service be renamed "Dental Medicine";

To approve changing the name of the Staff Wives Association to "Massachusetts General Hospital Service League".

To accept the resignations of:

Dr. Evan Calkins with regret, from the position of Associate Physician, effective July 31, and to extend to him congratulations on his appointment as Professor of Medicine at the University of Buffalo;

Dr. Virginia B. Calkins with regret, from the position of Assistant in Medicine at McLean Hospital, effective July 1;

Dr. Thomas A. Carey from the position of Second Assistant Resident in Radiology, effective June 30;

Dr. Joseph Stokes, III, with regret and appreciation for his able service to the Hospital, from the position of Assistant Physician, effective September 30;

Dr. William R. Waddell with regret and appreciation for his able service to the Hospital, from the position of Associate Visiting Surgeon, effective August 31.

To promote:

Lewis L. Engel, Ph.D. from the position of Associate Biochemist to that of Biochemist in Medicine;

Roger W. Jeanloz, Ph.D. from the position of Associate Biochemist to that of Biochemist in Medicine;

Anne Parsons, Ph.D. from Assistant Social Anthropologist to Associate Social Anthropologist in the Department of Social Science at McLean Hospital, beginning July 1.

To grant leave of absence to:

Dr. Chiu-chen Wang, Associate Radiologist, for one year, beginning July 1;

Dr. Louis Wener, Assistant in Radiology, for service in the Air Force, beginning July 1.

To change the titles of:

Dr. Richard R. Curtin from Assistant in Surgery to that of Clinical Associate in Surgery, beginning August 1;

Dr. Paul R. Dinsmore to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. Gerhart A. Duda to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. Gordon G. Globus to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. S. Sheila Hafter to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. John M. Kuldau to Clinical and Research Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. Egbert H. J. Mueller to Clinical and Research Fellow in Psychiatry at McLean Hospital, beginning July 1, this reappointment contingent upon licensure;

Dr. David G. Satin to Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Dr. Richard A. Weinberg from Clinical Fellow in Dermatology, beginning July 1, to Assistant Resident in Dermatology, effective August 1.

To extend the appointments of:

Dr. Jesse F. Scott, Associate Biophysicist in Medicine, from July 1, 1961 through June 30, 1962;

Dr. Narayana C. Surya as Visiting Psychiatrist pro tempore through August 25.

To reappoint:

Dr. Edward F. Bland to the Social Service Advisory Committee for a three-year period;

Dr. Jacqueline Gauthier as Clinical Fellow in Psychiatry at McLean Hospital, beginning July 1;

Mr. Donald Moreland to the Social Service Advisory Committee for a three-year period;

Miss Ruth Sleeper to the Social Service Advisory Committee for a three-year period.

To appoint:

Dr. Man M. S. Ahuja as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. Elroy E. Anderson as Clinical Associate on the Children's Service, effective July 1;

Dr. Homer L. Ash as Resident in Dental Medicine for one year, beginning July 1;

Dr. Stanley Austin as Clinical Fellow in Anesthesia, for the period May 1 through October 31;

Dr. Laurence I. Barsh as Intern in Dental Medicine for one year, beginning July 1;

Dr. Guido Belsasso-Prister as Assistant Resident in Psychiatry, beginning July 1;

Dr. Martin A. Berezin as Attending Psychiatrist at McLean Hospital, beginning September 1;

Dr. Hector V. Berezowski as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. John B. Blennerhassett as Second Assistant Resident in Pathology for one year, beginning July 1, 1962;

Dr. Joseph H. Brenner as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Charles M. Bryant as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Joseph W. Burnett as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. George P. Canellos as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robert W. Carey as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Randolph Catlin, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Francisco Civantos as Third Assistant Resident in Pathology for one year, beginning July 1, 1962;

Dr. John K. Cobb as Assistant in Radiology, beginning July 1;

Dr. Stanley Cohen as Clinical and Research Fellow and Acting Third Assistant Resident in Pathology for one year, beginning July 1, 1962;

Dr. Efrain O. Contreras as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Giulio J. D'Angio as Assistant Radiologist, beginning June 5;

Dr. Charles A. M. Y. Nagant de Deuxchaisnes as Clinical and Research Fellow in Medicine for one year, beginning July 15;

Dr. Paul R. Dinsmore as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Gerhart A. Duda as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Arthur W. Duff as Clinical Fellow in Pathology for one year, beginning July 1, 1962;

Dr. Ralph Earle, Jr. as Exchange Assistant Resident on the Children's Service, for the period July 1 through August 9;

Dr. William H. Eger as Assistant Psychiatrist, beginning July 1;

Prof. Shinichiro Endo as Clinical and Research Fellow in Neurosurgery for one year, beginning approximately September 1;

Richard A. Erle, M.A. as Assistant Psychologist at McLean Hospital, beginning July 24;

Dr. Paul Field as Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Joan W. Flacke as Assistant Resident in Anesthesia, beginning October 1;

Dr. Dorothy Ford as Assistant in Physical Medicine;

Dr. Alvin E. Friedman-Kien as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. Theodore Friedmann as Exchange Assistant Resident on the Children's Service, for the period August 10 through September 18;

Dr. Nicoll F. Galbraith, Jr. as Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. James A. Gardner as Second Assistant Resident in Surgery, for a period of six months, beginning August 1;

Dr. Phillip H. Gates as Assistant Psychiatrist, effective July 1;

Dr. Jacobus M. Greep as Clinical and Research Fellow in Surgery, beginning June 15;

Dr. S. Sheila Hafter as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Murray H. Helfant as Clinical and Research Fellow in Neurosurgery, for the period July 1 through December 31, 1961, and as Assistant Resident in Neurosurgery for one year, beginning January 1, 1962;

Dr. Norman G. P. Helgeson as Assistant Resident in Pathology for one year, beginning July 1, 1962;

Dr. Albert E. Herman as Resident in Psychiatry at McLean Hospital, beginning July 1;

Dr. Pelagio V. Iriarte as Exchange Assistant Resident on the Children's Service, for the period July 1 through December 31;

Dr. Koichi Ishikawa as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. David C. Jackson as Clinical Fellow in Anesthesia, beginning December 1;

Dr. Oleg Jardetzky as Consultant in Pharmacology;

Dr. Frederick D. Jarvis, Jr. as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Pierre Johannet as Assistant Psychiatrist, effective July 1;

Herman M. Kalckar, Ph.D. as Biochemist in Medicine;

Dr. Martin Kantor as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Leo T. Kelly as Assistant in Anesthesia, effective July 1;

Helen J. Kenney, Ed.D. as Consultant in Education in the Department of Psychology at McLean Hospital, beginning July 1;

Dr. Peter G. Kimball as Clinical Assistant in Dental Medicine, beginning July 1;

Dr. George Küry as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Keith A. Lamont as Clinical Fellow in Surgery, assigned to Gynecology, with the privilege of assisting Dr. Joe V. Meigs in the care of his private patients;

Dr. Lawrence M. Leonard as Senior Orthopedic Resident, for a period of six months, beginning July 1;

Dr. James G. Manson as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. Michael T. McGuire as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Richard Masters as Clinical and Research Fellow in Dermatology for one year, beginning July 1;

Dr. John A. Mills as Assistant in Medicine, beginning May 26;

Dr. Paul R. Minton as Clinical Assistant in Medicine at McLean Hospital, effective July 1;

Dr. Yuji Miyazaki as Clinical and Research Fellow in Neurosurgery for one year, beginning approximately September 1;

Dr. David R. Moloney as Resident in Dermatology for one year, beginning July 1;

Dr. John J. Monahan as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. West T. Moore as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Henry P. Pendergrass as Assistant Radiologist, beginning September 1;

Dr. Robert S. Pinals as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Donald B. Rae, D.D.S. as Assistant Dental Surgeon;

Dr. Mudundi R. Raju as Research Fellow in Physics (Medicine) for one year, beginning September 1;

Dr. David E. Reiser as Assistant Psychiatrist, beginning July 1;

Dr. Georg Riccabona as Clinical and Research Fellow in Medicine for one year, beginning February 1, 1962;

Dr. Victor J. Rosen, Jr. as Clinical and Research Fellow in Pathology, for the period July 24, 1961 through June 30, 1962;

Dr. Jens G. Rosenkrantz as Assistant in Surgery, for the period July 1 through August 31; Dr. Rosenkrantz returned as First Assistant Resident in Surgery on September 1;

Dr. Christopher VanA. Rowland, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Lawrence C. Salvesen as Clinical Fellow in Psychiatry for one year, beginning July 1;

Dr. Benjamin T. Santoro as Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. David G. Satin as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Murray Sidman, Ph.D. as Psychologist to the Neurology Service, beginning July 1;

Dr. Jeremiah E. Silbert as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Lt. Col. Kirpal Singh, AMC, as Visiting Psychiatrist pro tempore, for the period July 1 through September 30;

Dr. Charles Sorbie as Clinical Fellow in Orthopedic Surgery for one year, beginning July 1, with the privilege of assisting Dr. Cave in the care of his private patients;

Dr. John B. Spillane as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Danuta M. Stachiewicz as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. J. Henry Stempien as Assistant Dental Surgeon on the Dental Service, effective July 1;

Dr. Joseph F. Stocks as Clinical Associate on the Children's Service, effective July 1;

Pierre J. J. Stoffyn, Ph.D. as Assistant Biochemist in the Research Department at McLean Hospital, beginning July 1;

Dr. Alan A. Stone as Assistant Psychiatrist at McLean Hospital, beginning August 1;

Dr. Lawrence Sweeney as Clinical Fellow in Radiology, beginning July 1;

Dr. Chiu-an Wang as Clinical Fellow in Surgery, with the privilege of assisting Dr. Claude E. Welch and his associates in the care of their private patients;

Barbara K. Watson, Ph.D. as Assistant Bacteriologist, beginning September 1;

Dr. Kurt Wiemers as Clinical Fellow in Anesthesia, for the period July 1 through December 31;

Irving Wolf, Ph.D. as Associate Psychologist in the Department of Psychiatry, beginning June 1;

Dr. Jacob C. Wolterbeek as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Paul I. Yakovlev as Consultant in Neuropathology (Neurology) for one year, beginning July 1.

To rescind the appointment of:

Dr. Beale H. Ong as Third Assistant Resident in Surgery.

At their meetings on May 10, 17, 24, and 31, and during June, July, and August, the General Executive Committee voted:

To accept the resignations of:

Dr. Jean P. Binette from the position of Research Fellow in Medicine, effective as of September 30;

Eubert J. Daniel, Ph.D. from the position of Research Fellow in Orthopedic Surgery, effective as of August 31;

Dr. Derrick Felix-Davies from the position of Clinical and Research Fellow in Medicine, effective as of July 1;

Dr. Peter R. Holt from the position of Clinical and Research Fellow in Medicine, effective as of August 31;

Dr. Serge D. Orloff from the position of Clinical and Research Fellow in Medicine, effective as of July 31;

Dr. Felix Palubinskas from the position of Clinical Fellow in Radiology, effective as of August 22;

Dorothy K. Stearns, Ph.D. from the position of Research Fellow in Medicine, effective as of June 30.

To promote:

Dr. Joseph R. Barrie to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Sheldon C. Binder to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. John D. Burrington to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Ruben F. Gittes to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Nathan T. Griscom to the position of First Assistant Resident in Radiology, beginning July 1;

Dr. Donald B. Halverstadt to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Stephen E. Hedberg to the position of First Assistant Resident in Surgery for one year, beginning July 1;

Dr. Arthur L. Herbst to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. John B. Herrmann to the position of First Assistant Resident in Surgery for one year, beginning July 1;

Dr. Nelson R. Lampert to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Lucian L. Leape, Jr. to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. John L. Lewis, Jr. to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Ronald A. Malt to the position of Resident in Surgery for one year, beginning July 1;

Dr. Anthony P. Monaco to the position of First Assistant Resident in Surgery for one year, beginning July 1;

Dr. Ashby C. Moncure to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Gerald S. Moss to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Gustave C. E. Mueller to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Eldred D. Mundth to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Leslie W. Ottinger to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. John M. Reed to the position of Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. John P. Remensnyder, Jr. to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Stewart Sell to the position of Third Assistant Resident in Pathology for one year, beginning July 1;

Leonard B. Shulman, D.M.D. to the position of Assistant Resident on the Dental Service for one year, beginning July 1;

Dr. David B. Skinner to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Quentin R. Stiles to the position of First Assistant Resident in Surgery for one year, beginning July 1;

Dr. John T. Truman to the position of Chief Resident on the Children's Service for one year, beginning July 1, 1962;

Dr. Harold C. Urschel, Jr. to the position of First Assistant Resident in Surgery for one year, beginning July 1;

Dr. Richard H. Wohl to the position of Second Assistant Resident in Surgery for one year, beginning July 1.

To extend the appointments of:

Dr. Gianfranco DalSanto as Clinical Fellow in Anesthesia, through September 5;

J. Veronica F. King, Ph.D. as Research Fellow in Medicine, from September 12 through September 26;

Dr. Melvin Lederman as Clinical and Research Fellow in Surgery, from July 1 through August 31;

Dr. A. David McGugan as Resident in Dermatology, from July 1 through December 31;

Koscak Maruyama, D.Sc. as Research Fellow in Medicine, through September 10;

Leslie Parker, B. Sc. as Research Fellow in Physics (Medicine), from September 1 through December 31;

Dr. Mahmoud Sadrieh as Clinical and Research Fellow in Surgery, from July 1 through August 31;

Dr. Harilaos T. Sakellarides as Clinical and Research Fellow in Orthopedic Surgery for one year, beginning July 1;

Dr. Dorothy A. Westcott as Clinical Fellow in Anesthesia, from July 16 through October 31.

To reappoint:

Dr. David W. Allen as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Neil Baggett, B.Sc. as Research Fellow in Biochemistry for one year, beginning September 1;

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Donavin A. Baumgartner, Jr. as First Assistant Resident in Surgery, beginning July 1;

Dr. J. Claude Bennett as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. John A. Bolzan, with a change of title to that of Clinical Fellow in Medicine, for one year, beginning July 1;

Dr. Caesar Briefer, Jr. as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Mortimer J. Buckley, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Donald G. Comb, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning September 1;

Dr. Albert Damon as Clinical Fellow in Medicine for one year, beginning September 1;

Dr. Roman W. DeSanctis as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Leon M. Edelstein as Assistant Resident in Dermatology for one year, beginning July 1;

William H. Ellett, B. Sc. as Assistant Physicist (Medicine) for one year, beginning September 24;

Dr. Alvin Essig as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Abdollah Gashgai as Second Assistant Resident in Surgery, beginning July 15;

Dr. Richard F. Gibbs as Assistant Resident in Anesthesia for one year, beginning July 15;

Dr. Herbert A. Haessler as Research Fellow in Medicine for one year, beginning July 1;

Dr. Reginald Hall as Clinical and Research Fellow in Medicine, for the period September 1, 1961 through February 28, 1962;

Dr. Earle I. Hammer as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. John Hedley-Whyte as Clinical Fellow in Anesthesia, with the additional title of Acting Chief Resident in Anesthesia, for one year, beginning July 1;

Dr. Peter R. Holt as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Wallace A. Jones, with a change of title to Clinical and Research Fellow in Pathology only, for one year, beginning July 1;

Dr. Sigetosi Kamiyama as Research Fellow in Medicine for one year, beginning September 1;

Shelby Kashket, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Marvin R. Lamborg, Ph.D., with a change of title to Assistant Biochemist (Medicine), for one year, beginning July 1;

Dr. Burnham E. Lamkins as Assistant Resident in Dermatology for one year, beginning July 1;

Dr. Austra Likais as Clinical Fellow in Medicine for one year, beginning June 1;

Dr. S. Bert Litwin as Clinical and Research Fellow in Surgery for one year, beginning July 1;

Dr. Myron Lotz as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Tecla O. Lovina, with a change of title to Clinical Fellow in Medicine, for one year, beginning July 1;

Dr. Donald McCaughan as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. William F. McCourt as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Donald M. McKee to the position of Second Assistant Resident in Surgery for one year, beginning July 1;

Dr. Bucknam McPeek as Assistant Resident in Anesthesia for one year, beginning July 15;

Dr. Francis D. Milligan as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Hans B. Nevinny-Stickel as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Harry S. Olin as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Anthony S. Patton as Second Assistant Resident in Surgery, beginning July 1;

Mr. James L. Pinter as Research Fellow in Physics (Medicine) for one year, beginning September 1;

Dr. John T. Porvaznik, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Dr. Walter G. J. Putschar as Consultant in Pathology, beginning May 1;

Dr. Mitchell T. Rabkin as Clinical and Research Fellow in Medicine, for six months, beginning July 1;

Dr. Allan I. Sandler as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robert H. Schapiro as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. T. David Seigne as Clinical Fellow in Anesthesia for one year, beginning June 1;

Dr. John R. Senior as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Mary J. Spiro, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Mary L. Stephenson, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;

Dr. Claire M. Stiles as Assistant Resident in Anesthesia for one year, beginning July 1;

Anne M. Stoffyn, Ph.D. as Research Fellow in Medicine, for the period May 13 through August 30;

Dr. Shizuko Takahashi as Research Fellow in Medicine for one year, beginning September 15;

Dr. Judith A. Tassie as Clinical Fellow in Anesthesia, acting in staff capacity, beginning June 30;

Dr. C. Gene Wheeler to the position of Second Assistant Resident in Surgery for one year, beginning July 1.

To appoint:

Dr. Fethiye Ayral as Graduate Student Assistant in Orthopedic Surgery, for three months, beginning June 12;

Colin H. Bolton, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1;

Dr. Kusum P. Dalal as Research Fellow in Pathology, assigned to Cytology;

Harold M. Flowers, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1;

Dr. Carlos M. Garrido as Research Fellow in Pathology for one year, beginning September 1;

Dr. Mithat Ilhan as Research Fellow in Neurology, assigned to the Electroencephalographic Laboratory, for one year, beginning July 1;

Dr. Kamnuan Kachachiva as Graduate Student Assistant in Orthopedics, for the period July 14 through October 13;

Henry A. Leon, Ph.D. as Research Fellow in Pathology for one year, beginning June 1;

Nancy K. Mello, Ph.D. as Research Fellow in Psychology for one year, beginning July 1;

Dr. Arif Poryali as Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. Martinez E. Rosas as Graduate Student Assistant in Orthopedics, for three months, beginning July 11;

Dr. Hiroshi Shida as Research Fellow in Surgery, for the period July 5 through September 30;

Marvin Snider, Ph.D. as Research Fellow on the Children's Service for one year, beginning July 1;

Kathleen Stratton, Ph.D. as Assistant Physicist (Medicine) for one year, beginning September 1;

Dr. Julius W. Taylor as Graduate Student Assistant in Orthopedics, for a period of two months, beginning August 1;

Dr. Toshiji Umezawa as Research Fellow in Radiology, beginning September 1;

Sylvia D. Wittkower, M.S. as Research Fellow in Psychology, in the Department of Psychiatry, for one year, beginning September 1.

* * *

THE JAMES HOWARD MEANS METABOLIC RESEARCH LABORATORIES

The dedication of our James Howard Means Metabolic Research Laboratories, given in memory of Aimee and Winthrop Sargent, took place on June 7. During a luncheon, served in Bartlett Hall, three speakers addressed the invited guests: Mr. Phillips Ketchum, President of the MGH Corporation, who presided over the ceremonies; the Right Reverend Henry Knox Sherrill, Honorary Chairman of our 150th Anniversary Program and past President of our Board of Trustees; and Dr. C. Sidney Burwell (*W.M.* 1919), Samuel A. Levine Professor of Medicine, *Emeritus*, and Special Consultant to the Dean of the Faculty of Medicine, Harvard University.

Dr. Burwell, the principal speaker, paid the following tribute to Dr. Means:

It is a great pleasure to participate in a ceremony that establishes these laboratories as a center of light and learning, and that attaches to it the name of James Howard Means, also a source of light and learning.

Before I speak about the qualities of James Howard Means and about the significance of these laboratories, I want to make a brief apology. It is in the form of a story, and, I am afraid, a well-known one, but it is highly relevant. It concerns my friend and colleague, the Dean of the Harvard Law School, who, contemplating the recent migration from that School to service in Washington, is said to have remarked plaintively, "Old Deans never die; they just lose their faculties."

This occasion is to dedicate and to name the James Howard Means Metabolic Research Laboratories, given in memory of Aimee and Winthrop Sargent. It is a wise thing to put such a broad definition on the function of the laboratories. No one can tell what new avenues of research will open, and therefore a fundamental principle of wise organization is to install flexibility of purpose in such laboratories as these, so that the workers in them can follow their problems where they take them, or so that new types of workers may be sought. This kind of freedom is a priceless asset for an investigator, and it ought not to be limited by restrictive titles of laboratories or of special fields in medicine.

Let us turn our attention now to the individual in whose honor these laboratories are named—James Howard Means. In general, one can say that doctors in academic medicine do four things: they take responsible care of patients; they advance knowledge through research; they teach their successors; and they do the administrative work necessary to the organization of all of these activities. Throughout his professional life in the Harvard Medical School and the Massachusetts General Hospital, Dr. Means has taken care of patients, and after his statutory retirement from these institutions in 1951 he played an important role in the Health Service at the Massachusetts Institute of Technology. His own research has been imaginative, solid, and based on physiology. He has taught students, house officers, and colleagues more by example than by formal instruction. I well remember that some years ago I sought a demonstration of the art of history-taking for the introductory course in Medicine in the second year. Dr. Means came to the classroom and interviewed a patient whom he had never seen. On the basis of his skillful questioning, his equally skillful reasoning, and his careful listening, he arrived at a picture of the patient, of the environment in which the patient lived, and of the disease from which she suffered. I suspect that the second year students were as impressed as I was.

He has been active and successful in administration, both in the Hospital and in the Medical School. He was made the Jackson Professor of Medicine at the age of 38 and was a senior statesman in the Faculty from then until his retirement, functioning as an active, working, communicating member of the Faculty and of many of its most important committees. Many of you here know well the role that he has played in the organization and development of the Massachusetts General. Thus we can say that he has had distinguished careers in these areas of patient care, of research, of teaching, and of administration.

However, no one who knows of him would think of limiting his careers to these. Quite aside from his admirable book, *Thyroid disease*, and his long list of scientific articles, he is a distinguished author. He has written *Doctors, people, and government;* he has written a fine history of *Ward IV;* and he has recently published an enchanting history of the Association of American Physicians, obviously written with the greatest pleasure on his part, and, as I can attest, read with the greatest pleasure by those who have taken part in that great society. I think I can visualize Dr. Means sitting at his desk, plunging happily into the writing of this history. It is a pleasure to think of someone actually enjoying writing, especially for those of us to whom writing is difficult and who can think of a hundred reasons for postponing it.

The artistic quality of this book reminds me of another career of Dr. Means, namely, his admirable career in painting. Here is another creative activity through which he has expressed his vigorous personality in fascinating interpretation of the visible world.

My own acquaintance with Dr. Means covers many types of experience. When I was a medical student he was a teacher; when I was a house pupil at the M.G.H. he was one of the productive and influential people in the laboratory and the clinic. He was studying metabolism in his laboratory when I was learning about the electrocardiogram in Dr. White's laboratory. I remember running up and down stairs as a subject for Dr. Means's studies of oxygen consumption. I think it was to find out why I was thin and other house officers were fat. We have had a long association as colleagues in the Faculty of Medicine and now we have a highly agreeable association in our retirement.

On the basis of all these types of experience and of certain other extracurricular evidence as well, I have certain conclusions about his career and about his qualities. His career seems to be characterized by excellence of original equipment, excellence of training, and excellence of performance. As to his qualities, there is one unique quality in James Howard Means—a salient characteristic. I think the word for this is *gusto*. He qualifies for this term in almost all of the meanings given by Webster and by the Oxford dictionary: keen or zestful appreciation; high relish or enjoyment; artistic style; aesthetic perception; lofty spirit or taste; appreciation of flavor. (Dr. Means has retired from the Harvard Medical School, from the Massachusetts General Hospital, and from the Massachusetts Institute of Technology, but I am not able to describe him as a naturally retiring man.)

Now as to the laboratories. It has been pointed out to me that the James Howard Means Metabolic Research Laboratories are located in the cellar of the Bulfinch Building. Nothing could be more suitable. The cellars of hospitals are in general the areas where research activities germinate (like mushrooms), and the cellar of the Bulfinch is a place where the wine of research goes through the gradual metabolic evolution that makes good wine and sound knowledge.

It is pleasant to think that the name of James Howard Means will continue to be associated with productive research in the field of metabolism. Several years ago, in a Foreword to Dr. Means's book on *Ward IV*, I wrote these words:

"When one contemplates the history of research in general, in industry, and in medicine, it appears that there are advantages to having research on a broad spectrum going on in a group of people where communications are good and where ideas can be exchanged. It is particularly good to have what is called basic or fundamental research going on in the same place as applied research. It has been learned that ideas developing at any point of this spectrum may illuminate other parts. Fundamental advances may be transferred into application. Observations in practical situations may have implications for the understanding of fundamental problems."

It seems obvious from what I know of the institutions concerned that these principles are going to be applied in these laboratories. One can be confident that basic information concerning metabolic phenomena will be produced by its workers. One can be sure also that matters immediately applicable to the study and care of patients will emerge. Therapeutic advances based on physiology will help patients to health. I am sure that diagnostic procedures will be devised; but, knowing that the people who will work in these laboratories will have an adequate historical background, I am confident that in spite of the name of the laboratories none of the diagnostic procedures will be labeled "the Means test".

It has been said that if you want your name remembered you had better arrange to have a mountain or a river named for you. It seems to me quite as permanent and a great deal more suitable that the name of James Howard Means should be perpetuated in a laboratory for metabolic research. In such a laboratory his qualities of scholarship, enthusiasm, and originality, appearing as we hope they will in his successors, will contribute to the continuing and beneficent progress of medicine.

The laboratories were open for inspection from two to four-thirty on the afternoon of the dedication day.

* * *

THE MILDRED M. BURGIN HOUSE OFFICERS' LIBRARY OF THE CHILDREN'S SERVICE

This library was given in memory of Mrs. Mildred M. Burgin by her family and friends in order to perpetuate her very deep interest in the welfare of the house staff of the Children's Service.

This library, which is attractively furnished, is located on the 4th floor of the Burnham-Vincent Building, and is frequently used for conferences and study by those working on the Burnham floors.

Anyone wishing to contribute to the support of this library may do so by adding to the "Mildred M. Burgin House Officers' Children's Service Library Fund".

* * *

A cable address for Massachusetts General Hospital has been registered with Western Union Telegraph Company. It is the one-word address "MASSGENRAL", and henceforth any cable addressed to Massgenral Boston will be delivered to Fruit Street.

It is important that this be known in order to be of value.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biological Chemistry

Hatch, F. T., Larrabee, A. R., Cathou, R. E., and Buchanan, J. M.
Enzymatic synthesis of the methyl group of methionine. I. Identification of the enzymes and cofactors involved in the system isolated from *Escherichia coli.*
J. Biol. Chem. 236:1095.

Takeyama, S., Hatch, F. T., and Buchanan, J. M.
Enzymatic synthesis of the methyl group of methionine. II. Involvement of vitamin B_{12}.
J. Biol. Chem. 236:1102.

Endoscopy

Benedict, E. B.
Benign stenoses of the esophagus.
Am. J. Digest. Dis. 6:570.

General Surgery

Kestens, P. J., and McDermott, W. V., Jr.
Perfusion and replacement of the canine liver.
Surgery 50:196.

Long, R. T., and Cope, O.
Emotional problems of burned children.
New England J. Med. 264:1121.

Laboratory Science

Bürgi, W., Schmid, K.
Preparation and properties of Zn-α_2-glycoprotein of normal human plasma.
J. Biol. Chem. 236:1066.

Gitlin, D., Schmid, K., Earle, D. P., and Givelber, H.
Observations on double albumin. II. A peptide difference between two genetically determined human serum albumins.
J. Clin. Invest: 40:820.

Kamiyama, S., and Schmid, K.
Partial elucidation of the oligosaccharide chains of the human barium α_2-glycoproteins.
Biochim. et biophys. acta 49:250.

Morgan, W. S., and Hultin, T.
In vivo and *in vitro* distribution of labeled amino acids in soluble protein fractions of rat liver as shown by column chromatography.
Exp. Cell Res. 23:431.

Schmid, K.
Les globulines sériques du système gamma. Leur nature et leur pathologie. By J. Heremans.
J. Am. Chem. Soc. 83:2026.

Schmid, K., and Binette, J. P.
Polymorphism of α_1-acid glycoprotein.
Nature, London 190:630.

Physiology

Meyer, C. J., Wurtman, R. J., Altschule, M. D., and Lazo-Wasem, E. A.
The arrest of prolonged estrus in "middle-aged" rats by pineal gland extract.
Endocrinology 68:795.

Psychiatry

Beecher, H. K.
Surgery as placebo: A quantitative study of bias.
J.A.M.A. 176:1102.

Benda, C. E.
"Narcissism" in psychoanalysis and the "love of oneself" in existential psychotherapy.
Dis. Nerv. Syst. 22:69.

Klein, D. C., and Lindemann, E.
Preventive intervention in individual and family crisis situations.
In Prevention of mental disorders in children, Gerald Caplan, Editor, New York, Basic Books, chap. 13.

Lindemann, E., and Felsinger, J. M.
Drug effects and personality theory.
Psychopharm. 2:69.

Sifneos, P. E.
Dynamic psychotherapy in a psychiatric clinic.
In Current psychiatric therapies, New York, Grune & Stratton, Inc., part 6, p. 168.

Weisman, A. D., and Hackett, T. P.
Predilection to death: Death and dying as a psychiatric problem.
Psychosom. Med. 23:232.

Books

Benda, C. E.
The image of love: Modern trends in psychiatric thinking.
New York, Free Press of Glencoe, Inc.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Acts and resolves passed by the General Court of Massachusetts in the year 1960.
Boston, 1961.
(1Ah)

Allen, A. W., and Barrow, D. W. (Editors)
Abdominal surgery.
New York, Paul B. Hoeber, Inc., 1961.
(23R)

American Medical Association.
American Medical Directory, ed. 21.
Chicago, American Medical Association, 1961.
(1E)

Bacq, Z. M., and Alexander, P.
Fundamentals of radiobiology, ed. 2.
New York, Pergamon Press, 1960.
(36Jn)

Begg, R. W. (Editor)
Canadian cancer conference, vol. 4.
New York, Academic Press, Inc., 1961.
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Bibliotheca Paediatrica, fasc. 75-77.
Communications XVIIIème Congrès de l'Association des Pédiatries de Langue Française, Genève, 16, 17 et 18 Mai 1961.
Bâle (Suisse), S. Karger, 1961.
(26A)

Blades, B. B. (Editor)
Surgical diseases of the chest.
St. Louis, The C. V. Mosby Company, 1961.
(23Q)

Bock, K. D., and Cottier, P. T. (Editors)
Essential hypertension; an international symposium.
Berlin, Springer, 1960.
(15D)

Bourne, G. H., and Danielli, J. F. (Editors)
International review of cytology, vol. 11.
New York, Academic Press, Inc., 1961.
(2Am)

Caffey, J. P.
Pediatric x-ray diagnosis, ed. 4.
Chicago, The Year Book Publishers, Inc., 1961.
(7R)

Calmon, D., and Kressman, T. R. E. (Editors)
Ion exchangers in organic and biochemistry.
New York, Interscience Publishers, Inc., 1957.
(5A)

Cell physiology of neoplasia. A collection of papers presented at the 14th annual symposium on fundamental cancer research, 1960.
Austin, University of Texas Press, 1961.
(13V)

Ciba Foundation Study Group No. 7.
Virus meningo-encephalitis, edited by G. E. W. Wolstenholme and M. O'Connor.
Boston, Little, Brown and Company, 1961.
(9B)

Ciba Foundation Study Group No. 8.
Problems of pulmonary circulation, edited by A. V. S. de Reuck and M. O'Connor.
Boston, Little, Brown and Company, 1961.
(15F)

Ciba Foundation Symposium on the nature of sleep, edited by G. E. W. Wolstenholme and M. O'Connor.
Boston, Little, Brown and Company, 1961.
(19P)

Ciba Foundation Symposium on quinones in electron transport, edited by G. E. W. Wolstenholme and C. M. O'Connor.
Boston, Little, Brown and Company, 1961.
(5Y)

Clark, R. L.
Cancer chemotherapy.
Springfield, Ill., Charles C. Thomas, 1961.
(13V)

Clark, R. L., and Cumley, R. W. (Editors)
The yearbook of cancer, 1960-61 series.
Chicago, The Year Book Publishers, Inc., 1961.
(13V)

Cutting, W. C. (Editor)
Annual review of pharmacology, vol. 1.
Palo Alto, Annual Reviews, Inc., 1961.
(22C)

d'Abreu, A. L.
A practice of thoracic surgery, ed. 2.
London, Edward Arnold (Publishers) Ltd., 1959.
(23Q)

Daley, R. (Editor)
Progress in clinical medicine.
Boston, Little, Brown and Company, 1961.
(7A)

Davenport, H. W.
ABC of acid-base chemistry, ed. 4.
Chicago, University of Chicago Press, 1958.
(5Am)

Dittmer, D. S. (Editor)
Blood and other body fluids.
Washington, D.C., Federation of American Societies for Experimental Biology, 1961.
(14A)

East, T., and Bain, C.
Recent advances in cardiology, ed. 5.
Boston, Little, Brown and Company, 1959.
(15E)

Experimental Cell Research, suppl. 8.
Cell movement and cell content, edited by R. J. C. Harris.
New York, Academic Press, Inc., 1961.
(2Am)

Freud, S.
Standard edition of the complete psychological works, vols. 19 and 21.
London, The Hogarth Press, 1961.
(19Op)

Garland, J., and Stokes, J., III.
The choice of a medical career. Essays on the fields of medicine.
Philadelphia, J. B. Lippincott Company, 1961.
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Greep, R. O., and Talmadge, R. V.
The parathyroids.
Philadelphia, W. B. Saunders Company, 1961.
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Gunsalus, I. C. (Editor)
The bacteria, vol. 2.
New York, Academic Press, Inc., 1960.
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Hayden, A. C., and Thompson, E. T. (Editors)
Standard nomenclature of diseases and operations, ed. 5.
New York, McGraw-Hill Book Company, Inc., 1961.
(8B)

Heald, P. J.
Phosphorous metabolism of brain.
New York, Pergamon Press, 1960.
(19J)

Henry Ford Hospital International Symposium.
Blood platelets, edited by S. A. Johnson and others.
Boston, Little, Brown and Company, 1961.
(14Am)

Hollaender, A. (Editor)
Radiation protection and recovery.
New York, Pergamon Press, 1961.
(23Z)

Kellogg (W. K.) Foundation, Battle Creek, Mich.
The first twenty-five years; the story of a foundation.
Battle Creek, W. K. Kellogg Foundation, 1959.
(1Af)

Lowman, C. L.
Abdominal fascial transplants.
Ann Arbor, Edwards Brothers, Inc., 1954.
(23N)

Luck, J. M. (Editor)
Annual review of biochemistry, vol. 30.
Palo Alto, Annual Reviews, Inc., 1961.
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Luisada, A. A. (Editor)
Cardiology, vol. 5.
New York, McGraw-Hill Book Company, Inc., 1961.
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McLean, F. C., and Urist, M. R.
Bone; an introduction to the physiology of skeletal tissue, ed. 2.
Chicago, University of Chicago Press, 1961.
(18C)

The Merck manual, ed. 10.
Rahway, N. J., Merck and Company, Inc., 1961.
(6G)

Miller, G. E. (Editor)
Teaching and learning in medical school.
Cambridge, Mass., Harvard University Press, 1961.
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Nemiah, J. C.
Foundations of psychopathology.
New York, Oxford University Press, 1961.
(19O)

Nord, F. F. (Editor)
Advances in enzymology, vol. 23.
New York, Interscience Publishers, Inc., 1961.
(5C)

Spiegel, E. A. (Editor)
Progress in neurology and psychiatry, vol. 16.
New York, Grune & Stratton, 1961.
(19S)

Reddish, G. F.
Antiseptics, disinfectants, fungicides and chemical and physical sterilization, ed. 2.
Philadelphia, Lea & Febiger, 1957.
(22Ec)

Rytand, D. (Editor)
Annual review of medicine, vol. 12.
Palo Alto, Annual Reviews, Inc., 1961.
(1J)

Soffer, L. J., and others.
Human adrenal gland.
Philadelphia, Lea & Febiger, 1961.
(14T)

Somers, H. M., and Somers, A. R.
Doctors, patients and health insurance.
Washington, D.C., The Brookings Institute, 1961.
(36N)

Squibb product reference for the medical profession.
New York, E. R. Squibb & Sons, 1961.
(22A)

Stewart, C. P.
Toxicology; mechanisms and analytical methods, vol. 2.
New York, Academic Press, Inc., 1960.
(34N)

Turakulov, Ya. Kh.
The metabolism of iodine and the thyroid hormone.
Tashkent, Academy of Sciences of the Uzbek SSR, 1959.
(5M)

Woodruff, M. F. A.
Transplantation of tissue and organs.
Springfield, Ill., Charles C. Thomas, 1960.
(23N)

Yearbook of the Royal Society of London, 1961.
London, Royal Society of London, 1961.
(1R)

New addresses:

Dr. Arthur F. Amick (*M.* 1957), 3900 Elliot Ave., Minneapolis 7, Minn.

Dr. Elroy E. Anderson (a.r.p. *C.M.* 1960), 84 Ocean Ave., Bass River, Mass.

Dr. Stanley H. Appel (*M.* 1961), Mount Sinai Hospital, New York, N. Y.

Dr. Arturo L. Aranas (r.p. *Psychiat.* (*McL.*) 1961), Ste. Anne's Hospital, Ste. Anne de Bellevue, Quebec, Canada

Dr. A. Robert Arnstein (*M.* 1956), 838 Fremont St., Menlo Park, Calif.

Dr. H. James Bagnall (clin. & res. fel. *N.S.* 1957), 267 O'Connor St., Ottawa 4, Ontario, Canada

Dr. Louis Bakay (sr. r.s. *N.S.* 1951), Edward J. Meyer Memorial Hospital, 462 Grider St., Buffalo 15, N. Y.

Dr. Paul H. Black (*M.* 1957), National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, Md.

Dr. Maurice J. Boivin, MC, USAF (a.r.p. *An.* 1961). 48th Tactical Hospital, APO 170, c/o Postmaster, New York, N. Y.

Dr. Irving D. Bornstein (a.r.p. *D.* 1961), Veterans Administration Hospital, Downey, Ill.

Dr. William R. Buchanan, Jr. (*C.M.* 1955), 9 Green Way Lane, Greenfield, Mass.

Dr. Charles E. Burden (a.r.p. *C.M.* 1961), Children's Medical Center, 300 Longwood Ave, Boston, Mass.

Dr. E. Murray Burns (r.p. *Psychiat.* 1935), 1920 N.W. Johnson St., Portland 9, Oreg.

Dr. Robert W. Carey (*M.* 1960), Veterans Administration Hospital, 150 S. Huntington Ave., Jamaica Plain, Mass.

Dr. Thomas A. Carey (a.r.p. *R.* 1961), 1696 Monaco Parkway, Denver, Colo.

Dr. James R. Carter, Jr. (*M.* 1960), National Institutes of Health, Bethesda, Md.

Dr. John W. Cass, Jr. (*W.M.* 1931), 87 Chestnut St., Boston, Mass.

Dr. Robert W. Chamberlin, Jr. (a.r.p. *C.M.* 1959), Johns Hopkins Hospital, Baltimore 5, Md.

Dr. Fletcher H. Colby (*W.S.* 1920), 27 Chestnut St., Brookline 46, Mass.

Dr. David L. Collins, Jr. (*S.* 1955), Professional Bldg., Kannapolis, N. C.

Dr. Richard R. Curtin (*S.* 1953), Exeter Clinic, 75 Front St., Exeter, N. H.

Dr. John R. David (*M.* 1956), New York University Medical School, New York, N. Y.

Dr. John M. Davis (*C.M.* 1961), 100 York St., New Haven, Conn.

Dr. Luis L. de Mola (a.r.p. *Path.* 1960), Alcanfores 999, Miraflores, Lima, Peru

Dr. Edward B. Dewey (*E.S.* 1921), P.O. Box 2029, Pebble Beach, Calif.

Dr. Richard G. Eaton (a.r.s. *Or.* 1961), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Karl Engelman (*M.* 1960), National Heart Institute, National Institutes of Health, Bethesda, Md.

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Dr. Dana L. Farnsworth (*W.M.* 1935), 75 Mount Auburn St., Cambridge 38, Mass.

Dr. Lloyd A. Ferguson (*M.* 1961), University of Chicago School of Medicine, Chicago, Ill.

Dr. William J. Foley (clin. fel. *Path.* 1960), University Hospital, Ann Arbor, Mich.

Dr. Hugh F. Folsom (*W.M.* 1931), East Dover, Vt.

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Dr. Gordon G. Globus (r.p. *Psychiat.* (*McL.*) 1961), Boston University-Massachusetts Memorial Hospitals Medical Center, 750 Harrison Ave., Boston, Mass.

Dr. Leon I. Goldberg (*M.* 1957), Emory University, Emory University, Ga.

Dr. Charles P. Gore (a.r.p. *Psychiat.* 1952), Dunollie, Station Rd., Menston, Ilkley, England

Dr. Jack J. Greenberg (*S.* 1957), United Leeds Hospitals, Leeds, England

Capt. Paul F. Griner, MC, USAF (*M.* 1960), Base Hospital, Andrews Air Force Base, Washington, D.C.

Dr. G. Edmund Haggart (*W.M.* 1920), Jordan Hospital, Plymouth, Mass.

Dr. James C. Healey (r.p. *Psychiat.* (*McL.*) 1961), Mental Health Dept., State Capitol Bldg., Hartford, Conn.

Dr. Jimmie C. B. Holland (r.p. *Psychiat.* 1955), Edward J. Meyer Memorial Hospital, 462 Grider St., Buffalo 15, N. Y.

Dr. James R. Hughes (*M.* 1961), Boston City Hospital, 818 Harrison Ave., Boston, Mass.

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Dr. Richard B. Kearsley (*C.M.* 1954), Massachusetts General Hospital, Boston 14, Mass.

Dr. Arthur S. Keats (a.r.p. *An.* 1951), 1801 Allen Parkway, Houston 3, Tex.

Dr. Walter E. Klingensmith (*S.* 1955), Becklev Memorial Hospital, Beckley, W. Va.

Dr. David Korn (*Path.* 1960), National Institute of Arthritis and Metabolic Disease, National Institutes of Health, Bethesda, Md.

Dr. David J. Lang (a.r.p. *C.M.* 1961), National Institutes of Health, Bethesda, Md.

Dr. John D. Leidholt (a.r.s. *Or.* 1952), 1855 Gaylord St., Denver 6, Colo.

Dr. Raphael H. Levey (*S.* 1960), National Institutes of Health, Bethesda, Md.

Dr. Marvin M. Lipman (r.p. 1959), Scarsdale Medical Center, 259 Heathcote Rd., Scarsdale, N. Y.

Dr. Charles F. McKhann, III (*S.* 1956), Karolinska Institute, Stockholm, Sweden

Capt. Robert W. Mackie, MC, USN (sr. r.s. *N.S.* 1954), U.S. Naval Hospital, Bethesda 14, Md.

Dr. Clarence N. McPeak (r.p. *R.* 1929), 15 Brown Ave., Fitchburg, Mass.

Dr. John W. Madden (*S.* 1959), 3904 Spruce St., Philadelphia, Pa.

Dr. Mart Mannik (*M.* 1960), Rockefeller Institute for Medical Research, 66th and York Ave., New York, N. Y.

Dr. A. Gedeon Matoltsy (assoc. biol. *D.* 1957), Dept. of Dermatology, Boston University School of Medicine, 80 E. Concord St., Boston 18, Mass.

Dr. Chaim I. Mayman (r.p. *N.* 1961), c/o Dr. Lowry, Washington University School of Medicine, St. Louis, Mo.

Dr. Harold I. Meyer (r.s. *W.S.* 1925), 1753 W. Congress Parkway, Chicago 12, Ill.

Dr. William L. Miller (a.r.p. *Path.* 1961), Louisville General Hospital, Louisville, Ky.

Dr. J. Bradford Millet (*W.S* 1943), 1624 Genesee St., Utica, N. Y.

Dr. John T. Monroe, Jr. (*M.* 1956), Dept. of Psychiatry, University of North Carolina School of Medicine, Chapel Hill, N. C. (as of Oct. 24)

Dr. Donald M. Muirhead, Jr. (*C.M.* 1960), Boston City Hospital, 818 Harrison Ave., Boston, Mass.

Dr. Eugene R. Nobles, Jr. (*S.* 1955), Sanders Clinic, Baptist Medical Bldg., Memphis, Tenn.

Dr. Joe R. Norman (clin. & res. fel. *M.* 1961), Medical College of Alabama, Birmingham, Ala.

Dr. Herman A. Osgood (h.p. *R.* 1919), Josiah B. Thomas Hospital, 15 King St., Peabody, Mass.

Dr. Renée B. O'Sullivan (a.r.p. *C.M.* 1957), New York Hospital-Cornell Medical Center, New York 21, N. Y.

Dr. Hugo M. Palazzi (clin. & res. fel. *S.* 1959), Casilla Correo 16, Cochabamba, Bolivia

Dr. José A. Pangáro (clin. fel. *M.* 1961), Santa Fe #1425, Buenos Aires, Argentina

Dr. Geraldine M. Peiffer (a.r.p. *An.* 1957), 5217 Hohman Ave., Hammond, Ind.

Dr. Hart deC. Peterson (a.r.p. *C.M.* 1961), University of Washington School of Medicine, Seattle, Wash.

Dr. John D. Pitts (*S.* 1950), 110 Lockwood St., Providence 2, R. I.

Dr. Alexander Polak (a.r.p *Path.* 1961), University of Washington School of Medicine, Seattle 5, Wash.

Dr. Sam M. Powell, Jr. (a.r.p. *C.M.* 1947), Jefferson Medical Group, 811 S. 20th St., Birmingham, Ala.

Dr. Richmond Prescott (*M.* 1960), West Roxbury Veterans Administration Hospital, 1400 Veterans of Foreign Wars Parkway, West Roxbury, Mass.

Dr. Stuart E. Price, Jr. (*S.* 1955), Peoples East End Bldg., Pittsburgh, Pa.

Dr. Alphonse M. Prus (c.r.p. *An.* 1961), Grace Hospital, 4160 John R St., Detroit, Mich.

Dr. John B. Robbins (*C.M.* 1960), University of Florida College of Medicine, Gainesville, Fla.

Dr. Paul S. Russell (*S.* 1949), Columbia-Presbyterian Medical Center, New York, N. Y.

Dr. Farrokh Saidi (a.r.s 1960), Nemazee Hospital, Shiraz, Iran

Dr. Edgar J. Schoen (a.r.p. *C.M.* 1954), University of Utah College of Medicine, Salt Lake City, Utah

Dr. Richard E. Senghas (sr. r.s. *Or.* 1961), 40 Evergreen St., Framingham, Mass.

Dr. Irwin I. Ship (*Dn.* 1957), Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa.

Dr. Harold Simon (r.p. *R.* 1961), New England Center Hospital, 171 Harrison Ave., Boston 11, Mass.

Dr. Jack Spencer (r.p. *R.* 1934), Union Hospital, Fall River, Mass.

Dr. David Spiro (a. path. 1960), Columbia University College of Physicians and Surgeons, 630 W. 168th St., New York, N. Y.

Dr. James H. Stempien (*Dn.* 1960), 328 Washington St., Wellesley Hills, Mass.; 29 Commonwealth Ave., Boston, Mass.

Dr. William G. Stewart, Jr. (*S.* 1960), Children's Medical Center, 300 Longwood Ave., Boston, Mass.

Dr. Joseph F. Stocks (a.r.p. *C.M.* 1961), 67 Silver St., Waterville, Maine

Dr. Alan A. Stone (r.p. *Psychiat.* (*McL.*) 1958), McLean Hospital, Belmont, Mass.

Dr. Louis W. Sullivan (clin. fel. & acting r.p. *Path.* 1961), Boston City Hospital, Boston, Mass.

Dr. Chung-Chang Tan (*Or.* 1943), 1951 N. Fresno St., Fresno 3, Calif.

Dr. Nathan S. Taylor (clin. & res. fel. and acting a.r.p. *Path.* 1961), Beverly Hospital, Beverly, Mass.

Dr. William M. Thurlbeck (a.r.p. *Path.* 1958), Dept. of Pathology, McGill University, Montreal, Canada

Dr. John D. Turner (*M.* 1957), National Heart Institute, National Institutes of Health, Bethesda, Md.

Dr. John Urquhart, III (*S.* 1960), National Institutes of Health, Bethesda, Md.

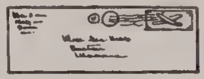
Dr. Frederick H. Verhoeff (cons. c. *Oph.*), 252 Pleasant St., Marblehead, Mass.

Dr. William R. Waddell (*W.S.* 1944), University of Colorado School of Medicine, Denver, Colo.

Dr. James P. Whittemore (*C.M.* 1946), 2330 N.W. Flanders St., Portland 10, Oreg.

Irving Wolf, Ph.D. (assoc. psychol.), Dept. of Psychology, Boston University, 308 Bay State Rd., Boston, Mass.

LCDR Edwin T. Wyman, Jr., MC, USN (sr. r.s. *Or.* 1960), Quarters G, U.S. Naval Hospital, Camp Lejeune, N. C.



Brief bits:

Dr. Edward B. Benedict attended the meetings of the American Gastroscopic Society and the American Gastroenterological Association in Chicago last May. He also attended the Editorial Board luncheon for *Gastroenterology.*

On the final day of the 74th annual meeting of the American Orthopaedic Association, held last May, Dr. Edwin F. Cave, president of the Association, announced the adoption of the following resolution: "That the American Orthopaedic Association go on record . . . as approving such an international program as will bring about a better mutual understanding among the physicians of the world, and a well-planned program of international medical research." Dr. Howard A. Rusk, in an article which appeared in the *New York Times* of May 28, said, "This was an unprecedented action of real significance. It expressed succinctly the recognition by these leaders in American medicine that the problems of health and medical research know no national boundaries."

Dr. Edward D. Churchill was one of the two speakers at a joint luncheon of the Harvard Foundation for Advanced Study and Research and the Law School Alumni Association, during the Harvard graduation exercises last June.

Dr. Allan L. Friedlich was elected president of the Massachusetts Heart Association's Greater Boston Chapter at the annual meeting of the organization, held last June.

Dr. Oscar Hirsch has been awarded a grant by the Massachusetts Division of the American Cancer Society, for a continuation of his research on malignancies in pituitary tumors during 1961.

Dr. Daniel J. Holland assumed his duties as

No. 97 in a series of Staff photographs

Dr. Edwin M. Cole, Neurologist—Head of the Language Clinic and the Cortical Function Test Laboratory

president of the Harvard Dental Alumni Association at the annual reunion of the Association, held last June.

Dr. John H. Knowles delivered three lectures which we have just learned about. On February 16 he spoke at the Cardiovascular Symposium of the Richmond Area Heart Association on "The pathophysiology of the pulmonary circulation in primary lung disease"; on February 18, at the University of Texas School of Medicine, Galveston, he lectured on the same subject; and on April 25 he addressed the House Officers' Association at Boston City Hospital on "The aging lung and emphysema".

Dr. George L. Nardi attended the Dijkzigt Conference, held in Rotterdam, Holland, last May. He addressed the Conference on the subject "A twenty-year review of thromboembolism at the Massachusetts General Hospital—1939-1959".

Dr. Carter R. Rowe was the guest speaker on the Orthopaedic Section at the meeting of the Medical Society of the State of New York, held on May 10. His paper was entitled "The management of osteomyelitis following fractures of the extremities".

Dr. Walter T. St. Goar gave a lecture to the Lahey Fellows at Lahey Clinic on May 10. His subject was "Diagnosis of osteoporosis". On June 6, at Emerson Hospital in Concord he spoke on "Pseudohypoparathyroidism".

Dr. C. Norman Shealy, Assistant Resident in Neurosurgery, left early in April for a 9-months' sojourn in Australia. He will be working in neurophysiology at the Australian National University in Canberra, under Sir John Eccles.

Dr. Lamar Soutter is now Area Chief of Surgery at the Veterans Administration Area Medical Office, 330 Stuart St., Boston.

Dr. Joseph Stokes, III, has gone to Hawaii for five years. He will be Director of Medical Education at Queen's Hospital, 1301 Punchbowl St., Honolulu 13, Hawaii.

Dr. Richard H. Sweet was elected president of the American Association for Thoracic Surgery, for the ensuing year, at the Annual Meeting of the Association, held last April.

Dr. Grantley W. Taylor read a paper at the 10th Middle East Medical Assembly, held in Beirut, Lebanon, while he was on a State Department tour. His subject was "Carcinoma of the breast". On April 28, Dr. Taylor spoke on "Relationship of liver dysfunction to the development of mouth cancer" at the Strasburger Conference, held at Memorial Hospital in New York.

Dr. Thomas V. Urmy (*E.M.* 1928), director of health at Williams College since 1946, was installed as president of the American College Health Association on April 29.

As part of its continuing program to educate physicians and future physicians about myasthenia gravis, the MG Foundation will again this year sponsor a series of research scholarships for promising young medical students. Eight outstanding students will receive awards, named for the founder of the first MG Clinic at Massachusetts General, Dr. Henry R. Viets. Their work will be carried out during vacation months.

Dr. William R. Waddell has been appointed professor and chairman of the Department of Surgery in the University of Colorado School of Medicine.

Mr. John B. Rideout, Administrative Assistant to Mr. Joseph W. Degen since 1955, resigned his position on July 31, to accept an appointment as Director of Nurses at Danvers State Hospital. Mr. Rideout is well equipped for his new duties. He is a graduate of McLean Hospital School of Nursing and has a B.S. degree from Boston University School of Nursing. Before coming to M.G.H. he served as Head Nurse and Supervisor and Clinical Instructor at McLean, and was Assistant Director of Nurses at Spring Grove State Hospital in Catonsville, Maryland.

Mr. Donald Withee, Director of our Photography Laboratory since 1952, resigned his position on July 6, to become Head of Medical Photography at the Scripps Clinic and Research Foundation in La Jolla, California.

Mr. Withee and his family drove out to the West Coast, camping on the way and planning to continue to camp out until he finds a house in a section of La Jolla which overlooks the ocean.

We happened to meet Mr. Withee just as he was driving out of the parking lot on his last day here. He said, "Please tell everybody at M.G.H. that I shall miss them all, and that I want to take this opportunity to thank all the doctors for the privilege of having been able to associate so pleasantly with them during these past few years. Also please tell all my friends at M.G.H. to drop in and say 'Hello' whenever they are in or near La Jolla."

A note from Dr. Chiu-chen Wang (r.p. *R.* 1952), written on July 10, says:

> As of the first of July, I shall be residing in Berkeley for a year. I wish to inform you of my new address, so we can keep in touch. It is Donner Laboratory, University of California, Berkeley 4, Calif.
>
> Please don't forget to mail me The News here. I have always enjoyed reading it and I don't want to lose track of my friends back home.

This interesting letter from Dr. Stuart Ragland, Jr., LCDR, MC, USN (*M.* 1951), was written from 791 Connell Drive, Cordova Park, Pensacola, Florida, and reads:

> Thank you for your letter of June 19 regarding my present status.
>
> On 3 January 1961 I accepted a commission as Lieutenant Commander, Medical Corps, United States Navy, and came to the Naval School of Aviation Medicine at NAS Pensacola, where I was designated a Naval Flight Surgeon on 23 June 1961. At my request I have been ordered to a refresher jet pilot course which should lead to designation as a Naval Pilot, so that I shall eventually have the title of Naval Aviator Flight Surgeon. It is anticipated that after this I will participate in the Man-Machine Test Program aspect of aerospace research, and hope it will mean that I shall eventually be the first physician into space.
>
> Although I am stationed at NAS Pensacola, it will probably be best to send The News to me at my home address as indicated on the letterhead above. Upon subsequent moves due notice will be sent to you for the necessary change of address.
>
> My very best to all my friends at M.G.H.

The News

No. 207 Boston, Mass. November 1961

On April 18, 1949, the Board of Trustees of the Massachusetts General Hospital announced the appointment of Dr. Dean A. Clark to the position of General Director of the Hospital, succeeding Dr. Nathaniel W. Faxon, who was retiring as Director after twenty years of association with the M.G.H.

Dr. Clark brought to the Hospital a long experience in public health. Since 1939 he had been a commissioned officer in the Regular Corps of the U.S. Public Health Service, reaching the rank of Surgeon, from which he took a leave of absence in 1945 to plan, develop, initiate, and administer the medical services of the Health Insurance Plan of New York. He took over the direction of the Hospital on October 1, 1949, moved with his family into the Resident Physician's House on the Hospital grounds, and plunged with a fresh approach into the torrent of MGH problems.

Almost immediately the plans for the new Research Building came off the architects' drawing boards and the structure began to rise on the northeast corner of the Hospital property, which necessitated Dr. Clark's moving with his family to Cambridge, where they have lived ever since. The Research Building was dedicated in May 1951, and at the dedication ceremonies Dr. Clark announced the 10-year plan of expansion and development of the Hospital, to culminate in the 150th Anniversary in 1961. The broad objectives of the 10-year plan are familiar to all of us at the M.G.H. Dr. Clark said at the dedication of the Research Building, "So that the Massachusetts General Hospital may be able in the future to continue to render the high standard of care of which we are rightfully proud, we must also have teaching; and to improve the effectiveness of our care and our teaching, we must have research. The three are inseparable in a hospital of this kind." He pointed out the need for $6,600,000 in additional endowment for patient care, in order to extend the charitable services of the Hospital. To strengthen teaching and research, the full-time medical and surgical staff would have to be enlarged if teaching and research, done in collaboration with the Harvard Medical School, were to be carried on and extended in the framework of the Hospital. To support these additional full-time men, the Hospital and Medical School together would require $7,500,000 in new endowment. In addition to a modest endowment for research, new buildings to replace some of the older ones at the Hospital were needed. Moderate expansion of clinical and basic research laboratories in the immediate future was also spelled out in considerable detail in the 10-year plan.

Following the Research Building, the new Nurses' Residence (Bartlett Hall) was completed in 1953. The Warren Building opened in 1956, providing new quarters for Pathology, Neurology, Dermatology, Psychiatry, and Neurosurgery, with added space for research activities. On top of these, five floors for doctors' offices were made available for the staff.

Besides the new construction, many older buildings were revamped. With a little paint, new floor covering, and new furniture, the old Out-Patient Department took on a new look. The Phillips House and Baker Memorial were extensively renovated, with new beds provided to make up for those which were sacrificed to the new Ambulatory X-ray in Baker. Several additions were made to the White Building for Anesthesia and Orthopedic Research; and the laboratories in the Bulfinch Building were extensively renovated and new ones provided for thyroid, allergy, hematology, and gastroenterology research. A significant improvement in patient care was made possible with a post-operative recovery room in the White Building. All this brought modifications in staff organization, a stronger administration, more advanced methods of accounting, and the delegation of administrative responsibilities to an administrative committee headed by Dr. Ellsworth T. Neumann, Administrator of the Hospital. In addition, the MGH Associates came into being.

During recent years, plans were developed for the implementation of the remaining elements in the 10-year plan. These were announced in 1959 as objectives for the 150th Anniversary. During the last eighteen months of Dr. Clark's administration, a sum of more than $11,000,000 for the implementation of the Anniversary Program has been assembled. This year, on the occasion of the 150th Anniversary, a Convocation was held at the Hospital, which focused national and international attention on the achievements of the M.G.H. during its 150 years. As Mr. Francis C. Gray, Chairman of our Board of Trustees, has said, "The President of the United States and the Governor of the Commonwealth, the press, radio and television, newspapers and magazines have singled out the Massachusetts General Hospital this year during the celebration of its 150th Anniversary with words of praise for its achievements during the past century and a half. We know the greatness of the M.G.H. lies in the sum of its parts; each doctor, each department, each laboratory and clinic contributes to the excellence of the Hospital."

In June of 1961, Dr. Clark offered his resignation, which was tabled until the meeting of the Board of Trustees on September 29. At that time, the resignation was accepted and the Trustees issued the following statement, "Dr. Dean A. Clark has tendered his resignation as General Director of the Massachusetts General Hospital, and it has been accepted. After time off for a vacation, he is planning to re-enter the field of Public Health. Dr. Clark has done many constructive things for the Massachusetts General Hospital during his twelve years as General Director, for which we are deeply grateful, and he will take with him the good will of us all."

D.C.C.
[David C. Crockett]

THE McLEAN HOSPITAL REHABILITATION CENTER

The ground breaking for the new Rehabilitation Center at McLean Hospital will soon take place, and the building will be completed by Christmas of 1962.

This will be the first new building for the use of patients at McLean in many years, and it is made possible as a result of contributions to the 150th Anniversary Drive and funds obtained from the United States Government under the Hill-Burton Hospital Construction Act. While some of the contemplated facilities already exist at the Hospital, centralizing them will help achieve a more integrated approach to the patient's treatment.

McLean was built on the present site between 1892 and 1895 for another age of psychiatric treatment, when achieving isolation and segregation of patients was thought to be a desirable goal. For many years, we have been trying to avoid as much as possible unnecessarily isolating patients from each other, their families, and the community; but when a patient is hospitalized it inevitably leads to some dislocation in interpersonal relationships. We encourage interaction between the patients, but this is handicapped somewhat by the distance separating the various areas which patients visit.

The idea underlying the Rehabilitation Center is that the hospitalized psychiatric patient in his course toward recovery and full participation in the life of his community needs opportunities for graduated participation in many different working and social situations. Prior to admission, the patient often took his work and past activities for granted, yet they played an important part in maintaining his emotional equilibrium. When hospitalization occurs, these meaningful relationships are to some extent interrupted, albeit temporarily, and this contributes to the feeling of estrangement and isolation which often complicates the emotional problems which necessitated the patient's admission in the first place.

While psychotherapy and family treatment have been the primary therapeutic tool at McLean Hospital, the need to make optimal use of the "other 23 hours in the day" has been recognized. Therefore, we have for many years also emphasized patient activities: social, vocational, educational, recreational, occupational, etc. These are seen not merely as filling up the time and relieving boredom, but as providing the patient with opportunities to acquire personal experiences in a variety of social situations, and providing substance to, as well as testing of, the psychotherapeutic work.

The Rehabilitation Center will consist of five major areas: the Occupational Therapy Area, the Library and Music Room, the Civic Center, the Day Care Center, and the Educational Department. The Patients' Library will be moved from its present location to the new building. The Music Room will be a great improvement on the present facilities, and will make the serious study and practice of music possible. The other three areas deserve special attention, as they make possible major additions to the treatment program.

Day Care Center

At present McLean has about fifty day patients who, under the supervision of a staff psychiatrist, come to the Hospital for periods varying from a few hours a week to several hours each day. While still living in the community, they participate in many of the daytime activities which the Hospital offers, as they did during their full-time hospitalization. The present facilities at McLean, however, have necessitated limiting this service to former in-patients of the Hospital; and due to lack of space, it has not been possible to make this treatment program available to patients admitted directly from the community.

Inquiries received from families, referring physicians, and potential patients lead us to believe that there is a demand for this kind of service in the community. Some people need the kind of treatment that only a hospital can provide, but need it only on a part-time basis. A patient will be admitted directly from the community to the Day Care Center, and over a period of a few days will receive a full psychiatric, medical, psychological, social, vocational, and educational evaluation (as indicated), often without having to spend more than a few hours a day at the Hospital. This would result in minimal dislocation of the patient's relationship to significant people in the home environment, such as family members and friends, as well as work colleagues. Upon completion of such an evaluation, a treatment program will be prescribed which may include psychotherapy, biological therapy, case work, educational and vocational rehabilitation, and a wide variety of activity therapies, as well as other psychiatric treatments. Many of these would be provided within the building itself. On the other hand, if Day Care is not sufficient to meet the patient's clinical needs, admission to the In-Patient Service could be readily accomplished in surroundings with which the patient is already familiar, and this again would minimize the estrangement and isolation which frequently follow from hospitalization.

The flexibility which this program allows would make it possible to tailor the types of treatment much more precisely to the specific clinical needs of the individual patient.

The Day Care Center will be in charge of a staff psychiatrist, with a head nurse who will be the coordinator of the day patients' activities in the Hospital. A few rooms have been set aside for resting, but the space has been deliberately limited to prevent the patient from isolating himself.

Across the entrance hall from the Day Care Center will be the Admission Area, where the process of admission directly to Day Care will take place.

Adjoining the Day Care Center will be the Recreational Therapy Area, which will be continuous with the Day Care Lounge. This will contain an area for card games, ping-pong, pool, etc.

Also adjoining the Day Care Center will be an area for elderly patients. We believe that it is important for elderly patients to have the opportunity to participate sometimes, if only as observers, in the life of younger people, while at the same time giving them the opportunity to retain some degree of privacy and to remove themselves from the comings and goings of people younger than themselves. Activities for the elderly will be developed, such as gardening, reading clubs, etc.

We believe that there are in the community elderly people with psychiatric disorders who remain in their families in spite of behaviour detrimental to the family as a whole and to themselves, as they are not receiving fully effective treatment; and there are others who are sent to mental hospitals or nursing homes for custodial care, where the opportunities for rehabilitation are less than the patients can use. We envisage the Day Care Center as making possible a combination of family life and hospitalization for these elderly patients. Elderly patients can be brought to the Day Care Center in the morning (say, by a relative on his way to work), can remain throughout the day, engaged in an interesting and therapeutic way (perhaps including psychotherapy), then can return to the family to spend the night. The family will be free of the responsibility of caring for the patient during the day and will resume the responsibility in the evening. This would prevent the complete segregation of the elderly person from his family by total hospitalization; and both the interest of the family as a whole would be served and the clinical needs of the patient would be met. In addition, we believe that there are a substantial number of elderly patients who suffer from depressions masked by symptoms interpreted as of organic origin. We expect to provide opportunities for the exercise of the remaining intellectual faculties, and, by combining these activities with a psychotherapeutic approach, we hope that the process of aging may be rendered less distressing to the individual concerned and his family. While this area will be primarily for the use of day patients, it will be open to suitable elderly in-patients.

Educational and Vocational Area

The number of adolescent patients has been growing, and we have been faced with the opportunity to provide them with their education, so as to minimize the educational loss resulting from leaving school to be hospitalized. We now have four teachers, and a high school education program is in operation. About fifteen patients are carrying on the average of two high school courses in a classroom setting. In addition, individual tutoring is available as needed. The new building will contain several classrooms, including one equipped with a laboratory for the study of physics, chemistry, and other sciences. In addition, there will be offices for individual tutoring and for the teachers. Between two of the classrooms there will be one-way screens, to make research possible in the educational process of the mentally ill.

We expect that most students will receive academic credit for their school work done here. Our present program of vocational testing and rehabilitative work needs to be expanded, in order to assist our patients in planning for their employment after discharge, and the necessary space is being provided in this part of the building.

Civic Center

In this area there will be meeting rooms, beauty shop, barber shop, post office, bank, coffee shop, and store. This will be built on the idea of the "Village Green", and will provide the setting for several activities which most people outside the hospital take for granted.

Frequently the patient who is convalescing from a serious mental illness has to relearn and practise some of the most elementary activities, i.e., how to make an appointment with a hairdresser, how to make a phone call, how to buy something, or how to establish a relationship. At the time of a patient's discharge a serious problem is often created by the sense of strangeness which the patient feels when he finds himself once again in the community, having to perform some of these elementary activities. By providing some of these activities within the Hospital, in a setting as unlike the traditional mental hospital as possible and similar to a small-town community center, we believe that it will be possible often for the seriously ill patient to continue to do for himself those things which he can do and thus diminish the amount of artificially induced incapacities which sometimes result from hospitalization. We also expect that this area will be used by the patient to learn and relearn some social and vocational skills which will be of benefit to him after discharge.

While not in the Civic Center, it is worth mentioning here that in the O. T. Department of the Rehabilitation Center there will be a home-making area, with a kitchenette and dining space which patients will be able to use for these rehabilitative purposes just described above.

To summarize, the Rehabilitation Building will be used by patients who are living in the community, as well as those residing in the Hospital. We see it providing for the in-patient of the Hospital an environment quite unlike that found in many traditional mental hospitals, and similar in many ways to that commonly found in the community. For the patient who is living in the community, we see it providing these facilities — psychiatric and otherwise — which only a mental hospital can provide, and, most importantly, providing them to the extent required by the patient's clinical condition.

The Rehabilitation Center will offer a patient residing in the community the type of hospital treatment he needs, and the patient in the Hospital the type of "community treatment" that he can benefit from. It will bridge the gap between the mental hospital and the community, and bring the Hospital closer to the patients who are living in the community and the community closer to the patients living in the Hospital.

Francis de Marneffe, M.D.,
Associate Psychiatrist,
McLean Hospital

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Dr. Francis D. Moore (*W.S.* 1940) received the honorary degree of Master of Surgery from the National University of Ireland, at ceremonies held in Dublin in September during the meetings of the International Society of Surgery. Dr. Moore is Moseley Professor of Surgery at Harvard Medical School and Surgeon-in-Chief at Peter Bent Brigham Hospital.

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Dr. John H. Knowles has been appointed to the newly created post of Director for Medical Affairs of the Massachusetts General Hospital, effective September 15, 1961. This position was established to help coordinate and support the efforts of all members of the Staff in medical advances and projects. His office is in the room immediately adjoining the Secretaries' Office on the ground floor of the White Building.

Dr. Knowles is a graduate of Harvard College and of Washington University School of Medicine. He came to the Massachusetts General Hospital as an intern in Medicine in 1951 and, except for military service and two years at the University of Rochester Medical School, has been here ever since. He was Chief Resident in Medicine in 1958. At present, he is an Assistant Physician on the Hospital Staff and an Associate in Medicine at the Harvard Medical School. He has been Chief of the Pulmonary Unit of the Hospital for the last two years, and is a diplomate of the American Board of Internal Medicine.

The Board of Trustees, at their meetings on August 31, and September 15 and 29, voted:

To grant a leave of absence of four months to Dr. Benjamin Castleman, beginning about November 1;
That the Warren Triennial Prize for the year 1962 be awarded jointly to Dr. George Palade of the Rockefeller Institute, New York City, and Dr. Keith Porter of the Biology Laboratories of Harvard University, in recognition of their contributions to our knowledge of the ultrastructure of cells.

To accept the resignations of:

Dr. Willard Dalrymple from the position of Assistant in Medicine, effective August 31;
Dr. William A. Tisdale from the position of Assistant in Medicine, effective August 31.

To appoint:

Dr. George P. Baker, Jr. as Clinical and Research Fellow in Medicine, effective as of July 1;
Dr. Hugh R. Butt as Visiting Physician, during the period November 13 through November 18;
Dr. Frederick J. Duhl as Assistant in Psychiatry, effective as of July 1;
Dr. Florence Geller as Exchange Assistant Resident on the Children's Service, for the period September 19 through October 25;
Clara W. Mayo, Ph.D. as Assistant Psychologist for one year, beginning September 1;
Dr. William J. Otto, Jr. as Second Assistant Resident in Radiology, beginning July 1, 1962;
Dr. Jorge E. Piza as Graduate Student Assistant and Clinical Fellow in Pathology for one year, beginning September 1;
Ernest T. Pritchard, Ph.D. as Assistant Biochemist at McLean Hospital, effective September 1;
Dr. Richard W. Sagebiel as Third Assistant Resident in Pathology for one year, beginning July 1, 1962;
Dr. Richard J. Steckel as Second Assistant Resident in Radiology, beginning July 1, 1962;
Anne M. Stoffyn, Ph.D. as Assistant Biochemist at McLean Hospital, effective September 1.

At their meetings on August 30, and September 6, 20, and 27, the General Executive Committee voted:

To promote:

Dr. Alan C. Aisenberg to the position of Assistant Physician, effective as of September 1;
Dr. Robert M. Kline to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1962;
Dr. S. Michael Marcy to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1962;
Dr. Lester F. Soyka to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1962;
Dr. C. Gene Wheeler to the position of First Assistant Resident in Surgery, effective as of July 1.

To reappoint:

Dr. Louis H. Edmunds, Jr. as Second Assistant Resident in Surgery, beginning October 1;
Dr. Eric Engel as Clinical and Research Fellow in Medicine for one year, beginning October 1;
Dr. Murray Feingold as Assistant Resident on the Children's Service for one year, beginning July 1, 1962;
Dr. George M. Perrin as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Annette M. Coe Rapin, Ph.D., with a change of title from Research Fellow in Medicine to that of Research Fellow in Biochemical Research for one year, beginning September 1;
Dr. Stephen L. Reynolds as Assistant Resident on the Children's Service for one year, beginning July 1, 1962;
Dr. Peter P.-E. Schuntermann as Assistant Resident on the Children's Service for one year, beginning July 1, 1962.

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The recent death of Dr. H. Robert Dudley, Jr., who left the Massachusetts General Hospital in July to become Professor and Chairman of the Pathology Department at Emory University, shocked everyone who had known him during the past ten years as a medical student, intern and resident, and member of the Staff. Some of his friends have established the Hugh Robert Dudley Memorial Fund in the Pathology Department, and anyone wishing to give to this Fund may send a contribution to Mr. George S. Weld, Secretary and Assistant Treasurer of the Massachusetts General Hospital, 45 Milk Street, Boston. Checks should be made payable to the Massachusetts General Hospital.

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A memorial fund has already been established by friends and associates of Miss Ida M. Cannon who desire to express their affection and honor her memory.

Miss Cannon was one of the great pioneers in social work and was associated with Dr. Richard C. Cabot as a founder of medical social work. Her career in this field covered a span of thirty-nine years (1906-1945), all spent at the Massachusetts General Hospital. During the last thirty-one of these years she served as Chief of Social Service.

Beyond her work at the Hospital and her activities in extending the field of medical social work in the United States and other countries, Miss Cannon made important contributions to community welfare and to the social work profession. She published two distinguished books and numerous articles about medical social work. She taught in schools of social work and was active in local, national, and international conferences. Although the years of her long professional career were centered in the Massachusetts General Hospital, her influence was world-wide.

The Ida M. Cannon Memorial Fund will be used for projects within the area of Miss Cannon's greatest interests — better understanding of the needs of patients, the social aspects of health and medical care, and the role and requirements of social work in these fields. This Fund will finance grants to social workers and members of associated professions in the United States and other countries for carrying on such projects.

The establishment of this Fund provides an opportunity for those who are interested, to participate in this memorial to Ida M. Cannon.

Gifts or bequests may be made out to Massachusetts General Hospital Ida M. Cannon Memorial Fund, and sent to Mr. Henry R. Guild, Treasurer, Massachusetts General Hospital, 45 Milk Street, Boston.

Gifts may be payable in installments extending up to three years, and are deductible for income tax purposes.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated

The following new titles have been received:

Anesthesia

Beecher, H. K.
Der Anästhesist und seine Stellung im Wandel der Zeit.
Triangel 5:11.

Beecher, H. K.
The present status and the future development of the physician anaesthetist.
Triangle 5:11.

Beecher, H. K.
Situation actuelle et perspectives de l'anesthésiste.
Triangle 5:11.

Arthritis

Balboni, V. G.
Septic arthritis: With a discussion of the role of infection in rheumatic disease.
In M. Clin. North America, Philadelphia, W. B. Saunders Company, 45:1155.

Calkins, E., Cohen, A. S., and Short, C. L.
Long-term chloroquine therapy in rheumatoid arthritis.
In M. Clin. North America, Philadelphia, W. B. Saunders Company, 45:1219.

Ropes, M. W.
Conservative treatment in rheumatoid arthritis.
In M. Clin. North America, Philadelphia, W. B. Saunders Company, 45:1197.

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VOLUNTEER GROUPS

DISTAFF CLUB

The following officers have been elected for the coming year:

President — Rachel Wohl
Vice-President — Eunice Porvaznik
Corresponding Secretary — Eleanor Skinner
Directory Secretary — Pat Sell
Treasurer — Beth Strickler
Area Coordinator — Anne Barlow
Newsletter Staff — Nancy Mundth, Lisa Lampert, Lee Herbst
Projects Chairman — Chris Patton
Volunteers — Joan Ottinger
Publicity — Barbara Goldfinger
Hospitality — Dottie Smith
Housing — Jean Canellos
Christmas Party Chairman — Ruth DeSanctis
Spring Dance Chairman — Mary Lou Monaco

Professor Robert H. Anderson spoke to our Club on "Elementary education" on September 12. Sixty members were present — one of the largest turnouts in Distaff history.

On October 3, Mrs. Oliver Cope discussed the workings of the community through its social agencies.

On October 29, a tea was given at the home of Dr. and Mrs. Walter Bauer for doctors and their wives from other countries.

Our questionnaire has been distributed, and groups — such as the MGH Volunteers and the Book Review Club — are getting under way. Area meetings were held during October, and in November we are looking forward to a talk by Dr. Paul D. White about his recent world trip.

THE CHILDREN'S SERVICE

On recommendation of the General Executive Committee, the Board of Trustees, at their meeting of March 17, 1961, approved a reorganization of the Children's Medical Service as follows:

1. That the name of the Service be "The Children's Service" of the Massachusetts General Hospital.
2. That there be created a Children's Service Executive Committee, the members of which will be nominated by the Chief of the Children's Service and appointed by the General Executive Committee. Its composition would include the Chief of the Children's Service as Chairman, and representatives of the Children's Medical Committee, the Children's Surgical Committee, the Children's Service Staff, the Hospital Administration, and a representative of the Massachusetts Eye and Ear Infirmary.

   It is understood that additional temporary or permanent members of this Committee may be appointed by the General Executive Committee from time to time upon nomination by the Chief of the Children's Service.
3. That Burnham-5 be designated as primarily a surgical floor, with the understanding that this does not preclude the admission of non-surgical patients to the floor when need arises and beds are available, nor the admission of surgical patients to the other Burnham floors when necessary.
4. That all the Burnham floors will be available to both Service and private patients.
5. That surgeons assigned to the Children's Service, and to be designated as such in the Annual Report, will be in charge of all surgical patients admitted to the Chil-

dren's Service, unless otherwise designated by the Chief of the General Surgical Services or specialty surgical service or unless the patient is a private patient of a staff member assigned to a bed in the surgical unit.

6. That, besides the Surgeons to the Children's Service, the Burnham surgical floor be staffed with:
   - A visiting pediatrician, serving as consultant
   - An assistant resident from General Surgery assigned full-time, in rotation
   - An assistant resident from Children's Medicine
   - An intern from Children's Medicine

   It is understood that the house staff assigned from Children's Medicine will participate, under direction of the surgeon in charge, in the working up of patients, in the operating room, in post-operative care, and in the follow-up clinic.
7. That each of the various general and special medical and surgical Services be asked to assign a staff visiting member as its liaison with the Children's Service and that these assignments be designated in the Annual Report.
8. That there be appointed by the General Executive Committee on joint recommendation of the Chairman of the Children's Surgical Executive Committee and the Chairman of the Hospital Surgical Executive Committee, after consultation with their respective committees, including the Chief of the specialty Service or assignment directly concerned,
   (a) A Children's Surgical Committee:
      - Two representatives from General Surgery, one of whom shall be Chairman
      - Representative from Urological Surgery
      - Representative from Orthopedic Surgery
      - Representative from Neurological Surgery
      - Representative from Plastic Surgery
      - Representative from Radiology
      - Representative from Dental Medicine
      - Chief of the Children's Service or his designated representative to act as liaison with Children's Medicine
      - Representative of the Hospital's Administration, who shall be Secretary

   (b) A Children's Medical Committee: Appointed by the General Executive Committee on joint recommendation of the Chairman of the Children's Service Executive Committee and the Chairman of the Hospital Medical Executive Committee after consultation with their respective committees, including the Chief of Psychiatry and the Chief of the specialty Service or assignment directly concerned.
      - Chief of Children's Service, who shall be Chairman
      - Two or three representatives from Adult Medicine
      - Representative from Psychiatry
      - Representative from Neurology
      - Representative from Dermatology
      - Representative from Hospital's Administration, who shall be Secretary

   It is understood that the composition of these two committees may be changed from time to time.
9. That the purpose of the above organizational changes is to promote the functioning of the Children's Service as a coordinated whole, with suitable autonomy within it for Children's Surgery and for other medical and surgical specialties. It is understood that there is no intention now or in the foreseeable future to establish a separate training program for the surgery of children.
10. That Physicians to Children's (Medical) Service henceforth be called Pediatricians, Associate Pediatricians, Assistant Pediatricians, etc.

* * *

PSYCHIATRY

Many members of our staff and of the faculty of Harvard Medical School, and others in the medical profession, need no introduction to Dr. David Stafford-Clark of London. He was in this country on a Nuffield Travelling Fellowship during 1949 and 1950, serving at Massachusetts General as resident and clinical fellow in psychiatry and at Harvard Medical School as a teaching fellow. After returning to his native England, he was appointed to the staff at Guy's Hospital, and is now Physician-in-Charge of the Department of Psychological Medicine and Director of the York Clinic at Guy's, and also Physician to the Bethlem Royal and Maudsley Hospitals, and to the Institute of Psychiatry of the University of London.

Several members of our staff attended the Third World Congress of Psychiatry, held in Montreal on June 6, and heard Dr. Stafford-Clark present an interim report on a research project by Prof. John Butterfield, Dr. Bernard L. Mallett, and Dr. Stafford-Clark, all of Guy's Hospital. A few days after the Montreal meeting, Dr. Stafford-Clark delivered a most interesting address here at M.G.H.

Since several of our doctors had already spoken so highly about Dr. Stafford-Clark's Montreal paper, we succeeded in securing a copy of the Montreal speech while he was here, and we give it to you now so that those who were unable to go to Canada may know more about the type of work being carried on at Guy's under Dr. Stafford-Clark's direction.

DISORIENTATION

An approach to the psychophysiology of confusion, with particular reference to psychiatric emergencies in a general hospital

Preliminary statement of aims and object research

Psychiatric emergencies arising in the wards of a general hospital can be divided into two main groups: the toxic confusional reactions on the one hand; and, on the other, acute so-called functional psychoses precipitated by the stress of illness and hospitalization.

Characteristic of the former group, and occurring not infrequently in the latter, particularly in the schizophreniform reactions, is a disturbance in the patient's perception of reality. One common aspect of this is disorientation in time and space and sometimes in identity, resultant upon a greater or lesser degree of clouding of consciousness, failure of recent memory, and failure of attention, concentration, and judgment. These disturbances of mental function in turn rest upon an underlying neurophysiological and biochemical disequilibrium.

It is of course well recognized that the factor of emotional stress is of profound importance in cases of this kind. Nevertheless, when the patient's response to stress assumes a form both unquestionably psychotic on the one hand, but relatively rapidly reversible on the other, it presents us with a unique opportunity for studying all aspects of the psychophysiological disequilibrium which has occurred.

The York Clinic is an in-patient psychiatric unit completely integrated with the medical and surgical practice of Guy's Hospital. The conditions therefore are exceptionally suitable for a combined psychiatric clinical and biochemical investigation. Current research, jointly undertaken by the departments of Psychological and Experimental Medicine, is directed particularly towards the disturbances of protein and catecholamine metabolism which may underlie confusional states. Attempts are also being made to develop new techniques for the direct study of cerebral circulation and carbohydrate metabolism.

Clinical background

One of the ways in which a department of psychological medicine makes its most consistent and productive contribution to the teaching and, indeed, to the whole climate of opinion in the school and hospital, of which it is a part, is through the services which it can perform and the example which it can set in the cure of those patients whose illness combines some form of structural disorder with some impairment or estrangement of normal behaviour.

These are the patients who develop states of toxic confusion, delirium, or psychotic illness, in the course of previously routine medical or surgical illness. They include patients in whom the emotional stress or threat of some physical disorder overwhelms their normal capacity for contact and cooperation with those who look after them. A few illustrative examples are appended.

Case 1:

A 35-year-old childless housewife, with relatively severe valvular disease of the heart, was seen at the request of an eminent surgical colleague who had proposed operation to relieve her intense physical disability secondary to her heart disease. While under his care, and receiving the appropriate attention and preliminary investigation for the brilliant operation which he was prepared to undertake, she became increasingly alarmed and began to develop delusional ideas: for example, that her heart had been punctured during the course of the investigations and was collapsing like a shrivelled balloon; and that it would not be safe for her to eat anything because her intestines had become a series of gutters in danger of overflowing their contents, which would then accumulate and putrify in the bottom of her pelvis. Psychiatric examination revealed a history of schizophrenia in her family, and in her own case there could be little doubt that the basic psychiatric syndrome was a chronic paranoid schizophrenia with bodily delusions released by the stress and fear of the approaching ordeal.

Appropriate treatment was successful in restoring completely her morale and mental and emotional clarity. She lost her delusional symptoms, and after four months was considered fit to undergo the operation, which, in fact, proved highly successful.

Case 2:

A young girl of 19 had suffered from a lifelong disability due to congenital heart disease, for which surgical repair had been considered possible. She, too, developed symptoms of marked emotional disturbance. She wandered about the surgical ward into which she had been admitted, trailing her nightgown and tearing and scattering pieces of paper on which she had scribbled numerous incoherent messages. Her behaviour resembled that of an imaginative schoolgirl acting the part of Ophelia.

This proved to be an hysterical reaction, provoked by the conviction that she could not hope to survive an operation upon an organ as vital as the heart, whose disability had caused her relatively complete invalidism throughout her whole life. Yet she had been unable either to express her fears or to weigh up the alternatives, and felt herself inexorably destined to die under the anaesthetic without having communicated her anxieties to anyone. She, too, received a combination of psychotherapy and quiet confident nursing and supervision in the Psychiatric In-Patient Unit to which she was admitted. Her disturbed behaviour was tolerated without comment, while its causes were gradually revealed and dealt with by appropriate psychotherapy, and its manifestations modified by tranquilizing drugs. Nevertheless, it took this extremely vulnerable and immature young woman five months to be fit for operation. When eventually the operation was undertaken, it, too, proved completely successful. It is perhaps an interesting and ironic observation on the attitude of patients to their own emotional disabilities, that this girl subsequently received a request from a weekly magazine to write a personal account of the treatment and operation which had turned her from a total invalid into a vigorous and healthy young woman. Her ghosted account omitted completely any reference to the five months' work by the Psychiatric Department which had enabled her to undergo the operation which formed the turning point in her life.

Case 3:

A 40-year-old married woman, with two children, had suffered from severe pulmonary tuberculosis, for which ultimately partial pneumonectomy offered promise of final cure. She had been extremely apprehensive about the operation, but had not disclosed her apprehensions to the surgical team who undertook it. Following the operation she had the misfortune to develop complications in the form of a small empyema, which required suction drainage and naturally held up her recovery.

She became exceedingly depressed, withdrawn, and ultimately deluded, believing that everyone else in the ward despised her because "the operation had gone wrong" and because "everyone is complaining about the smell". In fact, at her own request, she was nursed on the balcony, and, although the characteristic odour of the empyema was noticeable to her, it had at no time provoked comments from other patients or nurses.

Nevertheless, her delusional depression culminated in a determined suicidal attempt when she sought to smother herself with her pillows and caused considerable alarm to those looking after her. All her symptoms, both of depression and of punitive and paranoid delusions, disappeared within four days of her admission to the Clinic. Complete acceptance of her as a person, followed by a full discussion of her anxieties, guilt, and apprehension about her operations and the outcome, were the key to her restoration. She spent the rest of her convalescence from the empyema until its closure in the Clinic, maintaining that she felt safe there, because "You really understand me and for the first time you've given me courage to understand myself."

Case 4:

A widow of 47 noticed a small lump in her right breast which she feared—correctly, as it proved—might be malignant. She was referred by her doctor to the Surgical Out-patients' Clinic of a nearby hospital, where operation was advised. She went home, horrified at the implied confirmation of her fears, and for three months could not summon the courage to return. Eventually she persuaded her doctor to refer her to another hospital, because "I could not face going back and admitting to have been a coward."

The same very considerable aura of misery and apprehension surrounded her attitude towards this undoubtedly severe threat to her whole existence as that characterized by a patient previously described (Case 3).

The second hospital she attended arranged her immediate admission and undertook preliminary biopsy as a first stage procedure. This is, in fact, an unusual practice in the United Kingdom, since operations of this kind are normally performed in a single stage, with examination of frozen sections of the removed mass while the patient is still anaesthetised, so that second stage radical mastectomy can be immediately undertaken if necessary. As it was, this lady recovered consciousness with a small wound, only to learn a few days later that a second operation would be required. "What is this for?" she enquired timidly. "Just a deeper cut," was the foolish, well-intentioned, but devastatingly misleading reply. When she awoke from the second operation she discovered that she had had a total radical mastectomy.

Her reaction was to develop a severe psychotic depression, with hysterical paralysis and numbness of the arm on the affected side and bizarre delusional convictions that she was "no longer really a woman. . . . They have taken out things inside me, as well as removed my breast. . . . I am something like a zombie, something awful, a living corpse, no longer a real person at all . . .".

She, too, required patient, imaginative and constructive combination of psychological and physical treatment before her mental state could be restored to normal. The illness in this stage lasted over three months, and throughout most of it her contact with reality and her judgment remained fundamentally disturbed.

These are a few simple instances of the type of case which attracted our attention to the possibility of seeking a clue to the nature of the physiological and psychological components of psychotic illness in these reversible, although often severe, reactions to overwhelming stress in general hospital patients.

Other examples have included patients who become paranoid, catatonic, stuporous, and disoriented in the course of hypoxia from chronic bronchitis and emphysema, or temporary episodes of heart failure.

Procedure and progress report to date

The actual programme of research was begun on May 1st, 1960, under the joint supervision of the Professor of Experimental Medicine and the Physician-in-Charge of the Department of Psychological Medicine at Guy's Hospital. Its object was essentially to gain further insight into the nature of the biochemical basis of mental illness, with particular reference to the factors already outlined. To this end it was planned to investigate, both clinically and biochemically, patients admitted to the general medical, surgical, and obstetric wards of Guy's Hospital in apparently normal mental health, who became mentally disturbed during the period of their admission. The Research Fellow, Dr. B. L. Mallett, established close liaison with the doctors and ward sisters concerned, so that he was at once informed when such cases occurred.

Clinical studies

The first problem was to collect clinical information. A careful medical and psychiatric assessment of all relevant cases has therefore been made to determine the incidence and true nature of the mental disturbances encountered in a large general hospital. No similar study had been previously reported in Great Britain, nor could useful inferences be drawn (because of differences of definition and method) from three comparable but smaller studies carried out elsewhere. Accordingly, the investigation proceeded along the following lines:

(1) A medical and psychiatric assessment was made of all patients referred from the general wards because of mental disturbance, from 1 May 1960 to 31 December 1960. During this period 49 cases were seen by Dr. Mallett and/or one of the psychiatric consultants; and a further 26 cases were seen and treated by Dr. Mallett alone, without further reference to a consultant psychiatrist.

(2) An analysis was made of the case reports of all in-patients referred from the general wards for psychiatric opinions during the preceding five years. This work was carried out with the help of Dr. J. J. Fleminger, Consultant Psychiatrist at Guy's Hospital throughout the whole of the period under review, who had examined the majority of these patients himself.

The data obtained give an analysis of 300 cases, together with reason for admission, reason for referral, the psychiatric diagnosis made, and the treatment required. In general it is concluded that mental illnesses arising in the setting of a general hospital do not differ clinically from those occurring in the population at large. Thus the "hospital psychosis" is similar to the "postoperative psychosis" and the "puerperal psychosis" which it embraces, in that it is composed of a variety of common reaction types. The differential incidence of the affective, schizophrenic and organic reaction types in the present series is similar to that noted by Stengel *et al.* (1958) in a series of 80 postoperative psychoses. Shepherd *et al.* (1960), some time after the start of the present investigation, published an account of psychiatric consultations requested during one year in a smaller general hospital in S.E. London. These included fewer schizophrenic and neurotic reactions and a higher incidence of toxic and organic reactions. The reason for this is not yet clear. Useful information will come from further comparison of the present findings with the incidence of mental illness occurring in out-patient clinics and in general practice.

With the approval of the Nuffield Foundation a full report of this work will be submitted to the medical press, with conclusions and recommendations regarding psychiatric services in general hospitals.

Biochemical studies

The proposed biochemical enquiry has been tailored to suit both the clinical material and the laboratory facilities available in the hospital; thus, difficulties in getting the amino-acid chromatographic columns working have delayed any analysis of C.S.F. amino-acids. Experimental biochemical studies have proceeded along the following lines:

(1) Protein electrophoresis of serum taken from acutely psychotic patients at the height of the illness and on recovery has been carried out as suggested in the original project.

(2) Assays of urinary 5 hydroxy-indole acetic fractions. In view of the negative results obtained by other workers, this project was abandoned and in its place blood glutathione and cysteine estimations have been carried out.

(3) Preliminary work has been carried out on the direct *in vivo* study of cerebral metabolism by a method using radio-isotopes, which will be applied to cerebral glucose and non-esterified fatty acid metabolism.

(1) Serum protein electrophoresis

The research which, during the last five years, has carried the greatest implications for the possible aetiology and rational therapy of schizophrenia is that concerned with the demonstration of an unidentified toxic substance in the blood of schizophrenics. This substance has been called "taraxein" and is believed to be a globulin related to ceruloplasmin. It has been extracted, with varying degrees of success in different laboratories, by a chemical process involving 29 separate procedures, taking some four days and yielding a labile substance which deteriorates in about four hours. It seemed to us that an objective physicochemical characterization of plasma proteins might detect taraxein in psychotic serum, if indeed it exists.

Using the Tiselius electrophoretic apparatus, Dr. A. Shore, protein biochemist in the Medical School, Guy's Hospital, examined sera from 13 cases of acute psychosis both during the acute phase of the illness and, where possible, after recovery. The results suggested that where abnormalities of the electrophoretic pattern occurred the clinical picture, involving both somatic illness and psychiatric disturbance, was so interwoven that correlation of protein abnormality with mental state could not be clearly shown.

Accordingly, it was decided to carry out a similar investigation in undoubted cases of acute schizophrenia occurring in physically healthy subjects. Through the courtesy of Dr. M. Radzan, the Medical Superintendent, Dr. Mallett has been granted access to patients in Bexley Mental Hospital, and a series of such cases is at present being investigated. A starch-gel technique may be used in place of the present Tiselius method if it is considered that this will permit of more accurate separation of that portion of the protein spectrum believed to contain taraxein.

(2) Glutathione and cysteine estimations

The original work on taraxein was the outcome of an alleged relationship between raised globulin levels, increased speed of adrenalin oxidation, and lowered glutathione levels in the blood of psychotic patients. It has been suggested that sulphhydryl linkages may play a vital role in the metabolism of schizophrenia, and in the metabolic action of chlorpromazine. The evidence, however, is inconsistent and it was decided to measure glutathione and cysteine levels in the blood of patients under our care.

Dr. R. Rodnight, in the Department of Biochemistry of the Institute of Psychiatry of the University of London, has been working on this problem and has kindly agreed to carry out these estimations. To date, four have been investigated—a number too small to warrant any conclusions being drawn. One showed a high cysteine value during the period of greatest mental disturbance which fell during the recovery phase.

(3) *In vivo* studies of cerebral circulation and metabolism

Preliminary experiments carried out in collaboration with Mr. N. Veall, M.R.C., Physicist at Guy's Hospital, suggest that it will be possible to obtain a continuous measurement of cerebral blood flow, using radioactive xenon in a dosage much lower than has been used heretofore. The advantage of thus minimizing the exposure of patients to radiation does not need to be stressed.

Practice punctures of the internal jugular vein and jugular bulb on cadavers, with injection of dye and subsequent dissection, have been undertaken.

Subsequently we have been able to produce a concentration of radioactive xenon within the cerebral circulation, which can be detected and measured by appropriate counting devices linked to an autoanalyser simply by inhaling air in which carefully measured and controlled quantities of the appropriate gas have been introduced. This appears to be a safe method of introducing radioactive tracers into cerebral circulation and, of course, is infinitely preferable for patients who are already disturbed or frightened.

If this method can be practically applied it will be possible, utilizing autoanalytic techniques which have already been developed in the Department of Experimental Medicine and successfully applied to the peripheral tissues, to measure directly the cerebral glucose threshold and other aspects of carbohydrate metabolism in abnormal mental states. The method will also be used for the investigation of cerebral non-esterified fatty acid metabolism. Since recent reports have demonstrated a greater than normal anti-insulin activity in the blood and urine of schizophrenics, together with certain defects in oxidative phosphorylation and a restoration of a more normal pattern of carbohydrate metabolism following glutathione infusion, the present work will be of particular significance.

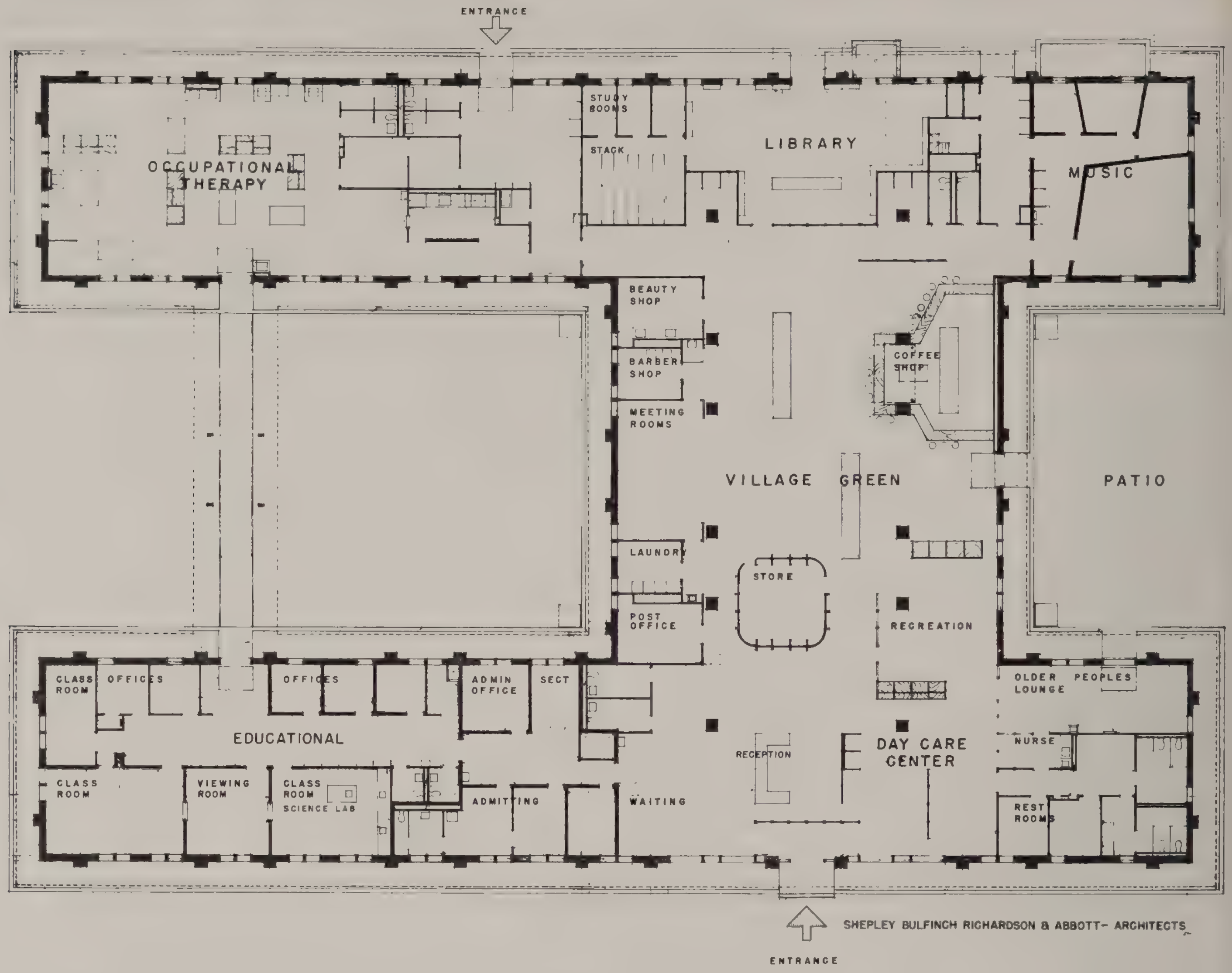
Plans for further research

With the approval of the Nuffield Foundation Committee, it is proposed to develop the above research along the following lines:

(1) Protein analysis will continue until it has been shown that an abnormality of the type indicated does or does not exist in the serum of schizophrenic patients.

Reduced glutathione and cysteine estimations will be carried to a similar conclusion.

(2) It is believed that direct *in vivo* studies of fundamental cerebral metabolic processes in both normal and abnormal subjects are most likely to throw light on some of the biochemical aberrations which may underlie the functional psychoses. It is proposed, therefore, to direct a considerable part of the available facilities and time towards the development of


ENTRANCE
STUDY ROOMS
STACK
LIBRARY
MUSIC
OCCUPATIONAL THERAPY
BEAUTY SHOP
BARBER SHOP
COFFEE SHOP
MEETING ROOMS
VILLAGE GREEN
PATIO
LAUNDRY
STORE
POST OFFICE
RECREATION
CLASS ROOM
OFFICES
OFFICES
ADMIN OFFICE
SECT
OLDER PEOPLES LOUNGE
EDUCATIONAL
RECEPTION
DAY CARE CENTER
NURSE
CLASS ROOM
VIEWING ROOM
CLASS ROOM SCIENCE LAB
ADMITTING
WAITING
REST ROOMS
SHEPLEY BULFINCH RICHARDSON & ABBOTT- ARCHITECTS
ENTRANCE

PLAN OF THE NEW REHABILITATION CENTER BUILDING AT McLEAN HOSPITAL

techniques which will enable accurate measurements to be made of various aspects of cerebral carbohydrate metabolism in health and disease.

Comment

The clinical observations made during this period were germane to the general problem of the diagnostic validity and prognostic significance of the terms "schizophrenia" and "depressive reaction", i.e., the subdivisions of the so-called functional psychoses. An attempt is being made to resolve this question, since it is of fundamental importance not only to the present investigation but also to the practice of psychiatry in general, by examining the results of a follow-up study initiated earlier of 186 young adult psychotic patients admitted to the Professorial Unit of the Maudsley Hospital and the Institute of Psychiatry of the University of London. Young adult patients were chosen for this study, since it is in such cases of early onset of psychosis that diagnostic confusion most often arises. The results indicate that the broad Kraepelinian diagnostic categories are valid and useful, and that it is possible to differentiate the schizophrenic and affective psychoses by symptomatology, outcome, and nature of subsequent illness should relapse occur.

New addresses:

Dr. Martin A. Berezin (attend. psychiat. (*McL.*)), 90 Forest Ave., West Newton 65, Mass.

Dr. Cecil H. Coggins (*M.* 1959), 627 Barron Ave., Palo Alto, Calif.

Dr. Willard Dalrymple (*M.* 1947), University Health Services, Princeton University, Princeton, N. J.

Dr. Henry Field, Jr. (*C.M.* 1921 and *E.M.* 1922), 804 Lawrence St., Ann Arbor, Mich.

Dr. Robert G. Hall (*W.M.* 1910), 731 S.E. 41st St., Portland, Oreg.

Dr. Roger I. Lee (*E.M.* 1907), 446 Walnut St., Brookline 46, Mass.

Dr. Irwin H. Rosenberg (*M.* 1960), Bldg. 16A, National Institutes of Health, Bethesda, Md. (This office will forward his mail.)

Dr. Theodore Sack (r.p. *Psychiat.* (*McL.*) 1958), 75 Blake Rd., Brookline 46, Mass.

Brief bits:

Dr. Hannibal Hamlin writes us that he gave two lectures in Spain last March. He addressed the Sociedad de Neurologia, Neurocirugia y Psiquiatria de Madrid on the subject "Tratamiento de los tumores hipofisarios"; at the Colegio Medico de Madrid he spoke on "Hipofisectomy, indicaciónes y metodos"; and on September 7, at the Second International Conference of Human Genetics, in Rome, his subject was "Hypophyseal tumors — Biologic and genetic factors".

Dr. Roger W. Jeanloz attended the Fifth International Meeting of Biochemistry, in Moscow, last August. He delivered a paper and served as chairman of the section on the Biochemistry of Carbohydrates.

Dr. Hsi-Chin Tsai, Professor of Medicine at the College of Medicine, National Taiwan University, and Physician-in-Chief at the Taiwan University Hospital, has returned to the M.G.H. to spend six months in the Cardiac Unit, under the auspices of the China Medical Board. Dr. Tsai was a graduate student here in 1953-54, and has been particularly concerned with the problems of rheumatic fever and of coronary heart disease in his country.

On July 17, Dr. Edward W. Webster read a paper at the 4th International Congress of Medical Electronics, held in New York City. His subject was "Limitations of combined image amplifier-television systems for medical fluoroscopy". From September 4 to 8, Dr. Webster was in Vienna as a consultant to the International Atomic Energy Agency, presenting a report on therapeutic dose distributions with high energy radiation.

* * *

Contributions to THE NEWS in the amount of $693, over and above the subscription fees, were received during the fiscal year 1960-1961. This was $43 more than last year's contributions.

A note of appreciation is always sent to each contributor, but THE NEWS takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

The News

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 208 Boston, Mass. December 1961

TRAUMA AND THE ORTHOPAEDIC SURGEON

Presidential Address,
American Orthopaedic Association,
Yosemite, California, May 24, 1961

. . . The founding of our organization was preceded only by that of the American Medical Association in 1847, the American Surgical Association in 1880, the American Clinical and Climatological Society in 1884, and three specialty groups: ophthalmology, otology, and gynecology. Many have followed; most of them larger, but none more select than ours. This selectivity carries with it a strong obligation. Election to The American Orthopaedic Association does not mean that we have reached the top and can rest—quite the opposite. It indicates added responsibility in directing the teaching and practice of orthopaedic surgery in North America and influencing it to a considerable extent throughout the globe.

This is the Seventy-fourth Annual Meeting of the oldest orthopaedic society in the world. Our organization has met annually since its founding, except in the year 1945, marking the end of World War II.

Of our Canadian membership, which began in 1906 with the election of B. E. Mackenzie, we can be justly proud. Mackenzie has been followed by a list of distinguished surgeons north of the border, all of strong character, ability, and accomplishment. Six of those men have been President of the Association. This friendship and association with Canadian orthopaedic surgeons will be preserved. It benefits all of us. We may predict, also, that Latin American membership in our society will increase to our advantage.

In 1887, fifty-five million people lived in the United States and four million in Canada. Both countries were prospering. President Cleveland was serving his first term. In England, Queen Victoria presided at the opening of Parliament; and, in Germany, Bismarck spoke forcibly in the Reichstag, stating: "Our friendship with Russia is beyond doubt and we shall never attack France". Henry Ward Beecher, preaching in Brooklyn, remarked: "I would have been a Democrat were it not for the Democratic Party". Lillian Russell was performing in Boston, and John L. Sullivan had broken his carpal navicular on striking the back of the neck of an opponent. Florida lots of 5,000 square feet could be bought for $10.00, and custom-made pantaloons sold for $5.50.

These were some of the happenings in the year of the founding of our society. Our organization has witnessed the extraordinary growth of America since 1887. Our country has been through six economic crises, two of them major ones; we have survived four wars.

1887—forty-one years after the first public demonstration of the use of sulphuric ether for anesthesia, thirty years after Pasteur's epoch-making investigations, twenty years following Lister's great discovery, and nine years prior to Roentgen's contribution of the x-ray. All of these great advances revolutionized surgery in all forms and made possible the development of the surgery of our specialty, which was due to come some years after the actual founding of our society.

The name of our branch of surgery certainly does not describe it adequately, nor does it indicate that trauma has any place at all in our specialty. Baer in 1924 wrote: "It occurs to me that our specialty may be somewhat handicapped by its name. Perhaps the word 'paidos' is the cause". But we ask ourselves, would we or can we give up the name of orthopaedics or orthopaedic surgery? Of course not. By those names our specialty has been designated since Andry coined the word *orthopédy* in 1741.

Early in the existence of the Association an awareness of the importance of trauma as a part of orthopaedic surgery was shown when in 1894 Phelps observed: "It is my earnest conviction that within a very few years fractures and dislocations will be treated by the orthopaedic surgeons". In 1906 Mackenzie of Canada expressed concern that orthopaedic surgeons were not taking their full responsibility in the management of trauma.

Actually, however, orthopaedic surgery was reborn and expanded during and after World War I, largely because trauma to the extremities became a part of orthopaedic surgery for the first time. In fact, many members of this Association were made by their war experience. Some had no formal training as we know it today, but after World War I contributed greatly to the development of the specialty in the years to follow.

Outstanding in the development of the traumatic side of orthopaedic surgery in World War I were Goldthwait, Osgood, Allison, Baer, Leo Mayer, and Gallie; also Porter and MacKenzie Forbes, who were successively Presidents of the Association during the war years 1917-1918. Of the younger group who gained vast experience during the first great war and who later rose to eminence in their specialty were Frank Dickson, Key, Ober, Wilson, Abbott, Smith-Petersen, Harris, Robertson, Lewin, James Dickson, and Ghormley, to name just a few.

Porter in his presidential address in 1917 stated: "I believe a new era has begun for our specialty through the impetus given by war. The old conception of orthopaedic surgery is undergoing transformation rapidly".

In 1919, Galloway wrote: "The war has done more to bring orthopaedic surgery into its true inheritance than would have been accomplished by any other agencies in many years".

Although the traumatic side of orthopaedic surgery was greatly reinforced by experience in World War I, relatively few orthopaedic clinics throughout our country had the privilege of caring for fractures and other trauma after the war of 1914-18; at best, they shared the management of extremity trauma with the general surgeons. In a few established fracture clinics the orthopaedic surgeon was usually an associate chief or a consultant. More frequently than not, the efforts of the orthopaedic services were confined to the management of joint fractures, ununited or malunited fractures, and minor fractures which did not involve soft parts.

World War II changed all of this. The sections of orthopaedic surgery in military hospitals often represented the largest divisions on the surgical services. Surgical teams sent to the forward areas were staffed by orthopaedic surgeons as the supply would allow. Wounds of the extremities made up 70 per cent of the case load of evacuation hospitals. If the development of orthopaedic surgery was enhanced by World War I, it was expanded tenfold by the experience gained in the War of 1939-45, thanks in no small measure to one of our members, the late Major General Norman T. Kirk, who was at that time the Surgeon General of the Army. All spine and extremity surgery came more and more under the care of the orthopaedic surgeon, including surgery of the intervertebral disc, hand surgery, certain forms of plastic surgery to the extremities, and certain problems of vascular and peripheral nerve surgery. . . .

Recently, an effort has been made to evaluate the activities of orthopaedic surgery, particularly in regard to the management of trauma, basing our opinions on replies from eighty-three directors of orthopaedic training centers. A 100 per cent response was obtained.

And now I must give some figures: The Emergency Ward was the subject of the first question. Sixty-four of eighty-three replies (77 per cent) indicated that general surgeons are in charge of emergency wards. This compares with Stewart's report before the Southern Surgical Society in 1959, when he summarized the results of his studies of emergency wards in 271 hospitals. He found that 84 per cent were being directed by general surgeons. In his survey, however, 41 per cent of emergency-ward admissions had traumatic lesions, whereas only 5 per cent of the total admissions had non-traumatic, acute abdominal disease.

Eighty-one of eighty-three of our replies stated that fractures are largely in the hands of the orthopaedic surgeons. Thirteen indicated that general surgeons are treating fractures in their clinics. The majority of skin grafts are being done by plastic surgeons, but second in this endeavor are the orthopaedic surgeons. In eighty-one clinics amputations are done by orthopaedic surgeons; in sixty-three of these they are shared with the general surgeons. Tendon surgery is done by orthopaedic surgeons in seventy-three centers, by general surgeons in sixty-one, and by plastic surgeons in twenty-five. In seventy-four of the eighty-three installations, hand surgery is done by orthopaedic surgeons; in forty-four by general surgeons; and in thirty-three by plastic surgeons. Directors of twenty-two training centers reported that they had separate hand services.

A significant observation was that children's orthopaedics in relation to trauma is decreasing. Seventeen installations replied that this was definitely so, and another twenty-one stated that there was a relative increase in fractures and other trauma. This impression is substantiated by figures from one Shriners' Hospital, which showed that in 1925 there were 49 per cent cases of poliomyelitis and in 1957 only 12.4 per cent. Tuberculosis decreased from 5.9 to 1 per cent. Mental defectives, cerebral palsy cases, etc. increased from 1.8 to 12.0 per cent and congenital deformities increased from 6.3 to 24.4 per cent. "Accidents to children remain the leading cause of death in the younger groups—perhaps not so much because of any great actual increase in accidents as because of the continued decrease in deaths from infectious disease." The fact is that trauma is now the commonest cause of death under the age of thirty-six years in the United States.

Curtis, in a review of forty-eight children's orthopaedic installations, concluded that ten years ago these installations were almost entirely devoted to orthopaedics. Now, 25 per cent of the work in these facilities is carried on by other specialties and at that only three-fourths of the beds are occupied. Curtis also found that where there is a large concentration of population, children's orthopaedics has dropped remarkably, and adult services have increased. Serious consideration is being given to a trauma service in many of the installations included in Curtis's survey.

Fortunately, there is still a desire on the part of the vast majority of orthopaedic centers to require for the trainee preliminary training in basic surgery. Forty-eight of the eighty-three in our study believe that one year of general surgery is sufficient; twenty-six prefer two or more years; and only five are of the opinion that preliminary surgical training prior to specializing is unnecessary. In this connection a Committee from the Council of Medical Education and Hospitals, the American Board of Surgery, and the American College of Surgeons is making an effort to provide a minimum of two years of basic surgical training for the surgical specialties. It is proposed by them that two years as an assistant resident in general surgery be a prerequisite for acceptance into any training center for a surgical specialty. I am sure that the real hope is to raise the standards of all branches of American surgery. Frank Glenn has remarked editorially: "The success of such a plan would be dependent upon a complete understanding of the objectives and an unreserved, dedicated cooperation upon the part of the general surgeons and those in the surgical specialties". I suggest that members of The American Orthopaedic Association and other qualified orthopaedic surgeons join in this effort and insist that adequate, basic, surgical training for the specialist be provided by the general surgical services in our country. This point of view is not inconsistent with maintenance of our independence and a demand for a stronger voice in directing the departments of surgery in our medical schools, as was so vigorously advocated by Abbott in 1947.

The majority of us are primarily surgeons. Our patients are the first to insist that we know what we are doing and that we do it properly when they are on the operating table and during their postoperative care. Our research laboratories in orthopaedic surgery are gradually increasing in number and in quality. The need for basic research is fundamental. The Orthopaedic Research and Education Foundation deserves strong praise. We do not yet have in our ranks, however, a sufficient number of men adequately trained to instruct our younger members in broad, basic, surgical principles, not so much in techniques—we can provide that—but in the knowledge of wound healing, the treatment of shock, the role of the endocrines, fluid balance, and of total preoperative and postoperative care.

Naffziger, himself a neurosurgeon, has remarked: "Specialization is essential to progress but to be useful as a teacher the specialist must be able to investigate his work in the entire field of surgery".

Next to obstetrics and gynecology we represent the largest single specialty group in surgery. The proposal to establish a Board of Trauma was correctly opposed in 1957. Nevertheless, such an occurrence will be a possibility unless we as orthopaedic surgeons equip ourselves in order to cope with the problem of trauma in a general sense.

One may ask how this can be accomplished with our present requirements in medical schools and in postgraduate training. Time in postgraduate training cannot be sacrificed. Where, then, can we economize on time? It must be done in our colleges and in our medical schools. This can be done without sacrificing training in basic science. A graduate of a college may go directly to business and, as a rule, work eleven or eleven and a half months a year. Medical students are not engaged in required study for twelve months out of the forty-eight in their course of instruction. Is it not time that medical-school curricula be altered to meet the needs in post-graduate training? R. A. Moore, President of the Downstate Medical Center of New York, suggests elimination of the summer vacation and an acceleration of the program for brighter students. Some experimentation in this regard is under way at Western Reserve, Johns Hopkins, and Northwestern Medical Schools. Boston University is combining in six years, training in liberal arts and medicine, and is utilizing the summer months in so doing. In these changing times we find ourselves as did those famous cartographers, Rand and McNally, after World War I, when maps were constantly changing according to the wishes of those recorded as victors. In the words of Newman Levy:

"Time was when this business of ours was
 grand,"
Said Mr. McNally to Mr. Rand,
"When our toughest job was to sit and think
Shall France be purple and Britain pink?
Shall Spain be tinted a bright cerise,
And perhaps a dash of green for Greece?"

"Remember those days," McNally said,
"When we'd plan a map a month ahead,
And we'd know, if it came out at noon,
 let's say,
It was up to date the entire day?"

"Those days," said Rand, "are gone *totally*."
"You said it, brother," said Mr. McNally.

While much has been accomplished in caring for the injured patient throughout our land, and while many individual orthopaedic surgeons have done their part, our societies of orthopaedic surgery have done little as organizations toward this end. The Instructional Courses of The American Academy of Orthopaedic Surgeons provide an excellent source for the teaching of trauma to the younger orthopaedic surgeons, yet in 1960 of a total of 111 courses given, only twenty-one dealt with fractures and other forms of trauma, and all but four of these had to do with injury to bone alone. With the relative decrease in children's orthopaedics and an increase in trauma, should there not be some realignment in the residency training of orthopaedic surgeons?

The British orthopaedic surgeons are a step ahead of us in trauma management. Worth noting is the *Memorandum on Accident Services—1959,* published by a committee representing The British Orthopaedic Association. The situation in Britain where the population is concentrated is admittedly bad. It is far worse in our land where distances are greater, and adequately trained personnel to care for the wounded are widely scattered.

The American Orthopaedic Association has taken the lead in advancing orthopaedic surgery throughout its seventy-four years. I think, however, we have not put forth our best effort toward the injured patient. Let us pick up the challenge and adopt a positive attitude toward the necessity of greater participation in the management of trauma. We must be aggressive in our approach. We must be the leaders. Said Pericles to the Athenians: "We do not imitate—but are a model to others". Whether we like it or not, the care of the wounded has fallen upon our shoulders. We can no longer simply sit as consultants. Theodore MacManus wrote:

> Man was not made to sit a-trance,
> And press, and press, and press his pants;
> But, rather, with an open mind,
> To circulate among his kind.
>
> And so, my son, avoid the snare
> Which lurks within a cushioned chair;
> To run like hell, it has been found,
> Both feet must be upon the ground.

Realizing that three-fourths of all trauma is to the skeletal system, I believe frankly that we as orthopaedic surgeons are not responding sufficiently to our opportunity and responsibility in the management of trauma. Mitchell expressed the same feeling in 1959 when he insisted that greater emphasis be placed upon training in all phases of trauma to the trunk and extremities.

I am convinced that the future of orthopaedic surgery will lie to a great extent in the field of trauma.

Many conditions which the orthopaedic surgeon has treated in the past can and should be prevented or corrected early in their development; namely, congenital dislocation of the hip, club-foot, and, possibly, scoliosis. At a meeting of the International Society of Orthopaedic Surgery and Traumatology held in New York in 1960, a day and a half was spent discussing congenital dislocation of the hip. Perhaps a more appropriate audience would have been that of obstetricians and pediatricians. Certainly these two specialty groups must bear a heavy responsibility in detecting congenital anomalies early in life, when treatment is far simpler.

Bryan McFarland in his *Editorial of A.D. 2000,* which, after all, is only thirty-nine years away, wrote: "The incidence of bone and joint injury has increased and today we pay respect to the gallant efforts of our forefathers who perforce spent so much of their time in treating congenital dislocation of the hip, clubfoot, and other deformities that are seldom seen today except in museums". Let us hope this day will come.

In closing my remarks, I like to remember that William T. Councilman, Professor of Pathology at Harvard, in his last formal lecture in 1922, referred to the three great epochs of life as birth, marriage, and death. A fourth great epoch in the life of any orthopaedic surgeon would surely be that of Presidency of this great society.

I recall my predecessors in this office with admiration, and when I think of my teachers I am more than grateful; to Nathaniel Allison, who first encouraged me to study orthopaedic surgery; to Ralph Ghormley, whom I revered all of my professional life; and to my chief, Marius Smith-Petersen, that unique and stimulating character, whose contributions to our special branch of surgery will live forever, and who taught me so much.

. . . for the great honor that you have given me, I thank you.

Edwin F. Cave, M.D.,
Consulting Visiting Orthopedic Surgeon

Reprinted from *The Journal of Bone and Joint Surgery,* June 1961, with deletions as indicated above.

There has been wide interest in the recent venture of our Fracture Service into the area of case teaching. The fracture office publishes monthly an illustrative fracture problem and discussion of therapy, much along the lines of the Clinical-Pathological Conferences presentations by the Pathology Department in the *New England Journal of Medicine.* The Fracture Service case report appears in the last issue of the *Journal of the American Medical Association* each month.

The Board of Trustees, at their meetings on October 13 and 27, voted:

To accept the resignation of Dr. Louis Bakay from the position of Clinical Associate in Neurosurgery, effective as of September 30;

To grant Dr. George P. Canellos a Dalton Scholarship of $458.33 per month for the months of November and December.

To appoint:

Dr. Mira Ahuja as Clinical Fellow in Pathology for one year, beginning October 16;
Dr. Noel H. Aldridge as Assistant Radiologist, beginning October 13;
Dr. Kenneth A. Arndt as Assistant Resident in Dermatology for one year, beginning July 1, 1962;
Dr. George P. Canellos as Assistant Resident in Medicine for one year, beginning July 1, 1962;
Dr. Hugh P. Chandler as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;
Dr. John R. Collins as Clinical and Research Fellow in Medicine, beginning July 1, 1962;
Dr. Arthur Z. Eisen as Clinical Fellow in Dermatology, beginning July 1, 1962;
Dr. Wolfgang K.-R. Entzian as Clinical and Research Fellow in Neurosurgery, beginning January 2, 1962;
Dr. William F. Gallagher, Jr., as Assistant Resident in Dermatology, beginning July 1, 1962;
Dr. Mehran Goulian as Clinical and Research Fellow in Medicine for one year, beginning January 1, 1962;
Dr. Alfred Leitner as Assistant Resident in Medicine for one year, beginning July 1, 1962;
Dr. Gordon F. Lupien as Assistant Resident in Orthopedic Surgery for one year, beginning October 1, 1962;
Prof. Heinz Osser of Berlin as Visiting Radiologist, for the period October 16 through October 21;
Dr. Peter B. Rosenberger as Exchange Assistant Resident on the Children's Service, for the period October 26 to December 4;
Judy F. Rosenblith, Ph.D. as Associate Psychologist in the Department of Psychiatry, effective as of October 1;
Dr. Robert L. Scheig as Clinical and Research Fellow in Medicine, beginning July 1, 1962;
Dr. Alfred L. Weber as Assistant Radiologist, beginning October 13;
Dr. Ralph A. Williams as Clinical Fellow in Psychiatry, for a period of nine months, beginning October 1;
Dr. Gerald F. Winkler as Clinical and Research Fellow in Neurology for one year, retroactive to July 1.

At their May 26 meeting, the Trustees voted to give Gordon L. Brownell, Ph.D., the permanent appointment as Applied Physicist, to begin July 1. This vote was delayed in reaching the office of The News until November 10.

At their meetings on October 11, 18, and 25, and November 1, the General Executive Committee voted:

To promote from the position of Intern to that of Assistant Resident in Medicine for one year, beginning July 1, 1962:

Dr. Robert E. Burke
Dr. Norman R. Cohen
Dr. Howard B. Corning
Dr. Shalom Z. Hirschman
Dr. Newton E. Hyslop, Jr.
Dr. Alan S. Keitt
Dr. Philip W. Majerus
Dr. John C. Parker
Dr. Kenneth I. Shine
Dr. James F. Spann, Jr.

To reappoint:

Dr. Robert E. Kahn, with a change of title from Clinical and Research Fellow to that of Clinical Fellow in Medicine, for one year, beginning November 1;
Dr. Manuel Nava (y Gutierrez de Velasco) as Clinical and Research Fellow in Medicine, for the period December 1, 1961 through June 30, 1962;
Dr. Krishna M. Saxena as Clinical and Research Fellow on the Children's Service for one year, beginning July 1;
Dr. Boris Senior as Clinical and Research Fellow on the Children's Service for one year, beginning November 1;
Dr. Juan F. Sotos as Clinical Fellow on the Children's Service for one year, beginning July 1;
Dr. Hsi-Chin Tsai, with the title of Visiting Fellow in Medicine, for the period October 2, 1961 through March 31, 1962;
Dr. Weiert M. Velle as Research Fellow in Medicine for one year, beginning October 1;
Irving Weliky, Ph.D., with a change of title from Research Fellow in Medicine to Assistant Biochemist (Medicine), effective as of October 1;
Chuan-Tao Yu, Ph.D. as Research Fellow in Medicine for one year, beginning November 2.

To appoint:

Peter L. Bergquist, Ph.D. as Research Fellow in Medicine, effective as of September 12;
Hilda Dickoff, Ph.D. as Research Fellow in Psychiatry, effective as of September 21;
Kerstin G. C. Gezelius as Research Fellow in Medicine for one year, beginning January 15, 1962;
Dr. George F. Kwass as Clinical and Research Fellow in Pathology, for the period October 1, 1961 through June 30, 1962;
William R. Meyers, Ph.D. as Research Fellow in Psychology, effective November 1;
Dr. Triplicane A. Sundararajan as Research Fellow in Biochemical Research for one year, effective as of September 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

General Medicine

Holt, P. R., Isselbacher, K. J., and Jones, C. M.
The reversibility of Whipple's disease. Report of a case with comments on the influence of corticosteroid therapy.
New England J. Med. 264:1335.

Shafer, W. H., and Isselbacher, K. J.
Uridine metabolism in chronic liver disease.
Gastroenterology 40:782.

General Surgery

Cope, O., Barnes, B. A., Castleman, B., Mueller, G. C. E., and Roth, S. I.
Vicissitudes of parathyroid surgery: Trials of diagnosis and management in 51 patients with a variety of disorders.
Ann. Surg. 154:491.

Huggins, C. E.
Survival of hamsters after 4 hours of cardiac arrest at O°C.
In Surg. Forum, XII:413.

Laboratory Science

Finkel, R. M., and Gergely, J.
Studies on cardiac myofibrillar adenosine triphosphatase.
J. Biol. Chem. 236:1458.

Gergely, J.
The biochemistry of muscular contraction.
In Neuromuscular disorders 38:70.

Hultin, A. von d., Arrhenius, E., and Morgan, W. S.
Amino acid incorporation by liver microsomes and ribonucleoprotein particles.
In Biological structure and function 1:221.

Isselbacher, K. J.
Solubilization and purification of glucuronyl transferase from rabbit liver microsomes.
Biochem. & Biophys. Research Communications 5:243.

Isselbacher, K. J., and Krane, S. M.
Studies on the mechanism of the inhibition of galactose oxidation by ethanol.
J. Biol. Chem. 236:2394.

Jeanloz, R. W., Rapin, A. M. C., and Hakomori, S.-I.
Partial esterification of 1, 6-anhydro-β-D-glucopyranose.
J. Organ. Chem. 26:3939.

Martonosi, A., and Gouvea, M. A.
Studies on actin. VI. The interaction of nucleoside triphosphates with actin.
J. Biol. Chem. 236:1345.

Rebouças, G., and Isselbacher, K. J.
Studies on the pathogenesis of the ethanol-induced fatty liver. I. Synthesis and oxidation of fatty acids by the liver.
J. Clin. Invest. 40:1355.

Orthopedic Surgery

Cave, E. F.
Fracture of the month—one year. (Editorial)
J.A.M.A. 177:258.

Otolaryngology

Kelemen, G.
Anatomy of the larynx as a vocal organ: evolutionary aspects.
Logos 4: no. 2, 46.

Miscellaneous

Boardman, D. W.
The doctor's office laboratory.
Am. Pract. & Digest Treat. 12:423.

Chafetz, M. E.
Alcoholism problems and programs in Czechoslovakia, Poland and the Soviet Union.
New England J. Med. 265:68.

Garland, J.
A fourth estate.
New Physician 10:71.

Garland, J.
Relations between medicine and pharmacy.
World M. J. 8:231.

Garland, J.
United States Food and Drug Administration and the pharmaceutical industry.
Brit. M. J. 1:1452.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Apple, D. (Editor)
Sociological studies of health and sickness.
New York, McGraw-Hill Book Company, Inc., 1960.
(613) Cabot Memorial Room

Brachet, J., and Mirsky, A. E. (Editors)
The cell, vol. 3.
New York, Academic Press, Inc., 1961.
(2Am)

Brecher, G. A.
Venous return.
New York, Grune & Stratton, 1956.
(15C)

Ciba Foundation Symposium on somatic stability in the newly born, edited by G. E. W. Wolstenholme and M. O'Connor.
Boston, Little, Brown and Company, 1961.
(26E)

Clifton, C. E. (Editor)
Annual review of microbiology, vol. 15.
Palo Alto, Annual Reviews, Inc., 1961.
(9A)

Eyring, H. (Editor)
Annual review of physical chemistry, vol. 12.
Palo Alto, Annual Reviews, Inc., 1961.
(5A)

Freidson, E.
Patients' views of medical practice.
New York, Russell Sage Foundation, 1961.
(362) Cabot Memorial Room

Greenberg, D. M. (Editor)
Metabolic pathways, vol. 2.
New York, Academic Press, Inc., 1961.
(5M)

Hanson, H.
The pied piper of Peru.
Jacksonville, Fla., Convention Press, 1961.
(1Ea)

Harris, R. J. C. (Editor)
International symposium on protein biosynthesis.
New York, Academic Press, Inc., 1961.
(5B)

Kaye, S.
Handbook of emergency toxicology, ed. 2.
Springfield, Ill., Charles C. Thomas, 1960.
(34N)

Leeds, M.
The aged, the social worker, and the community.
Cleveland, Howard Allen, Inc., Publishers, 1961.
(177.7) Cabot Memorial Room

Lewin, P.
The foot and ankle.
Philadelphia, Lea & Febiger, 1940.
(18O)

Li, C.
Human genetics; principles and methods.
New York, McGraw-Hill Book Company, Inc.—Blackiston Div., 1961.
(2Am)

Loraine, J. A.
Clinical application of hormone assay.
Baltimore, The Williams & Wilkins Company, 1958.
(5K)

McElroy, W. D.
Cellular physiology and biochemistry.
Englewood Cliffs, N. J., Prentice-Hall, Inc., 1961.
(2Am)

Mills, L. C., and Moyer, J. H. (Editors)
Inflammation and diseases of connective tissue; a Hahnemann symposium.
Philadelphia, W. B. Saunders Company, 1961.
(8E)

Murphy, J. T. (Editor)
Formulary of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary.
Boston, Massachusetts General Hospital, 1960.
(22B)

Parker, R. C.
Methods of tissue culture, ed. 3.
New York, Paul B. Hoeber, Inc., 1961.
(8C)

Polansky, N. A. (Editor)
Social work research.
Chicago, University of Chicago Press, 1960.
(177.7) Cabot Memorial Room

Pincus, G. (Editor)
Recent progress in hormone research, vol. 17.
New York, Academic Press, Inc., 1961.
(14K)

Pitt-Rivers, R. (Editor)
Advances in thyroid research.
New York, Pergamon Press, 1961.
(14V)

Pyle, S. I.
Onsets, completions, and spans of osseous stage of development in representative bone growth centers of the extremities.
Lafayette, Ind., Society for Research in Child Development, 1961.
(18C)

Raffel, S.
Immunity, ed. 2.
New York, Appleton-Century-Crofts, Inc., 1961.
(8G)

Ramsay, J. A., and Wigglesworth, V. B. (Editors)
The cell and the organism.
New York, Cambridge University Press, 1961.
(2Am)

Senders, V. L.
Measurement and statistics; a basic text emphasizing behavior science applications.
New York, Oxford University Press, 1958.
(31E)

Sigerist, H. E.
A history of medicine, vol. 2.
New York, Oxford University Press, 1961.
(1F)

Smithers, D. W.
The clinical aspect of the cancer problem.
Edinburgh & London, E. & S. Livingstone, Ltd., 1960.
(13V)

Stewart, C. P., and Strengers, Th. (Editors)
Symposium on water and electrolyte metabolism.
Amsterdam, Elsevier Publishing Company, 1961.
(5M)

Yates, P. O., and Hutchinson, E. C.
Cerebral infarction.
London, Her Majesty's Stationers Office, 1961.
(19J)

The 115th anniversary of Ether day was observed in the Moseley Rotunda on October 16, with Dr. Ellsworth T. Neumann presiding. Mr. Elliot L. Richardson, a member of our Board of Trustees, brought greetings from the Board and discussed the functions of the Trustees and their interest in and appreciation of each worker in the Hospital. Dr. Nathaniel W. Faxon gave a talk on "The M.G.H. Service Pins: Why, when, and how", in which he described the several pins which have been used over the years at the Hospital. Much research went into the development of Dr. Faxon's address, and we are planning to give you the text of his speech at an early date.

Over 240 pins were awarded for 5 years of continuous service at the Hospital, 84 (the largest number ever) for 10 years, 9 for 20 years, 10 to members of the professional staff for 25 years of unbroken service, 11 for 30 years (including 5 doctors), and 3—Miss Alice M. Harrington, Miss Nora Lordan, and Mr. John T. Keating—for 40 years.

Also on Ether Day, afternoon and evening symposia on cancer, another feature in observance of our 150th Anniversary, were held in the Morse Auditorium of the Museum of Science, Boston. The subject for the afternoon was "Symposium on viral oncogenesis and the problem of human cancer", organized by Dr. John F. Enders of the Children's Hospital Medical Center in Boston, with Dr. Peyton Rous, a Member (*Emeritus*) of the Rockefeller Institute, New York, as Chairman. The speakers and their subjects were:

Dr. Wilhelm Bernard, Institut de recherches sure le Cancer Gustave Roussy, Villejuif, France—"The nature of tumor viruses";
Dr. Renato Dulbecco, California Institute of Technology, Pasadena—"The response of isolated cells to tumor viruses";
Dr. Richard E. Shope, Member of the Rockefeller Institute, New York—"Are animal tumor viruses always virus-like?";
Dr. Wallace P. Rowe, Dept. of Health, Education & Welfare, Bethesda—"The epidemiology of a murine tumor virus";
Sir Christopher Andrewes, until lately Deputy Director, National Institute for Medical Research, London—"Viruses in relation to the whole cancer problem".

The subject for the evening symposium was "Clinical aspects of research in neoplastic disease", with Dr. Grantley W. Taylor and Dr. Claude E. Welch acting as Chairmen. The speakers and their subjects were:

Dr. Warren Cole, University of Illinois, Urbana—"Application of research to surgical treatment of cancer";
Dr. D. W. Smithers, Director, Royal Marsden Hospital, London—"The co-operation of surgeons and radio-therapists in the management of patients with neoplasia";
Dr. Sidney Farber, Director of Research, Children's Cancer Research Foundation, Boston—"The status and potential of cancer chemotherapy";
Dr. J. R. Heller, President, Sloan-Kettering Cancer Center, New York—"Cancer control—saving lives today".

During the dinner, between the two symposia, the annual Treadwell Library Award was conferred upon Dr. Joseph C. Aub by Dr. James Howard Means. The text of the citation reads:

> Distinguished pupil and associate of Walter B. Cannon, you were a leader in that small group which first brought the research laboratory into the Hospital, to the great enrichment of medical knowledge. Your pioneer work in human metabolism has become a classic. By charting the pathways of lead metabolism you plotted a course to a rational treatment and prevention of lead poisoning. You have added significantly to our understanding of the cancer problem. Your individual contributions have been many times multiplied by the inspiration you have given to a host of students and colleagues.

As an added tribute to Dr. Aub and his work, the following paper was written and passed on to us:

Our hero was born in Cincinnati in 1890. He graduated from Harvard College in 1911 and from Harvard Medical School in 1914. After that he served a medical internship at the Massachusetts General Hospital (*E.M.* 1915).

Even in medical school days he showed a keen interest in research, inspired in considerable measure by that great man, Dr. Walter B. Cannon, with whom he began a lifelong friendship.

During house staff days he caught the eye of the then new full-time Chief of Medicine, Dr. David L. Edsall, who at once recognized him as very promising material for academic medicine.

On finishing his internship, he went off to New York for a year under Graham Lusk and Eugene F. DuBois at the Russell Sage Institute at Cornell and Bellevue Hospital. Here he became, under this wonderful tutelage, an accomplished calorimetrist.

After this he returned to the M.G.H. and served for a year as resident (one of the very early ones) on the East Medical Service. For his research effort at that time, he worked on a problem of the specific dynamic action of protein in liver disease, in the primitive basal metabolism laboratory which only lately had been established by Dr. James Howard Means.

Come the spring of 1917, the United States had got into World War I and Aub went off to France with the U.S. Army Base Hospital No. 6, along with many other MGH-ers. This unit was stationed near Bordeaux, a long way from the front, and Aub was delighted when he got ordered to an advanced area to do research on shock with his friend Cannon.

After World War I, Aub went for a time into Physiology in Cannon's department at Harvard Medical School, rising to the rank of Assistant Professor of Physiology. More work on shock was done, and at the instigation of Edsall he embarked on a long-term study of lead poisoning, the basic foundation of which was done with Cecil Drinker, also in the Department of Physiology at Harvard Medical School.

In 1924 he returned to medicine and the M.G.H., where he continued until 1928. It was during these years that he did a really great work on the lead program. Both the basic and clinical aspects were studied at the M.G.H. It was in 1925 that the Research Ward 4 was opened, and it was Aub who then made the major use of it. Means, in his history of Ward 4, says that it was Aub's "outstanding ability as an investigator that set the high standards of operation that have characterized the work of Ward 4 ever since." The results of the lead program were far reaching and distinguished. The whole metabolism of lead was elucidated: how it enters the body; circulation in the blood, whence it exerts its toxic action; how it gets stored in bones, where it is relatively innocuous; and how it is excreted. More important still, it was found out how its absorption can be delayed and its excretion accelerated. The prophylaxis and treatment of plumbism was thus revolutionized.

Aub spent the years from 1928 to 1942 in charge of research at Harvard's Huntington Memorial Hospital which, perforce, was related to cancer, and this was probably the beginning of his career in cancer research which has continued ever since, and which is the accomplishment for which he is best known today. During these years he also had the appointment of Physician at the Peter Bent Brigham Hospital, to permit him to keep in touch with the broader reaches of medicine.

In 1942, Harvard closed the Huntington Hospital, but transferred the funds to maintain the Huntington Laboratory to the Massachusetts General. Aub returned then to the M.G.H., with the Huntington Laboratory in his pocket, so to speak, and has been here ever since. The M.G.H. opened its Research Building in 1951, and Aub got a floor of that. Under his brilliant leadership, the work steadily gained in distinction and became one of the top flights of cancer research enterprises in the country.

After some years as Associate Professor of Medicine at Harvard Medical School, Aub became Professor of Research Medicine in 1943. In 1956, due to the inexorable working of University rules, Aub became *emeritus*, but he has kept right on doing research in a small lab of his own at the M.G.H., while Dr. Paul C. M. Zamecnik has taken over the leadership of the Huntington.

Aub has carried on innumerable special activities and assignments during his long professional life. One of the most entertaining was his study of the endocrinology of deer antlers with Dr. George Wislocki. In the course of this, they found it convenient to shoot steroid pellets into the buttocks of deer with an air rifle.

He has worked in many ways for Harvard, on all sorts of committees, and especially as Chairman of the Department of Medicine for many years. During World War II, he devoted his energies to the study of shock, as part of a collaborative program sponsored by the Office of Scientific Research and Development, under Dr. Vannevar Bush, along with Drs. Cannon, Donald Van Slyke, and Jacob Fine, here in Boston, and others.

Aub has served the government in various ways, and societies of one sort or another. He has travelled far and wide to Europe, India, and elsewhere, on teaching missions. He has received many honors, both at home and abroad—too many to mention here. Perhaps the most distinguished of all is his membership in the National Academy of Sciences. Not many M.D.'s are admitted to that very learned body.

Joe Aub has had a full and rewarding life. In addition to his intellectual achievements, he has warmed the hearts of many by his friendship and kindliness. With his fine wife, Elizabeth, he has created a home in Belmont which has extended endearing hospitality to persons from all quarters of the earth.

Anonymous

Another event which took place on Ether Day this year was the business meeting of the Massachusetts General Hospital House Pupils Association, at which time the following officers were elected for a term of three years:

Dr. Langdon Parsons—President
Dr. Richard Chute—Vice President
Dr. Briant L. Decker—Secretary-Treasurer

* * *

VOLUNTEER GROUPS

Distaff Club

On November 14, Dr. Paul D. White talked to us about his recent world trip and showed us many very interesting slides. Husbands were invited to attend.

Mrs. Charles E. Huggins invited the Distaff-ers to her home on November 8, to hear Dr. Jane Hallenbeck, noted child psychiatrist, speak on "Normal child development".

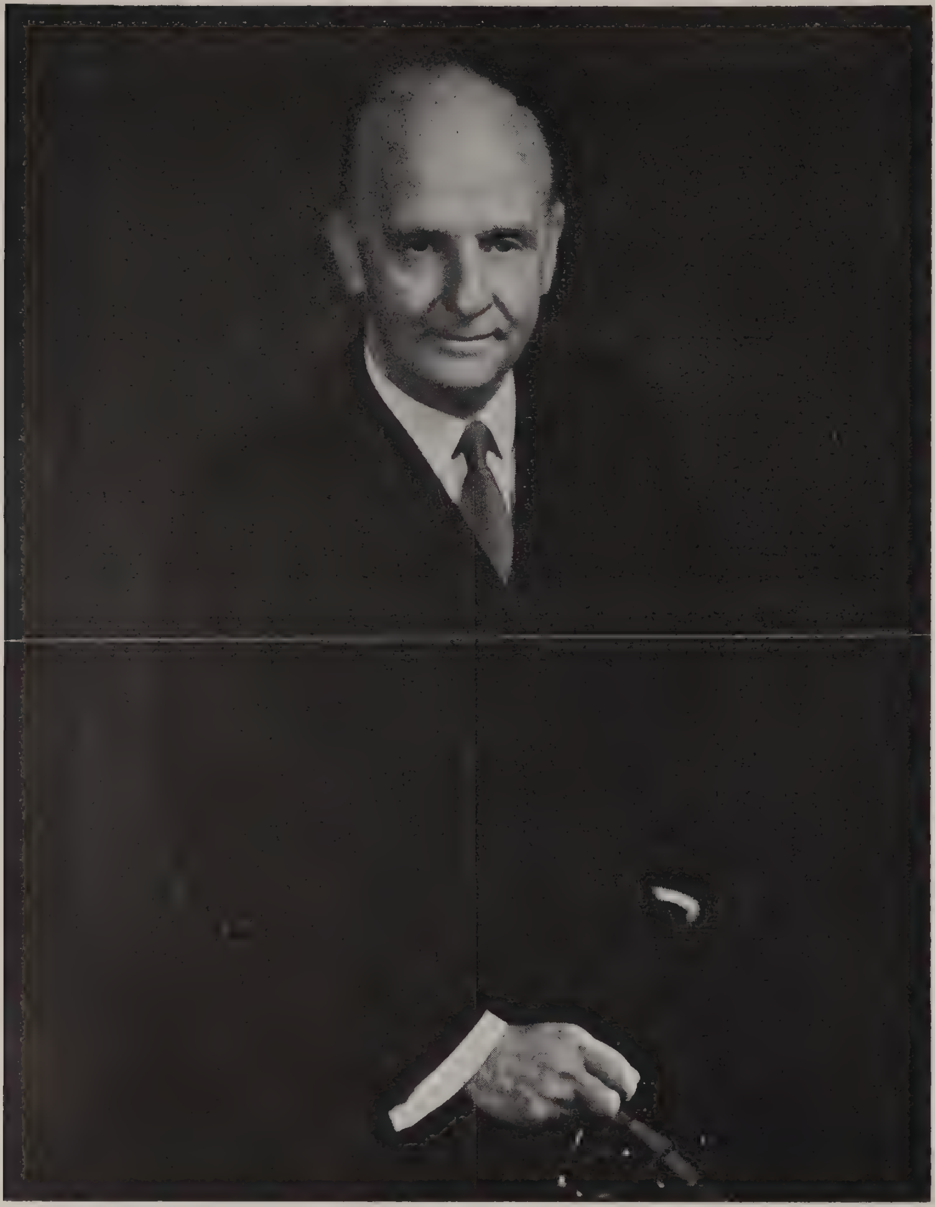
Our Volunteer Group in the Burnham Memorial is a very active one, under the supervision of Dr. Nathan B. Talbot and Miss Mary E. Quinlan.

Interesting group meetings have begun in the fields of child study, current events, book reviews, and sewing.

Our plans for December include gift wrapping for the MGH Christmas Party.

MGH Service League

The Massachusetts General Hospital Service League (formerly the M.G.H. Staff Wives Association) gave its fall tea on the afternoon of October 24, in the Walcott House. This tea is given annual-



No. 98 in a series of Staff photographs
Dr. Edwin F. Cave, Consulting Visiting Orthopedic Surgeon

ly to honor the professional visitors from other countries who come to the Massachusetts General Hospital for study and training. At the present time, these visitors represent 42 different countries.

Sandwiches and cakes, tea and coffee were served from the attractively decorated table, while the guests chatted with old friends and made new acquaintances. The truly international tone of the party was emphasized when ladies from India appeared in their native attire; and Dr. Nava's little girl, from Mexico, was the center of interest when she arrived.

This tea is only one of the many ways in which the Massachusetts General Hospital Service League extends hospitality and assistance to our professional visitors from other parts of the United States and from other lands.

New addresses:

Dr. Mervyn F. Burke, Jr. (a.r.s. 1961), 1950 Hopkins St., Berkeley 7, Calif.

Dr. Clarke T. Case (*W.S.* 1943), 1402 Genesee St., Utica, N. Y.

Eubert J. Daniel, Ph.D. (res. fel. *Or.* 1961), 27 Park Ave. West, South Weymouth, Mass.

Dr. Briant L. Decker (*C.M.* 1931 and *W.M.* 1932), 75 Mount Auburn St., Cambridge, Mass.

Capt. Oscar S. DePriest, III, MC, USAR (*S.* 1955), Medical Field Service School, Fort Sam Houston, Tex.

Dr. James Greenough (*W.S.* 1920), Box 22, Cooperstown, N. Y.

Dr. Walter F. Lever (a.r.p. *D.* 1938), Boston Dispensary, 25 Bennet St., Boston 11, Mass.

Dr. M. Morris Pinckney (*W.M.* 1932), 3500 Kensington Ave., Richmond, Va.

Dr. Leonard H. Plotkin (*C.M.* 1955), Williams, at Ridge Rd., Longmeadow, Mass.

Dr. Philip J. Porter (*C.M.* 1957), Boston City Hospital, Boston, Mass.

Dr. Dwight R. Robinson (*M.* 1958), Dept. of Biochemistry, Brandeis University, Waltham, Mass.

Dr. Richard H. Sweet (*E.S.* 1928), Nelson Star Route, Keene, N. H.

Brief bits:

Dr. Gordon L. Brownell has assisted in the Isotope Committee lectures at the Hospital.

Rev. James H. Burns, past Chaplain at M.G.H., has been installed as Executive Director of the New Haven Council of Churches. His address is 65 Lake St., Hamden 17, Conn.

Dr. Morris E. Chafetz visited Hungary, Yugoslavia, Bulgaria, and Roumania during July and August, to study their alcoholism programs. He lectured to the Academy of Science in Sofia, Bulgaria, on the subject of alcoholism.

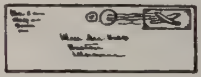
Dr. Willard Dalrymple (*M.* 1947) will assume the duties of Chairman of Princeton University's Department of Health on January 30, 1962.

Dr. Ferdinand Haase, Jr., past Assistant Director at M.G.H., informs us that the Albany Hospital has changed its name to Albany Medical Center Hospital.

Dr. Kurt J. Isselbacher has recently been appointed to the Gastroenterology Training Grants Committee of the National Institutes of Health for a period of five years, and has also been appointed to the Steering Committee of the Gastroenterology Research Group for five years. This group sponsors, twice a year, symposia relating to gastrointestinal physiology and pathophysiology.

Last October, Dr. John B. Stanbury attended a Colloquium on the Thyroid, under the sponsorship of the Institute of Biophysics in Rio de Janeiro and the 5th Pan American Congress of Endocrinology in Lima. Between meetings, he visited the Medical School of the University of São Paulo.

Dr. Byron H. Waksman gave an address on "Isosensitization to nervous substances" before the Fourth International Congress of Allergology, in New York, on October 19. Dr. Waksman was also invited to present a paper on "Tissue damage in the 'delayed' (cellular) type of hypersensitivity", as part of the Second International Symposium on Immunopathology, at Brook Lodge, Michigan, on October 24.



This letter has come from Dr. Fernando A. Cardenal (a.r.s. *Or.* 1959). Dr. Cardenal's many friends here at M.G.H. will be interested in his new address—Organisation Mondiale de la Santé, Hôpital de Befalé (par Boende), Province Equatoriale, République du Congo (Léo). The letter reads, in part:

> Would you be so kind as to continue sending me The News at the above address. I miss very much your publication and all the familiar names and your accounts of the activities going on at Massachusetts General.
>
> It may come as a surprise to you to receive this request from here. As a matter of fact, I had planned this journey before leaving Boston, but I was not sure it would come to reality. It is now only two months since I arrived in Congo, after a long stay in Venezuela and a shorter one in Europe.
>
> There is a tremendous amount of most interesting work to be done here. I have a modern hospital, fairly well equipped for a tropical area. Usual commodities and even food are scarce or lacking very often; but, on the other hand, the surroundings and the climate (so far) are wonderful.

♣ ♣ ♣

A painting, depicting the first public demonstration of the use of ether for major surgery here in our Ether Dome on October 16, 1846, has been done by Robert Thom, the well-known artist for Parke Davis and Co., in recognition of our 150th Anniversary.

The painting will be on loan to the Archives Department from December 8 to 23, and will be exhibited in the lobby of the Warren Building. A great deal of research went into the execution of this picture, and everyone associated with Massachusetts General should avail himself of the opportunity to see it while it is here.

The Massachusetts General Hospital 1811 News

No. 209 Boston, Mass. January 1962

THE LABORATORY FOR CARBOHYDRATE RESEARCH OF THE MEDICAL SERVICES

In 1951, I was invited by Dr. Walter Bauer, then Chief of the Arthritis Unit, to become a member of the Robert W. Lovett Memorial Group for the Study of Crippling Disease, and to organize a laboratory for the study of the chemical structure of the polysaccharides of connective tissue and of related biochemical problems. Ten years later (July 1, 1961), the Lovett Group was formally reorganized into four independent units of the Medical Service and I was appointed Head of the Laboratory for Carbohydrate Research. Although the space allotted to our group on the second floor of the Research Building remains the same as it was at its opening, my staff has more than tripled.

As an organic chemist interested in biological and biochemical problems, I greatly appreciated the opportunity to study substances I had been interested in since the time of my doctoral thesis. I had always felt that the chemical study of complex biological substances needed the full-time effort of a small integrated group of scientists. Because of their complexity and their lack of a definite biological activity, the polysaccharides of connective tissue, composed of alternating units of hexosamine (D-glucosamine or D-galactosamine) and of uronic acid (D-glucuronic or L-iduronic) with additional sulfate ester groups, had not attracted the interest of the large research groups of the pharmaceutical industry, and were left open to the efforts of half a dozen university laboratories located in this country, England, Sweden, and Japan.

Before joining the Lovett Group, I had studied the chemical structure of hyaluronic acid at the Worcester Foundation for Experimental Biology. Rapidly it became evident that short-cut methods, like the periodate oxidation, used with success in the case of simpler polysaccharides, would not be successful with more complex polysaccharides. It was then necessary to resort to the well-tested method of methylation, in which each free hydroxyl of the polysaccharides is transformed into an acid-resistant methyl ether. The methylated substance is then hydrolyzed, and the free hydroxyl groups appearing correspond to the position of the linkage between the monosaccharide units, or between the sulfate group and the monosaccharide unit.

This method had already been attempted without positive results in this field. The main difficulty resided in the fact that degradation of a methylated polysaccharide made of units of hexosamine and uronic acid could give rise to seven different methylated hexosamines. At the start of our study, only three of the seven possible methylated derivatives of D-glucosamine and one of the seven possible methylated derivatives of D-galactosamine, to be used as references, were known. To study the practicability of the method, it was first necessary to synthesize all of the known and missing reference substances, and then attempt to separate and identify them in artificial mixtures. We were encouraged in this long task by the knowledge that if the method could be shown to be efficient, it could be applied not only to the elucidation of the structure of the acidic polysaccharides of connective tissue (hyaluronic acid, chondroitin sulfates, heparins), but also to more complex substances containing amino sugars, like the blood group active substances from secretions, the glycolipids of brain, nervous tissue and erythrocytes, the antigenic polysaccharides of bacteria, the glycolipids of the bacterial cell wall, and also to numerous amino sugar-containing glycoproteins, some of them possessing enzymatic or hormonal activity.

It was gratifying to see the deep interest evinced by other laboratories in this method. In fact, they have been requesting so many reference substances that, at the present time, one research assistant is working full time solely to replenish our dwindling supplies. Thus, the study by other laboratories of the chemical structure of brain glycolipids, of the biologically active oligosaccharides of human milk, of the enzymatic degradation products of connective tissue polysaccharides, and of bacterial antigenic polysaccharides, has been made possible by the availability of our synthetic reference substances.

I was greatly helped in this synthetic approach, which took ten years to be accomplished, by Dr. Pierre J. Stoffyn of the University of Brussels, who joined our group in 1953 and stayed until 1961, with an interruption of two years which he spent in Brussels. He has recently joined the research group at the McLean Hospital, to work on the chemistry of brain glycolipids. I also had the cooperation of Drs. Dieter M. Schmid and Charles P. Gansser, who have returned to Switzerland to join research laboratories in the pharmaceutical industry, and of Drs. Dorothy K. Stearns, Renée G. Naves, and Christine Bothner-By. At the present time, the separation and identification of these reference products are studied with the modern techniques of organic chemistry: infrared spectra, paper electrophoresis, paper chromatography, etc.

This synthetic approach has opened up many problems in carbohydrate chemistry, especially in amino sugar chemistry. Basic problems of transformation of one sugar into another were studied by Mrs. D. A. Jeanloz; and the synthesis of D-gulosamine, the third 2-amino hexose to be isolated from a natural source, was accomplished by Dr. Z. Tarasiejska (Glaser), formerly of the University of Brussels and presently a member of the Worcester Foundation for Experimental Biology. This sugar had been shown to be a basic constituent of the antibiotics streptolin and streptothricin. In addition, new amino sugars not as yet known in natural products, have been synthesized: D-allosamine, D-talosamine (an artefact in the degradation of chondroitin sulfate), 3-amino-D-idose and 3-amino-D-gulose. The interest in 3-amino sugars has greatly increased since the recent isolation of 3-amino-D-ribose and of 3-amino-D-glucose from puromycine and kanamycine, respectively, both antibiotics possessing anti-tumor activity. During the past few years, synthetic studies directed toward the preparation of derivatives of D-galactosamine have been carried out by Dr. Tarasiejska (Glaser).

New methods of preparation of the methylated amino sugars have been investigated by Mrs. D. A. Jeanloz and Mrs. D. Baggett, in order to prepare large amounts for biological testing. Since glucosamine and especially its derivative with lactic acid, muramic acid, have been shown to be main constituents of the bacterial cell wall, it is felt that derivatives of glucosamine may interfere with the formation of the cell wall.

Using the method of methylation established with the help of the synthetic methylated derivatives, we have determined the chemical structure of hyaluronic acid. This substance has been demonstrated not only in most connective tissues but also as an excretion product of some bacteria, especially of Streptococcus hemolyticus. Because of the extremely high viscosity of its solution, it has been ascribed the role of maintaining the rigidity of tissues, of barrier against infection, and, because of its chemical properties, of control in the exchange between the vascular system and the cells.

In 1953, we were able to show that the D-glucuronic moiety of hyaluronic acid was linked to the hydroxyl at C_3 of the D-glucosamine unit. The elucidation of the location of the second type of linkage, the D-glucosaminyl, with the D-glucuronic moiety, was solved by reducing the latter residue into a D-glucose residue and comparing the methylated glucose obtained with the reference substances already synthesized. Thus, we were able to show that the C_1 of D-glucosamine residue was attached to the oxygen at the C_4 of the D-glucuronic acid residue.

The elucidation of the chemical structures of the chondroitin sulfate isolated from adult mammalian cartilage (chondroitin 4-sulfate or chondroitin sulfate A), and of the dermatan sulfate (also chondroitin sulfate B or β-heparin), was accomplished mainly through the efforts of Dr. P. J. Stoffyn, with the help of Dr. Monique Trémège-Cleland for the latter substance. Both substances possess water retention and probably play a role in connective tissue similar to the one of hyaluronic acid, in addition to their high ion-binding capacity. Chondroitin 4-sulfate has been mainly isolated from cartilage, but it has also been detected in skin, in umbilical cord, and in granulation tissue. Dermatan sulfate is one of the main constituents of the connective tissue of skin, but it has been isolated also from lungs, and detected in tendons, heart valves, and aorta. It possesses a definite antithrombic activity and differs in this respect from chondroitin 4-sulfate. Dermatan sulfate is stored in large amounts intracellularly in Hurler's syndrome (a systemic disease of connective tissue) and is also excreted in the urine. The proportions of hyaluronic acid, chondroitin 4-sulfate, as well as of dermatan sulfate, seem to vary with age.

The problem presented by the elucidation of the chemical structure of chondroitin 4-sulfate and dermatan sulfate was similar to the one presented by hyaluronic acid, with the additional complication of one sulfate group located on the hexosamine part. The position of the sulfate group was established by comparing the products resulting from the degradation of the methylated polysaccharide with those obtained from the polysaccharide desulfated before methylation. In the latter product, the position originally occupied by a sulfate group was now occupied by a methoxyl group. Before investigating the nature of the linkages between moieties, it was necessary to show the nature of the uronic part of dermatan sulfate. After reducing it to a hexose residue and comparing it with a synthetic sample, it was possible to demonstrate that it was L-iduronic acid. This substance up to now has not been detected in any other biological material.

The method of methylation proved the position of the sulfate group in chondroitin 4-sulfate and in dermatan sulfate to be at C_4 of the galactosamine moiety. For both substances, also, it was demonstrated that the galactosamine moiety was located at the C_4 of the uronic moiety (D-glucuronic acid for the former, L-iduronic for the latter), and that the uronic moiety was attached to the oxygen at C_3 of the galactosamine moiety. The interesting conclusion from these studies is that for the three polysaccharides of connective tissue so far studied (hyaluronic acid, chondroitin 4-sulfate, and dermatan sulfate), the differences do not reside in the type of the linkage of their building blocks, but in the nature of these building blocks: D-glucosamine and no sulfate for hyaluronic acid, D-galactosamine with a sulfate group at position 4 for chondroitin 4-sulfate and dermatan sulfate, D-glucuronic acid for hyaluronic acid and chondroitin 4-sulfate, and L-iduronic acid for dermatan sulfate. These results require some interesting hypotheses for the specificity of the enzymatic systems involved in the biosynthesis of these high molecular substances.

The elucidation of the structure of dermatan sulfate required synthetic work on the sugar L-idose and the preparation of some of its methylated derivatives. This was accomplished by Dr. Pierre Stoffyn and by Dr. Neil Baggett, who received his training at the University of Birmingham, England. Dr. Baggett is presently working on the synthesis of the uridine-diphosphate derivative of L-iduronic acid, a substance involved in the biosynthesis of dermatan sulfate. He is also attempting to elucidate the chemical structure of the anticoagulant polysaccharide heparin. Dr. Anund A. Hallén, from the Karolinska Institutet in Stockholm, has recently joined our group. He is studying the chemical structure of chondroitin 6-sulfate, a polysaccharide isolated from the cartilage of animals of a lesser degree of evolution than those containing chondroitin 4-sulfate, like the shark. A similar polysaccharide seems to exist in mammalian tissues, but its identity with the substance isolated from shark cartilage has not been clearly shown. In addition, the chemical structure of chondroitin 6-sulfate is not definitely established, since it has only been suggested through comparison of its infrared spectra with those of synthetic monosaccharides.

As early as 1955, it was felt that the methods devised for the study of the polysaccharides of connective tissue could be applied to more complex molecules. Dr. Sen-itiro Hakomori, from the University of Sendai in Japan, undertook the very large task of purifying the substances responsible in erythrocyte for blood group specificity. He started with more than 100 liters of typed human blood, A (+) and B (+), and, after many purifications, obtained from each blood batch less than 100 mg. of substance of glycolipid nature in which the activity resided. Further studies showed that both substances were still probably mixtures, but it was possible to establish a difference in the chemical structure of the two glycolipids. These substances are composed of sphingosine, fatty acids, and various amounts of galactose, glucose, glucosamine, and galactosamine. It is probable that the end groups of the carbohydrate chains of the glycolipids have the same chemical structure as the end groups of the carbohydrate chains of the blood group substances isolated from the mucous secretions of the same person, thus explaining the cross reaction between the two types of substances. Further work on this problem would require not only a very large scale isolation process not available in our laboratory, but also a better knowledge of the general chemistry of glycolipids. After working on some problems of basic carbohydrate chemistry, Dr. Hakomori returned to Sendai University, with the intention of rejoining our group at some future date.

Dr. Nathan Sharon of the Weizmann Institute of Israel spent one year with our group after having been associated with Dr. Fritz Lipmann. He brought us his interest in the chemistry of bacterial polysaccharides, a field in which I hope to see our laboratory very active in the future. From one strain of Bacillus subtilis, which synthesizes extracellularly large amounts of polyglutamic acid, he isolated a polysaccharide containing three amino sugars: D-glucosamine, D-galactosamine, and an unknown diamino sugar, in addition to amino acids. He could demonstrate that the diamino sugar had two amino groups at positions 2 and 4, and was a 6-deoxy sugar. Further work on its structure is being carried out by Dr. Sharon in Israel, but it was agreed that attempts to synthesize it would be done here, in our laboratory.

Dr. Annette M. C. Rapin, who had received her training at the University of Geneva, spent two years on this problem, and was successful in preparing 2,4-diamino-D-glucose and 4-amino-D-glucose. Succeeding Dr. Hakomori, she studied the chemistry of 1,6-anhydro-glucose, a carbohydrate which is the potential source of many derivatives of glucose, especially of those containing O^{18} or N^{15}. After this training in organic chemistry, Dr. Rapin has returned to her original interest in biology and has moved to the fifth floor to work with Dr. Kalckar.

Dr. Sharon, whom we hope to see again for a temporary stay in the near future, has been followed by another scientist from the Weizmann Institute, Dr. Harold Flowers, who is known for his syntheses of cerebrosides. He has just started working on the chemistry of the cell wall of bacteria, especially on the synthesis of muramic acid derivatives.

With the arrival in 1958 of two biochemists from the Harvard Medical School Quadrangle — Dr. E. Eylar, from Dr. Oncley's group, and Dr. R. Spiro, from Dr. B. Hastings's group — our laboratory began the study of the carbohydrate portion of glycoprotein. This line will, I hope, become one of our major fields of research in the future. In view of our association with Dr. K. Schmid's group, in which the isolation and characterization of glycoproteins has been very actively carried out for many years, it was quite natural that we should be attracted by the study of the chemical structure of their carbohydrate parts. In 1955, Dr. Allan Dixon, a British physician, had already carried out in our laboratory a preliminary study of ovomucoid and of the α_1-acid glycoprotein of human plasma. It was only after the arrival of the two abovementioned biochemists, however, that an intensive study was undertaken. Our work has been mainly directed toward the glycoproteins of plasma. Some of them, like the α_1-acid glycoprotein, show very great increase in certain types of diseases. Our main objectives are to establish the sequence of monosaccharide units in the carbohydrate part, and the mode of liaison between the carbohydrate and protein moieties. Dr. Eylar worked on the structure of the α_1-acid glycoprotein of human serum and was able to isolate by acid degradation a disaccharide, a tetrasaccharide, and an octasaccharide. The identity of the first one with lactosamine was established, and chemical structures were proposed for the two latter ones. Periodate oxidation of the glycoprotein and of products obtained by enzymatic degradation, as well as a preliminary study by methylation, suggested a definite structure for a large part of the carbohydrate moiety of the α_1-acid glycoprotein. It seems clear that this moiety is composed of a small amount (between 3 and 10) of high molecular oligosaccharides (or low molecular polysaccharides) possessing a very branched structure. The end chain of the branches is composed (starting from the end) of neuraminic acid linked by its position 2 to the position 4 of D-galactose, which in turn is linked by its position 1 to the position 4 of N-acetylglucosamine. The inside core, linked to the protein, is composed of D-glucosamine and D-mannose.

Dr. Eylar has left, to occupy a position in the Department of Biochemistry at the University of Indiana Medical School. He has been replaced by Dr. Annemarie Closse of the University of Freiburg in Breisgau, Germany. She has carefully studied the degradation of the carbohydrate part with enzymes and is presently studying the effect of prolonged periodate oxidation. She has also undertaken the separation of the products resulting from the degradation of the methylated glycoproteins.

The work of Dr. R. Spiro on fetuin, a glycoprotein of calf fetal blood, has already been described in THE NEWS, in the 1960 report on the whole Lovett Group. After purifying fetuin and studying its physical properties and chemical composition, Dr. Spiro was successful in obtaining pure glycopeptides. Their amino acids and carbohydrate composition, as well as their molecular weight, were characterized. Further studies on fetuin included acid and enzymatic degradation, and periodate oxidation of the carbohydrate part. Dr. Spiro is now a member of the Baker Research Laboratory at the Deaconess Hospital.

The elucidation of the chemical structure of glycoproteins is also approached by the study of the chemistry of their components, and by synthesis. Dr. Stearns and Dr. Tarasiejska (Glaser) have studied the chemical structure and the preparation of derivatives of neuraminic acid, a major component of glycoprotein and glycolipids. Dr. Colin Bolton, from the University of Birmingham, England, has just joined our group and is attempting to synthesize the linkage between the carbohydrate and the protein parts, in preparing various glycopeptides containing aspartic acid and D-glucosamine or D-mannose.

Recently we have been in close contact with several groups and we have joined our efforts in common projects with those of Dr. Endre A. Balazs at the Retina Foundation, Dr. B. D. Davis of the Department of Bacteriology and Immunology, Harvard Medical School, and Dr. W. Pigman of the New York College of Medicine.

With the increase in the size of our group and the acquisition of considerable heavy equipment, we have now arrived at the point where space is at a great premium. It is our hope that before our twentieth anniversary we will have moved into more spacious accommodations.

I would like to take this opportunity to extend my deep and sincere appreciation to Dr. Walter Bauer, Chief of the Medical Services. His confidence and his belief that chemical and biochemical research are vitally necessary for the advancement of medicine have made possible our work. I would also like to express my gratitude to the numerous governmental and private agencies for their financial support: the National Institutes of Health (Institutes for Arthritis and Metabolic Diseases and for Cancer Research), the National Science Foundation, the Atomic Energy Commission, Eli Lilly and Company, the Arthritis and Rheumatism Association, the American Heart Association, the Helen Hay Whitney Foundation, the American Cancer Society, and the Damon Runyon Fund.

Roger W. Jeanloz, Ph.D., Biochemist,
Head of the
Laboratory for Carbohydrate Research

Dr. Walter Bauer, Chief of our Medical Services, has announced (as of July 1, 1961) the reorganization of the Robert W. Lovett Memorial Group for the Study of Crippling Disease. On that date Dr. Evan Calkins resigned from the Lovett Group to become Professor of Medicine at the University of Buffalo. Since Dr. Calkins's departure, the Lovett Group has been formally organized into four independent units, held together by a common interest of its members in the biology, chemistry, and diseases of connective tissue.

Dr. Jerome Gross has been named head of the Biology Laboratory; Dr. Roger W. Jeanloz as head of the Carbohydrate Research Laboratory; Dr. Stephen M. Krane as head of the Arthritis Unit; and Dr. Karl Schmid as head of the Protein Chemistry Research Laboratory.

Dr. Gross, who has made fundamental contributions in the area of collagen structure and metabolism, has been at the M.G.H. since 1948, and is at present Associate Biologist at the Hospital and Assistant Professor of Medicine at Harvard Medical School.

Dr. Roger W. Jeanloz, who is well known for his work on the chemistry of polysaccharides, has been at the M.G.H. since 1951, is Biochemist at the Hospital and Associate Professor of Biological Chemistry at the Medical School.

Dr. Krane has been at the M.G.H. since 1951, and served as Chief Resident in Medicine in 1957. He has been engaged in research on diseases and metabolism of the skeleton, and is at present Assistant Physician at the M.G.H. and Associate in Medicine at Harvard Medical School.

Dr. Karl Schmid, who has been at the M.G.H. since 1952, has made many contributions concerning the structure and characterization of serumproteins, particularly the glycoproteins. He is also in charge of the ultracentrifuge and electrophoresis service, and holds the titles of Associate Biochemist at the M.G.H. and Associate in Physical Chemistry in the Department of Medicine at the M.G.H. at Harvard Medical School.

The Lovett Memorial Group is a unique association of investigators and clinicians of widely different backgrounds and training. It is expected that this association will continue to result in a better understanding of connective tissue and its diseases.

* * *

Dr. Walter Bauer and Dr. Paul C. Zamecnik, Director of the Huntington Laboratories, have announced the appointment of Dr. Alan C. Aisenberg as Chief of the Medical Tumor Group, as of September 1, 1961. The new group will consolidate those hospital activities concerned with the medical care of patients with malignant disease. These activities include out-patient care of and in-patient consultation on individuals with malignant lymphoma, as well as the hormonal and chemotherapeutic treatment of individuals with other malignant disease. An integral part of the activities of the new group will be research on basic aspects of the neoplastic process.

Dr. Aisenberg is engaged in research on tumor metabolism. He has been associated with the clinical activities of the Medical Services and the Tumor Clinic since coming to the M.G.H. in 1956. A graduate of Harvard College and Harvard Medical School, he also received a Ph.D. degree in Biochemistry from the University of Wisconsin. His book, *The glycolysis and respiration of tumors,* was published last year by Academic Press.

Dr. Morton N. Swartz, Chief of the Infectious Disease Unit, returned on November 1, 1961 after a year's leave of absence spent in the Biochemistry Department at Stanford University Medical School. While there, he worked in Dr. Arthur Kornberg's laboratory on studies of the mechanism and replication of the DNA of certain bacterial viruses. Dr. Swartz will not participate in the clinical activities of the Infectious Disease Unit until July 1, 1962, in order that he may devote this time to reorganizing the clinical and research activities of the Infectious Disease Unit, and to continuing his studies of DNA synthesis. Once Dr. Swartz's new plan is in effect, the Hospital will have very strong representation in the infectious disease field.

Dr. Robert F. Loeb (*W.M.* 1920), Bard Professor of Medicine Emeritus at Columbia University, has been awarded the honorary degree of Doctor of Science at Oxford University. Dr. Loeb, whose work on the metabolism of sodium and potassium and on the treatment of Addison's disease won him international recognition, has been serving temporarily at Oxford, taking the place of Sir George Pickering, Regius Professor of Medicine, who has been visiting the United States.

The Board of Trustees, at their meetings on November 10 and 22, voted:

To grant leave of absence to Dr. Leonard W. Cronkhite, Jr. because of call to duty in the Armed Forces.

To appoint:

Dr. K. Frank Austen as Assistant in Medicine, effective January 1;

Dr. Anthony F. H. Britten as Clinical and Research Fellow in the Blood Bank, beginning January 15;

Dr. Padraic Burns as Clinical Fellow in Psychiatry, retroactive to October 1, 1961;

Dr. Champlain Charest as Clinical Fellow in Radiology, beginning July 1;

Dr. John P. Connelly as Assistant in Pediatrics, with the privilege of seeing a limited number of private patients in the Hospital;

Dr. Christopher R. Eliot as Junior Assistant Resident on the Children's Service for one year, beginning July 1;

Dr. Alvin Essig as Assistant in Medicine, effective as of November 1, 1961;

Dr. George Fostiropoulos as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Freddy H. Frankel as Clinical and Research Fellow in Psychiatry, beginning December 1, 1961;

Dr. Neva M. Johnson as Clinical Fellow in Radiology for one year, beginning January 1;

Dr. Philip C. Kelleher as Clinical Fellow in Medicine for one year, beginning November 1, 1961;

Dr. Edwin J. Lieberman as Clinical Fellow in Psychiatry, retroactive to October 1, 1961;

Dr. Richard A. Norton as Clinical Fellow in Medicine, retroactive to November 1, 1961;

Dr. June E. Osborn as Junior Assistant Resident on the Children's Service for one year, beginning July 1;

Dr. Daniel M. Philbin as Assistant Resident in Anesthesia, beginning July 1;

Dr. Mitchell T. Rabkin as Chief Resident in Medicine, beginning January 1;

Dr. Francis P. Shea as Assistant in Radiology, beginning July 1;

Dr. Barton K. Slemmons as Clinical Fellow on the Orthopedic Service, for the period November 16, 1961 through December 31, 1961;

Dr. Myron R. Stocking as Clinical Fellow in Psychiatry, retroactive to October 1, 1961.

At their meetings on November 15, 22, and 29, the General Executive Committee voted:

To accept the resignation of Albert F. Parlow, Ph.D. from the position of Research Fellow in Biology in the Department of Surgery, effective as of February 28;

To rescind the promotion of Dr. Peter Schuntermann to the position of Assistant Resident on the Children's Service, effective July 1.

To appoint:

Dr. Marc R. Playout as Research Fellow in Medicine for one year, beginning July 1;

Dr. Gentaro Usuku as Research Fellow in Medicine, for the period September 1, 1962 through October 31, 1963.

To reappoint:

Dr. Edward Lowenstein as Assistant Resident in Anesthesia for one year, beginning November 7, 1961;

Dr. Justus S. Saurbrey as Clinical and Research Fellow in Surgery for one year, beginning October 1, 1961.

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RADIOLOGY DEPARTMENT

Several members of our Radiology Department attended and participated in the 47th Annual Meeting of the Radiological Society of North America, held in Chicago from November 26 to December 1, 1961.

Dr. Laurence L. Robbins delivered the Annual Oration, in honor of the memory of Donald S. Childs, M.D. He spoke on "Education of the radiologist: Thence and whence".

Dr. Majic S. Potsaid received the Magna Cum Laude Award for his scientific exhibit entitled "An in-phantom radiation dosimeter".

Drs. Milford D. Schulz and C. C. Wang received the Special Mention Award for their exhibit on "A simple method of indexing and filing of radiation therapy records and of patient follow-up". They also presented a paper on "The place of radiation therapy in the management of carcinoma of the rectum and rectosigmoid colon".

Dr. Henry P. Pendergrass presented a paper on "Roentgen technics in the diagnosis and localization of pheochromocytoma".

Dr. Paul F. J. New presented a Refresher Course on "Plain film examination of the skull".

Dr. Edward W. Webster presented a Refresher Course on "Fluoroscopy: Physics, electronics, and physiology". He also participated in Refresher Courses on "Total-body irradiation" and "Introduction to cineradiography". In addition, he presented a paper entitled "A system for stereoscopic fluoroscopy involving electronic storage" and presided at the Physics Program, presented on November 30.

Dr. Potsaid participated in the Refresher Course on "Introduction to cineradiography".

Dr. Stanley M. Wyman presided at the Section on Diagnosis.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biology

Drabikowski, W., Kuehl, W. M., and Gergely, J.
Inhibition of actin polymerization by mercurials without removal of bound nucleotide.
Biochem. & Biophys. Res. Comm. 5:389.

Gergely, J., and Drabikowski, W.
The effect of desoxycholate treatment on actin.
Abstr. 1st Internat. Biophys. Congr. Stockholm.

Gergely, J., Drabikowski, W., and Kuehl, W. M.
Exchange of ATP with bound ATP of G-actin and the possible role of phosphate transfer to bound ADP.
5th Internat. Congr. Biochem. Moscow.

Maruyama, K., and Gergely, J.
Dissociation of actomyosin at low ionic strength.
Abstr. 5th Ann. Meeting, Biophys. Soc., TC 11.

Maruyama, K., and Gergely, J.
Removal of the bound calcium of G-actin by ethylenediamine tetraacetate (EDTA).
Biochem. Biophys. Res. Comm. 6:245.

Maruyama, K., and Martonosi, A.
Protective action of nucleoside triphosphates against the inactivation of G-actin by ethylenediaminetetraacetate.
Biochem. Biophys. Res. Comm. 5:85.

Cardiology

Currens, J. H., and Grant, M.
Blood thrombotest versus prothrombin test: Comparison in patients maintained in bishydroxycoumarin and related drugs.
J.A.M.A. 178:168.

Currens, J. H., and White, P. D.
Half a century of running: Clinical. physiologic and autopsy findings in the case of Clarence DeMar ("Mr. Marathon").
New England J. Med. 265:988.

Orthopedic Surgery

Grant, B. D., and Rowe, C. R.
Motor paralysis of the extremities in herpes zoster.
J. Bone & Joint Surg. 43-A:885.

Pathology

Richardson, E. P., Jr.
Progressive multifocal leukoencephalopathy.
New England J. Med. 265:815.

Radiology

Dreyfuss, J. R., Robbins, L. L., and Murphy, J. T.
Disposable, plastic unit for barium enema examination.
Radiology 77:831.

New, P. F. J.
Diagnostic radiology.
In Surgery, G. L. Nardi and G. D. Zuidema, Editors, chap. 40.

Simon, H., and McCoy, W. T.
X-ray Seminar, No. 4: Acute mediastinal enlargement.
J.A.M.A. 178:318.

Simon, H., and McCoy, W. T.
X-ray Seminar No. 5: Left upper quadrant mass.
J.A.M.A. 178:750.

Wang, C. C., and Schulz, M. D.
Basic principles of radiation therapy.
In Surgery, G. L. Nardi and G. D. Zuidema, Editors, chap. 41.

Weylman, W. T., and Simon, H.
X-ray Seminar, No. 3: Unusual bone manifestations of a common disease.
J.A.M.A. 177:855.

Miscellaneous

Churchill, E. D.
Medical wants and needs in mature and developing nations.
M. Times 89:1169.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Abrahamson, A. C.
Group methods in supervision and staff development.
New York, Harper and Brothers, 1959.
(307) Cabot Memorial Room

Albert, A. (Editor)
Conference on human pituitary gonadotropins.
Springfield, Ill., Charles C. Thomas, 1961.
(14Z)

Anderson, W. A. D. (Editor)
Pathology, ed. 4.
St. Louis, The C. V. Mosby Company, 1961.
(8A)

Artz, C. P. (Editor)
Complications in surgery and their management.
Philadelphia, W. B. Saunders Company, 1960.
(23L)

Cabot, N. H.
You can't count on dying.
Boston, Houghton Mifflin & Company, 1961.
(331.25) Cabot Memorial Room

Ciba Foundation Study Group No. 9.
Progesterone and the defence mechanism of pregnancy.
Boston, Little, Brown and Company, 1961.
(5K)

Ciba Foundation Study Group No. 10.
Biological activity of the leucocyte.
Boston, Little, Brown and Company, 1961.
(14M)

Cole, W. H., and others.
Textbook of surgery, ed. 7.
New York, Appleton-Century-Crofts, Inc., 1959.
(23A)

Conant, N. F., and others.
Manual of clinical mycology, ed. 2.
Philadelphia, W. B. Saunders Company, 1954.
(10C)

Edds, M. (Editor)
Macrocolecular complexes.
New York, The Ronald Press Company, 1961.
(2Am)

Gray, P. (Editor)
Encyclopedia of the biological sciences.
New York, Reinhold Publishing Corporation Inc., 1961.
(2A)

Gurr, E.
Encyclopedia of microscopical stains.
Baltimore, The Williams & Wilkins Company, 1960.
(3J)

Hamilton, G.
Theory and practice of social case work, ed. 2.
New York, Columbia University Press, 1951.
(177.7) Cabot Memorial Room

Harkins, H. N., and others. (Editors)
Surgery: principles and practice, ed. 2.
Philadelphia, J. B. Lippincott Company, 1961.
(23A)

Hess, I., Riedel, D. C., and Fitzpatrick, T. B.
Probability sampling of hospitals and patients.
Ann Arbor, University of Michigan Press, 1961.
(39Ap)

Homburger, F. (Editor)
Progress in experimental tumor research, vol. 2.
New York, Hafner Publishing Co., 1961.
(23K)

Hunter, G. W., and others.
Manual of tropical medicine, ed. 3.
Philadelphia, W. B. Saunders Company, 1960.
(21M)

Kabat, E. A.
Experimental immunochemistry, ed. 2.
Springfield, Ill., Charles C. Thomas, 1961.
(8G)

Lennox, W. G.
Epilepsy, 2 vols.
Boston, Little, Brown and Company, 1959.
(19Fe)

Lever, W. F.
Histopathology of the skin, ed. 3.
Philadelphia, J. B. Lippincott Company, 1961.
(27B)

Moseley, F. H. (Editor)
Textbook of surgery, ed. 3.
St. Louis, The C. V. Mosby Company, 1959.
(23A)

Nardi, G. L., and Zuidema, G. D. (Editors)
Surgery: a concise guide to clinical practice.
Boston, Little, Brown and Company, 1961.
(23A)

Nicholds, E.
A primer of social casework.
New York, Columbia University Press, 1960.
(177.7) Cabot Memorial Room

Pfeiffer, C. C., and Smythies, J. R. (Editors)
International review of neurobiology, vol. 3.
New York, Academic Press, Inc., 1961.
(19Ab)

Popper, H., and Schaffner, F. (Editors)
Progress in liver disease.
New York, Grune & Stratton, 1961.
(16K)

Pumphrey, R. E., and Pumphrey, M. W. (Editors)
The heritage of American social work.
New York, Columbia University Press, 1961.
(177.7) Cabot Memorial Room

Reynolds, F. C. (Editor)
American Academy of Orthopaedic Surgeons instructional course lectures, vol. 17.
St. Louis, The C. V. Mosby Company, 1960.
(18As)

Society for Endocrinology. Memoirs No. 11.
Cell mechanisms in hormone production and action.
New York, Cambridge University Press, 1961.
(14K)

Society for Experimental Biology, Symposium No. 15.
Mechanisms in biological competition.
New York, Academic Press, Inc., 1961.
(2A)

Special Libraries Association. Boston Chapter.
Directory of special libraries in Boston and its vicinity, ed. 6.
Boston, Special Libraries Association, Boston Chapter, 1961.
(1Ca)

Steinberg, A. G. (Editor)
Progress in medical genetics, vol. 1.
New York, Grune & Stratton, 1961.
(2Am)

Wood, M. M.
Paths of loneliness: the individual isolated in modern society.
New York, Columbia University Press, 1953.
(136) Cabot Memorial Room

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VOLUNTEER GROUPS
MGH Service League

The MGH Service League, formerly the MGH Staff Wives Association, is concluding a successful program of activities for the fall season.

One of the most gratifying projects sponsored by the Service League is the program of concerts given in the Chapel. They are attended by wheel-chair and ambulatory MGH patients. On November 15, Lodowick Crowfoot, a student at Harvard College, gave a piano recital. Mr. Crowfoot's father trained at the Massachusetts General Hospital and his mother was a nurse here. His concert attracted one of the largest attendances ever present in the Chapel — 25 patients in wheel chairs, 11 ambulatory patients, and many other visitors. On November 29, Minuetta Kessler gave a piano concert of her own compositions, and on December 13, the girls of the Beaver Country Day School sang Christmas songs, under the direction of Ingeborg Jarratt. On January 3, Dorothy McKenna gave a piano recital, together with assisting artists.

The Hospitality Committee chairman, Mrs. Grant V. Rodkey, reports that the hospitality of many of the Massachusetts General Hospital families' homes was extended to our visitors from other lands during the holiday season.

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New addresses:

Dr. Karl-Erik Åström (clin. & res. fel. *N.* 1957), Hannebergsgatan 24, Solna, Sweden
Dr. Stanley Austin (clin. fel. *An.* 1961), c/o A. Frank Banks, ACIA, Dunelm Chambers, Blue Coat St., Nottingham, England
Dr. Mervyn F. Burke, Jr. (a.r.s 1961), University of California Medical Center, San Francisco 22, Calif.
Dr. Richard A. Currie (*S.* 1950), West Virginia University Medical Center, Morgantown, W. Va.
Dr. Habibolah Davanloo (a.r.p. *Psychiat.* 1959), Montreal General Hospital, Montreal, Canada
Dr. Robert H. Detwiler (*C.M.* 1940), 3120 N. 13th St., Arlington, Va.
Dr. Robert E. Dinsmore (a.r.p. *R.* 1961), Radiodiagnostic Dept., Hammersmith Hospital, Postgraduate Medical School of London, Ducane Rd., London W. 12, England
Dr. Robert G. Frost (a.r.p. *An.* 1961), Anesthesia Dept., Stanford Medical Center, Palo Alto, Calif.
Dr. Joshua J. Hurwitz (a. *U.*), 1152 Beacon St., Brookline, Mass.
Dr. Arthur S. Keats (a.r.p. *An.* 1951), Baylor University College of Medicine, Texas Medical Center, Houston, Tex.
Dr. Clarence N. McPeak (r.p. *R.* 1929), 96 Highland St., Gardner, Mass.
Dr. Robert F. Moore (*M.* 1954), 425 North St., Randolph, Mass.
Dr. Sholem Postel (a. *M.*), 75 Mount Auburn St., Cambridge 38, Mass.
Dr. Elihu M. Schimmel (clin. & res. fel. *M.* 1960), 55 Stimson Rd., New Haven 11, Conn.
Dr. Edgar J. Schoen (a.r.p. *C.M.* 1954), Kaiser Foundation Hospital, 280 W. MacArthur Blvd., Oakland 11, Calif.
Dr. Oscar E. Starobin (*M.* 1955), 27 Elm St., Worcester 8, Mass.
Dr. William A. Tisdale (*M.* 1952), Dartmouth Medical School, Hanover, N.H.
Dr. Giles D. Toll (*S.* 1952), Presbyterian Hospital, Denver 18, Colo.

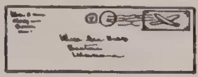
Brief bits:

Dr. Alexander Breslow (a.r.p. *Path.* 1959) began his new duties on September 1, 1961, as Assistant Professor of Pathology at the George Washington University Hospital, Washington, D.C.

Last August Dr. John Gergely presented papers at the first International Biophysics Congress in Stockholm and the fifth International Congress of Biophysics in Moscow. In November he lectured at the University of Minnesota Medical School and at the Institute of Enzyme Research of the University of Wisconsin.

Dr. Oscar Hirsch participated in the Second International Congress of Neurosurgery, held in Washington, D.C., last October. This was by invitation of the president of the Congress. An exhibition of Dr. Hirsch's work on pathology was arranged by Dr. Hannibal Hamlin in such an attractive way that it was favorably commented upon by the visitors at the Congress. A motion picture entitled "Symptoms and treatment of pituitary tumors by the transsphenoidal method" —the first movie, ever, of this kind—taken during Dr. Hirsch's operations on patients, demonstrated his special technique.

On November 15, 1961, Dr. Carter R. Rowe read a paper before the Peninsula Medical Society in Hampton, Virginia, on "Acute and recurrent dislocations of the shoulder".



In response to an appeal from us, this most interesting letter has come from Dr.

Dr. Roger W. Jeanloz, Biochemist — Head of the Laboratory for Carbohydrate Research

John W. Ratcliffe (*W.S.* 1946), whose new address is 104 St. Matthews Avenue, San Mateo, California:

The good ship *Hope* is safely back in her berth in San Francisco, after an unprecedented medical mission to Southeast Asia which lasted a year. It was the unique and unforgettable privilege of Jack Tetirick, Paul Spangler, and me to open the surgical service when the *Hope* arrived in Jakarta, in the fabled island of Java, on October 19, 1960. I have enjoyed the fine letters in The News from my *Hope* colleagues. I should like to give you a few notes on my thoughts about Project Hope nearly a year after my return.

The story of Project Hope has captured the most intense interest of laymen. At a time when so much publicity has been given to our failures in foreign aid as an instrument of foreign policy, it has gladdened many a heart to hear this simple success story. Doctors and nurses have responded well to the opportunity for service which *Hope* has given them. It is necessary to observe, however, that there is a large fund of doubt and skepticism in the profession, particularly in academic circles, regarding the technique and philosophy of Project Hope. These doubts have merit and deserve to be discussed thoroughly. Satisfactory resolution of these doubts is crucial to the further progress of this program. If the idea of medical technical assistance for the developing and needful nations is to be implemented on the necessary scale, our profession must lead the way. Our opportunity is great and our effort up to this time must be described as negligible. One ship and a handful of medical people may comprise a pilot experiment in people-to-people aid, but they do not acquit the medical profession of its responsibility to lead the way to an effective aid program. In the following paragraphs I should like to discuss several aspects of Project Hope that will dissect some of the doubts. I should like to conclude with some suggestions as to the actions our great medical schools and hospitals might take to render aid to the underdeveloped countries.

COST OF PROJECT HOPE

The cost of Project Hope, about 3.5 million dollars for the first year (the approximate cost of one jet fighter), has disturbed many people. An analysis of cost per patient treated might yield a figure deemed by experts as uneconomic. Certain factors affected the number of patients who could be treated by the *Hope* forces. Foremost among these was the fact, particularly apparent in general surgery, that a great majority of the patients we were asked to manage suffered from advanced stages of their diseases, as well as from anemia, malnutrition, and parasitosis. This tended to make the arduous therapeutic effort focus on a relatively small number of patients compared with what might have been accomplished from the standpoint of sheer volume if the problems had been of a more routine nature.

Although many critics saw the use of a ship and crew of American merchant mariners as an unnecessary expense, experience in Indonesia and South Vietnam has shown the impact of the *Hope* as a visible and tangible symbol. Millions of people literally *saw* the ship, and its fame spread to the remotest island *kampongs*. Means of cutting ship-crew costs are being studied. The scope and efficiency of Project Hope may also be extended by greater utilization of mobile hospital and clinic units employing air transport to remote interior areas.

TEACHING MISSION

The mission of the *Hope* as a teaching task force was widely heralded in advance in Indonesia, and the doctors there had earmarked and collected for our care astonishing lists of patients with problems of the first magnitude. These patients and their eager doctors were a perfect setting for a fruitful adventure in education. But how could the small *Hope* group contribute significantly to medical education in a society whose medical needs verge on the catastrophic, whose over-all physician-population ratio approximates 1:60,000? Such a contribution is indeed small, and yet it was applied at a crucial point. In Jakarta, Surabaja, and Makassar the *Hope* staff worked intimately with the medical school faculties. The effect was that of an intensive postgraduate course and, as such, was stimulating to all who participated. Accustomed as we are to rapid and widespread dissemination of medical knowledge, we can hardly imagine how starved for outside communication the Indonesian doctors are. Owing to curious currency and travel restrictions, as well as to the relative poverty of the people, it is virtually impossible for the Indonesian doctors to leave their country for study. Even worse, it is almost impossible for them to subscribe to our technical literature because of their lack of dollars. Thus, Dr. Monadjat of Jakarta, the only plastic surgeon in this country of 90 million people, could not renew his subscription to *Plastic and Reconstructive Surgery.*

We taught by means of lectures, but principally by informal conferences and innumerable surgical demonstrations done with the assistance of Indonesian residents and young faculty members. I am confident that Dr. Walter Tambunon of the University of Indonesia, Jakarta, will henceforward be able to perform a commando operation. He has the tumor surgery assignment there and had done 11 radical necks but had lost his only attempt at a commando procedure. He has now seen such a procedure, perhaps the first successful one in Indonesia. Similarly, Dr. Lium Djie Swie of Surabaja will tackle arteriovenous aneurysms and congenital megacolon with new confidence as a result of the visit of the *Hope.* Early postoperative ambulation, precise postoperative orders and daily rounds, recovery room techniques, restricted use of antibiotics, close doctor-nurse teamwork, and other ideas and practices which we take for granted, excited the Indonesians as novelties. *We* learned new respect for the durability of the human constitution under adverse environmental circumstances. We also learned a new dimension in hospitality and friendliness from the Indonesian people. We shall forever be enriched by our visit to Indonesia.

* * * *

In conclusion, I should like to make two suggestions to our profession:

(1) Individuals and medical societies could make a great contribution in sending books and journals out of our abundance to established medical schools and hospitals out there.

(2) Great hospitals and medical schools in this country and in Europe could adopt, found, and nurture to a condition of self-sufficiency medical schools in Asia, Africa, and South America. Government financial backing would be required and amply justified. We can create a revolution in the health of the people of the world. This sounds visionary, but my visit to Indonesia has shown me that great possibilities abound in the world. Our opportunity and responsibility lie clearly before us. It would be in the character and tradition of the Massachusetts General Hospital to blaze this trail.

The News

No. 210 Boston, Mass. February 1962

ARTHRITIS UNIT OF THE MEDICAL SERVICES

In 1929, Dr. Walter Bauer was asked to organize a research group jointly at Harvard Medical School and the Massachusetts General Hospital for the purpose of studying articular disease. Over the past thirty years, the Robert W. Lovett Memorial Laboratory for the Study of Diseases Causing Deformities has flourished. In the late 1940's, Dr. Bauer brought together a small group of laboratory investigators for the purpose of instituting more fundamental approaches to the study of connective tissue and its diseases.

The success of this venture is indicated by its steady growth in size and reputation. On July 1, 1961, Dr. Evan Calkins resigned as Chief of the Unit, to move to Buffalo as Professor and Chairman of the Department of Medicine. At this time Dr. Bauer reorganized the Lovett Group as follows: Dr. Jerome Gross became Chief of the Biology Laboratory; Dr. Roger W. Jeanloz became Chief of the Carbohydrate Chemistry Laboratory; Dr. Karl Schmid became Chief of the Protein Chemistry Laboratory; and the author was appointed Chief of the Arthritis Unit. The Lovett Group continues as an association of its members with a common interest in connective tissue and its disorders. The present report deals with the activities, since July 1961, of the Arthritis Unit as one part of the Lovett Group.

The major function of the Unit continues to be the study and care of patients with rheumatic disease and related disorders. We have an active clinic where 20 to 30 patients are seen each week, some of whom have been followed for 30 years. It is truly a revelation to me, as a relative newcomer, to see what can be accomplished in a disease such as rheumatoid arthritis when both doctors and patients have an understanding of chronic illness. Since the approach in this clinic has been in general a conservative one, it has been possible to obtain valuable information concerning the natural history of the arthritic diseases. This has been a major contribution of Drs. Bauer, Charles L. Short, and Marian W. Ropes. All the staff members of the Unit, as well as the clinical fellows, attend the clinic regularly—whether or not they are primarily occupied with clinical or laboratory problems. Drs. Bauer, Short, and Ropes have used the clinic as the major tool for long-term follow-up of patients with various rheumatic diseases, in an attempt to accurately document the natural history of these disorders. Dr. Short is at present particularly interested in those patients with rheumatoid arthritis who have had a long remission of their disease.

It has also been possible to use the clinic in carrying out controlled studies of effects of various treatments in rheumatoid arthritis. The efficacy of chloroquine and related compounds has been carefully examined—most recently in a double-blind study in which this clinic cooperated with nine others throughout the country. Dr. Alan S. Cohen, formerly a member of this clinic and now Director of the Rheumatology Unit at Boston University, has played a major role in this work. It is anticipated that similar programs will be pursued in the future.

Dr. Ropes is continuing her studies in several areas relating to the rheumatic diseases. One is the evaluation of Congo red retention as an indication of amyloidosis in patients with rheumatoid arthritis followed over many years and the determination of the effect of treatment with ascorbic acid on the dye retention. Another is the elucidation of some of the factors affecting the therapeutic and toxic blood levels of salicylates. A third is the characterization of the natural history of disseminated lupus erythematosus (D.L.E.) in the large group of patients who have been seen at this Hospital. In contrast with other institutions, there are a number of patients with D.L.E. in this clinic who have never received adrenocorticosteroids and who have had spontaneous remissions of their disease. Dr. Ropes is now assembling this wealth of material which indicates that the course of D.L.E. may be more benign in many patients than has been generally appreciated.

Dr. John A. Mills, formerly on the medical house staff, joined the Unit as a full-time staff member in October 1960. He has assumed a major role in the supervision of fellows and students, and in postgraduate teaching functions. He still manages to devote a considerable portion of his time to laboratory investigation, mainly in the field of immunology. One of his current projects is a collaborative one with Dr. Edgar Haber, a resident on the Medical Service. Drs. Mills and Haber are studying the effect on antigenic specificity of an alteration in the spacial configuration of a protein. Dr. Haber, working with Dr. Christian Anfinsen at the National Institutes of Health, had previously found that reduction and reoxidation of the enzyme ribonuclease under controlled conditions resulted in the formation of derivatives which, although chemically identical with native ribonuclease, had different spacial configuration and had lost enzymatic activity. Drs. Mills and Haber are now studying the ability of such altered proteins to cross-react with an antibody to normal ribonuclease.

In another project, Dr. Mills has been studying the pathogenesis of delayed hypersensitivity by means of passive transfer, using lymph node lymphocytes of animals sensitized by injections of protein. Initial work has involved attempts to simplify the experimental passive transfer system and to determine to what extent the viability of donor lymphocytes is important.

Dr. J. Claude Bennett is pursuing another approach to problems of antigen-antibody reactions, relating to the molecular structure of specific antibodies. The recent development of two experimental techniques has made this approach possible. The first is that of controlled enzymatic degradation of antibodies whereby fragments of much smaller size, but retaining biological activity, can be obtained. The second is the reduction of disulfide bridges of the protein, which breaks up the very complex molecule composed of intertwining peptide chains into single chains which can then be separated. By application of these two techniques in sequence, an antibody with a molecular weight of about 160,000 can be specifically degraded to fragments of molecular weight 13,000 – 15,000. Dr. Bennett has made considerable progress in these studies and shortly will be able to examine these fragments with respect to amino acid sequence and sites of biologic activity, and use the techniques to determine structural differences between normal and abnormal globulins.

In July 1961, Dr. Jeremiah E. Silbert joined our Unit as a research fellow. Dr. Silbert had his house staff training at Barnes Hospital in St. Louis and subsequently spent two years in Dr. Carl Cori's Department of Biological Chemistry, working with Dr. David Brown. Dr. Silbert has been interested primarily in the mechanisms and pathways of biosynthesis of mucopolysaccharides, using a mast cell tumor which is readily transplantable in mice. This particular tumor has high content of heparin, as well as other polysaccharides. It has been possible to demonstrate the formation of uridine diphosphate glucosamine by homogenates of this tumor, and it appears likely that it is a precursor of heparin.

He is now attempting to obtain heparin synthesis by cell-free preparations of this tumor, investigating the point at which the uronic acid is incorporated and when sulfation occurs.

In the author's laboratory, studies have been in progress over the past 2½ years in collaboration with Dr. Melvin J. Glimcher of the Orthopedic Research Laboratories, concerning the mechanism of mineralization and resorption of bone. Dr. Glimcher and I have been able to show that purified collagens from a variety of sources bind inorganic orthophosphate at physiologic temperatures and pH. Although most of the phosphate is bound loosely and has the characteristics of electrostatic bonding, part of the phosphate combines in a fashion indistinguishable from a covalent bond. The site or sites on the collagen molecule where phosphate interacts have not yet been identified, although we have several clues as to what they might be. Presumably, this reaction is of importance for several reasons. The most significant is the relation of this phosphate-collagen complex to the nucleation process, in which collagen in a particular molecular aggregation state can induce the crystallization of apatite (the calcium-phosphate crystal of bone mineral) from solutions of calcium and phosphate in concentrations approaching physiological ones.

Dr. Glimcher and I have also been studying the adenosine diphosphatase activity associated with connective tissue. This activity appears to be associated with collagen and remains with it upon purification of this protein. Moreover, the integrity of this particular enzyme correlates directly with the integrity of the collagen structure. In the course of these studies, we found that the inorganic crystals of bone (apatite) participated in this reaction. It was found that bone, when ashed at high temperatures, continued to retain the ability to split adenosine triphosphate. Subsequently, we were able to show that *synthetic* inorganic apatite crystals were able to bind various nucleotides and form crystal-phase inorganic pyrophosphate, one phosphorus deriving from the crystal and the other from the nucleotide. This reaction has taught us a great deal about the structure of phosphate crystals and is an interesting model for protein catalysis. We hope that such a collaboration between our two laboratories will continue to be fruitful.

Dr. Charles Nagant, from Louvain, Belgium, joined our group last fall and is beginning clinical studies on bone metabolism, using the short half-lived isotope of calcium—Ca^{47}. We plan to use the techniques previously developed here in cooperation with Drs. Gordon L. Brownell, John B. Stanbury, and Elias C. Dow to investigate rates of bone formation and destruction in the localized osteoporosis associated with rheumatoid arthritis, as well as in other skeletal disorders.

Dr. Robert S. Pinals, as a trainee of the National Institute of Arthritis and Metabolic Disease, has been active this present year in consultations on the Hospital wards, in conjunction with the senior members of the Unit. He has undertaken studies, in cooperation with members of the Howe Laboratory, of posterior capsular cataracts which seem to occur with greater frequency in patients with *long-standing* rheumatoid arthritis who have received long-term steroid treatment. He has also begun clinical studies of patients with uveitis, which include bacteriological studies of blood and the genitourinary tract in cooperation with Dr. Louis Dienes.

At first glance it might seem that in our investigative efforts we are circumventing the problem of rheumatoid arthritis. We feel, however, that our group is composed of individuals who are all interested in problems relating to the biology and chemistry of connective tissue such as those described above. Each approaches the problem from his particular point of view in relation to his previous training and interest, retaining a common interest in the patients and their disease. We share our interest with the members of the other laboratories of the Lovett Memorial Group, hoping by our cooperative effort to make some headway in a complex field.

I think it still pertinent to quote Dr. Bauer from his 1950 report to the MGH NEWS, as Dr. Jerome Gross did in 1953: "The failure to disclose specific leads as to the etiology or pathogenesis in the clinical studies of rheumatoid arthritis and the related diseases has . . . reoriented us to a more fundamental approach—namely, a characterization of the tissues involved, so that as the normal is defined we can better interpret the alterations produced by the disease. Such an approach necessitates also a study of the reactions of tissues *in vivo* and *in vitro* and of the individual as a whole to insults of various types. These studies will be pursued in the years to come."

Stephen M. Krane, M.D.,
Assistant Physician
and *Chief of the Arthritis Unit*

The Board of Trustees, at their meeting on December 8, 1961, voted to appoint:

Dr. Joseph N. Blau as Clinical and Research Fellow in Neurology for one year, beginning January 1;
Dr. Lawrence D. Egbert as Assistant in Anesthesia, effective as of December 8, 1961;
Dr. Khalil Germanos as Assistant Resident on the Orthopedic Service for one year, beginning January 1;
Dr. Alexandra M. Kail as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Gabriel B. Mirkin as Assistant Resident on the Children's Service for one year, beginning July 1;
Dr. John W. Mitchell as Exchange Assistant Resident on the Children's Service, for the period December 5, 1961, through January 16, 1962;
Dr. Jean C. Siegfried as Clinical and Research Fellow in Neurosurgery, for the period January 1 through June 30;
Dr. Seymour Zimbler as Assistant Resident on the Orthopedic Service for one year, beginning January 1.

At their meetings on December 6, 13, and 20, the General Executive Committee voted:

To terminate the appointments of:

Dr. Anton T. Appels as Clinical and Research Fellow in Medicine, effective as of November 28, 1961;
Dr. Sigetosi Kamiyama as Research Fellow in Medicine, effective as of November 19, 1961.

To promote:

Dr. Edward P. Baker, Jr. to the position of Assistant Resident in Neurosurgery, assigned to Neuroradiology, for eight months, beginning January 1;
Dr. George B. Carter to the position of Resident in Radiology, beginning January 1;
Dr. Anthony P. Monaco to the position of Resident Surgeon, effective July 1, with the privilege of receiving the American Cancer Society Clinical Fellowship award at the rate of $3600 in addition to his hospital salary;
Dr. Robert A. Nebesar to the position of First Assistant Resident in Radiology, beginning January 1;
Dr. James W. Tanner to the position of Resident in Radiology, beginning January 1;
Dr. Harold C. Urschel, Jr. to the position of Resident Surgeon, beginning January 1.

To reappoint:

Dr. William C. Amman as Graduate Student Assistant in Medicine, assigned to Allergy, for the period January 10 through June 30;
Anthony L. Andrikides, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning November 1, 1961;
Laurence C. Bonar, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;
Dr. Milan Fiala as Clinical and Research Fellow in Medicine, for the period January 1 through June 30;
Dr. Bruce W. Fischberg as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;
Dr. Ulf Å. Friberg as Research Fellow in Orthopedic Surgery for one year, beginning November 1, 1961;
Lorna J. Langer Gilmore, Ph.D. as Research Fellow in Biochemistry, in the Department of Pathology, for one year, retroactive to October 1, 1961;
Samuel R. Kamhi, Ph.D. as Research Fellow in Orthopedic Surgery for one year, retroactive to October 1, 1961;
Murray V. King, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning January 1;
Dr. Jan Koch-Weser as Clinical Fellow in Medicine for one year, beginning January 1;
Dr. Preecha Lojananond as Research Fellow in Pathology, assigned to Cytology, for one year, retroactive to October 1, 1961;
Dr. Edward A. Nalebuff as Clinical Assistant in Orthopedic Surgery for one year, retroactive to October 1, 1961;
Dr. Nathan T. Sidley as Clinical and Research Fellow in Psychiatry for one year, retroactive to September 1, 1961.

To appoint:

Dr. Alberto Diaz-Cabello as Graduate Student Assistant in Surgery, for the period October 31, 1961 through January 31, 1962;
Dr. John B. Foster as Research Fellow in Neurology, assigned to Neuropathology, for the period January 1 through June 30;
Sharad G. Joshi, Ph.D. as Research Fellow in Medicine for one year, beginning January 15;
Mr. James J. Muller as Research Fellow in Psychology, in the Department of Psychiatry, effective as of December 15, 1961;
Dr. Inga K. Samuelsson as Research Fellow in Neurology, for the period November 1, 1961 through June 30, 1962;
Dr. Siavoush Sehhat as Graduate Student Assistant in Surgery for one year, retroactive to September 7, 1961;
Dr. Sigmond N. Titte as Graduate Student

Assistant in Surgery for one year, retroactive to July 1, 1961;

Dr. Isaac J. Velasco as Graduate Student Assistant in Surgery, for a period of six months, retroactive to July 1, 1961.

To assign:

Dr. Murray H. Helfant as Junior Resident in Neurosurgery at the Boston V.A. Hospital, for eight months, beginning January 1;

Dr. Earl F. Jordan as Assistant Resident in Neurosurgery to the private service, for eight months, beginning January 1;

Dr. C. Norman Shealy as Senior Resident in Neurosurgery at the Boston V.A. Hospital, for eight months, beginning January 1;

Dr. R. Lewis Wright as Assistant Resident in Neurosurgery to Laboratory service.

* * *

Dr. Raymond D. Adams has been recognized by the New York Academy of Sciences with the honor of Fellowship in the Academy. This honor is in recognition of the achievements of Dr. Adams's work in Science. Fellowship in the New York Academy of Sciences is awarded to a Member who has attained outstanding recognition for scientific achievement or for the promotion of Science, and is accordingly recognized as an honor in the world of Science.

Dr. Jack R. Dreyfuss has been elected to Fellowship in the American College of Radiology. He will receive the degree at a convocation in New York City on February 10.

Dr. Thomas B. Fitzpatrick has been appointed to the editorial boards of the *New England Journal of Medicine,* the *Journal of Investigative Dermatology,* and the *Archives of Dermatology.*

At the meeting of the American Academy of Dermatology and Syphilology, held in Chicago last December, Drs. Makoto Seiji, Thomas B. Fitzpatrick, and M. S. C. Birbeck received the Gold Award of Merit of the Scientific Exhibits for their original display entitled "The melanosome: The metabolic unit of melanin formation".

Dr. Fitzpatrick will be Chairman of the Program Directors' Meeting of Dermatology Training Grants, which will be held in Washington on February 9.

Dr. Richard P. Stetson, President of the Medical Foundation, Inc., has announced the award of a three-year fellowship to Dr. Edwin W. Salzman, an Assistant in Surgery on our Staff. Dr. Edward D. Churchill commented, on the occasion, "Dr. Salzman's career as a contributor to the advancement of surgery is assured by his innate talents, his long education, and demonstrated competence."

The Medical Foundation, a United Fund agency, supports young investigators in basic research through fellowships. Dr. Salzman is studying the way the body controls bleeding. "This complicated process keeps us from bleeding to death from small cuts, but sometimes does not function properly as in heart attacks and strokes," says Dr. Salzman. He is currently studying the surface of platelets (blood cells concerned with the coagulation of blood and contraction of the blood clot). He hopes to be able to find the mechanism that makes them work. If he does, the solution for handling both clotting and hemorrhaging will be that much nearer.

Dr. Salzman is one of the few surgeons doing research in this area—studies of the blood usually being confined to pathologists, internists, and physiologists.

His interest in blood disease has also extended to the operating room, where recent advances have made it safe to operate on patients with bleeding disorders who formerly were denied surgery.

George A. Talland, Ph.D. was awarded the 1961 Monograph Prize in the Physical and Biological Sciences by the American Academy of Arts and Sciences, for his manuscript entitled "The amnesic syndrome: A psychological study".

The Monograph Prizes of the Academy are intended to encourage and assist the publication of scholarly contributions to knowledge, too long for articles in the learned journals and too specialized or too short for a general book. In response to this prize competition, more than two hundred manuscripts were submitted by scholars and scientists from all parts of the English-speaking world.

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THE NEW GEORGE W. HOLMES MEMORIAL LIBRARY

IN THE DEPARTMENT OF RADIOLOGY

The Department of Radiology has recently redecorated and equipped the Seminar Room on White 2 as an X-ray Staff Library and Conference Room. With the approval of the General Executive Committee, the room has been renamed the George W. Holmes Memorial Library.

Dr. Holmes, who was Chief of the Department of Radiology from 1917 to 1941, came to the Hospital as assistant to Dr. Walter James Dodd in 1910 and was appointed Assistant Skiagrapher. Following Dr. Dodd's death, he became the second Chief of Radiology. During World War II, Dr. Holmes was recalled to the Hospital and served as Acting Chief of the Department from 1942 to 1945. He died at his home in Belfast, Maine, in 1959, aged 82.

Many of Dr. Holmes's former residents have contributed toward a Fund which will eventually be used to endow a larger memorial library when the Department is able to increase its floor space. In the meantime, it was decided to use the old Seminar Room for this purpose, the room now being too small to accommodate the House Staff and Physicians who attend the Department's seminar on Wednesday afternoons.

The library has been painted green, and gold-colored draperies have been hung at the windows. On one wall is the oil painting of Dr. Holmes, presented by his former pupils when he retired. On the opposite wall is a photograph of Dr. Dodd, above which, in a small glass case, is the first X-ray tube used at the Massachusetts General Hospital in 1896—four months after Roentgen's momentous discovery. Dr. Holmes's desk has been refinished and placed in the room, together with a new set of matching chairs. An excellent collection of radiologic textbooks has been assembled on the library shelves, and around the room are photographs of every physician who has trained in the Department since the beginning of the X-ray residency training program in 1915. Incidentally, Dr. Holmes was the first radiologist in the United States to start a formal residency program in Radiology. Among his many pupils were Drs. Merrill Sosman, Aubrey Hampton, John Camp, Harold Peterson, Ross Golden, Alexander Macmillan, Charles Martin, as well as Drs. Robbins and Wyman.

The Department has collected memorabilia of Dr. Holmes, including, in addition to material already in the Department, many early photographs of Dr. Holmes, certificates, citations, letters, and medals which have been contributed by Dr. Holmes's family. Worthy of special mention among these are the gold medals he received from the American Roentgen Ray Society and the Radiological Society of North America. Much of the material will be placed on display in the library. Some of it will be given to the Historical Collection in Radiology to be assembled in the new Countway Library of Medicine at Harvard Medical School. This latter collection will memorialize the pioneers of Radiology in the Boston area and will also contain original pieces of early X-ray equipment.

On December 15, 1961, Dr. Holmes was honored by the New England Roentgen Ray Society at its meeting at Longwood Towers, in Brookline, Massachusetts. The material collected by the Department was on display, including manuscripts, letters, awards, and photographs of the X-ray Department as it appeared in the 1920's. It was noted by Dr. Lloyd Hawes, who, together with Dr. Jack Dreyfuss, assembled the material for the exhibit, that Dr. Holmes is considered the father of radiological training in the United States, and that there is hardly a major teaching hospital in this country which does not have a radiologist trained by Dr. Holmes or one of his followers.

* * *

An account of our Ether Day activities appeared in the December 1961 issue of THE NEWS. At that time we said that the text of Dr. Faxon's interesting address, delivered in the Moseley Rotunda on the afternoon of October 16, would appear at an early date. To our regret, space accommodations have prevented its appearance until now.

SERVICE PINS: WHY, WHEN, AND HOW

The Massachusetts General Hospital expects everyone to do his duty. It sets a high standard of performance and promptly admonishes those who fail to meet this standard. It seldom praises. Today, however, is an exception, for on this 115th anniversary of Ether Day the Massachusetts General Hospital, for the 16th consecutive year, praises and shows its appreciation for length and excellence of service by the awarding of Service Pins.

It is always interesting and often instructive to explore the genesis and development of customs such as this. Why, when, and how did the M.G.H. decide to award Service Pins? As usual, this event is an example of how one thing leads to another, and we shall find that three other types of pins preceded our present Service Pin.

The story starts in 1942 or 1943, during World War II, when the American Hospital Association issued a pin to be given to hospital employees to show that they were not draft-dodgers, but were working in institutions which the government considered essential for the welfare and health of the nation. This was pin #1.

Now we come to pin #2. (This is complicated, but bear with me, please.) Volunteers have served the M.G.H. ever since 1869, when the Ladies' Visiting Committee was formed. Red Cross Gray Ladies and unpaid O.P.D. secretaries continued and expanded the idea of volunteer service. As World War II developed, so many doctors, nurses, and employees joined the Armed Forces that hospitals literally had to depend upon volunteers in order to keep operating. At the M.G.H. they served as house men and orderlies, house maids and ward maids and kitchen help—in fact, in almost every non-professional department of the Hospital. In 1943, over 1200 individual volunteers gave over 150,000 hours of service. This is the equivalent to adding 50 people to the Hospital personnel, working all day for every day in the year.

Naturally, the Hospital (and especially Miss Eleanor Greenwood, who was the Head of the Volunteer Service at that time) felt that some recognition for this service was indicated, and largely through Miss Greenwood's efforts action was taken. In 1942 the Volunteer Service Bureau of Boston, which was a part of the Community Fund (now known as the United Community Services) designed a pin which was adopted by the Boston hospitals and issued to volunteers after they had given 100 hours of service in one year. The volunteers had to pay $1.50 for the pin, but Miss Greenwood states that they always showed up promptly after completing their 100 hours and were very proud of their pin. It was of blue and white enamel, and bore the words "Hospital Volunteer Service" and the seal of the American Hospital Association.

The right to use this seal came about in this way: The A.H.A. had in 1933-34 approved the establishment of "prepayment plans for group hospitalization" and in 1935 had made recommendations governing the formation of "Hospital Service Plans", as this group hospitalization came to be called. In 1939, the A.H.A. officially adopted the name "Blue Cross" and at the same time the present Blue Cross symbol, with the A.H.A. seal in the center, as the national symbol of the Hospital Service movement. The Blue Cross name and symbol, but with a different center, had originated in Wisconsin. The Associated Hospital Service Corporation of Massachusetts, formed in 1937, immediately adopted this symbol for its letterhead and was generally spoken of as the Massachusetts Blue Cross. When, in 1942, Miss Greenwood and the Volunteer Service Bureau representatives asked Mr. Cahalane (then the Executive Director of the Massachusetts Blue Cross and also the Head of the Commission on Blue Cross of the A.H.A.) for permission to use the A.H.A. seal on their volunteer pin, he gave them the desired permission and the pin was designed and issued to the Boston hospitals. It was such a success that in 1944 the A.H.A. decided to adopt the idea and the pin as a national volunteer emblem, and so the Volunteer Service Bureau relinquished to the A.H.A. all rights and privileges connected with the emblem. The A.H.A. added the words "American Hospital Association" along the lower sides of the shield, but retained the general design. These pins were sold to member hospitals in the United States and Canada. This pin continued in use until 1954, when the design was changed to a hexagonal pin, in gold and blue enamel, with the words "Hospital Volunteer Service" surrounding the A.H.A. seal. This design is still used.

Now we come to pin #3. The pin we have been talking about was for 100 hours of service, but many of the volunteers had served for much longer periods—some for years, and so Miss Greenwood designed a little red ribbon bar which bore a bronze star for each year of service as a War Service Worker. War Service Workers were volunteers, but were an especially devoted and separate group. This ribbon caught the attention of the Boston Hospital Council and was adopted for use in other Boston hospitals. It was issued, in addition to the volunteer pin, from 1944 to the end of World War II.

One more step before we come to Service Pins. A hospital, probably more than any other institution, seems to collect, over the years, a group of loyal and dedicated persons who, by reason of long service and character, stabilize and leaven the larger body of those who come and go. To show appreciation of this devoted service, the Trustees of the M.G.H. began at McLean Hospital, in 1941, to present certificates of service to employees who had been with the Hospital for 20 years or more.

Now, all these different ideas were brought together, and the M.G.H. Service Pin is the result. First the A.H.A. war pin, then the volunteer pin and ribbon, and lastly the M.G.H. employee certificate. Credit for this synthesis should go to Mrs. Lois N. McCoy, who was Personnel Director at that time. She suggested to me (and the Trustees agreed) that, although the idea of certificates was good, a more tangible and visible recognition of length of service would be better appreciated by employees. Such a Service Pin would be a badge of honor for the wearer and an incentive to those who had not already earned one. Consequently, on April 6, 1945, the Trustees voted: "To authorize the award of Service Pins to those with more than ten years of service to the Hospital."

So, 16 years ago—on Ether Day, October 16, 1945—the first ceremony of awarding Service Pins was inaugurated, and Mr. John R. Macomber, then President of the Corporation, handed pins to 241 persons. I quote from the November 1945 issue of the M.G.H. News:

> The pins bear the Hospital seal, and include one star for each ten years of service rendered. Many received pins with one star, several with two, fewer with three, and Miss Genevieve C. Chase, our Record Librarian, was awarded a pin with four stars for more than forty years of service. Then came the high point in the program. Two men—Mr. Eric Frankson, our Storekeeper, and Mr. Robert Henderson, Dean of Orderlies—were presented with pins, similar in design, but fashioned entirely of gold. These special pins signify over fifty years of association with the Hospital.

It was an auspicious beginning for a ceremony which has now been continued for 16 years. The following year, McLean Hospital awarded pins to 125 faithful members of their Hospital family.

At first, Service Pins were given only to employees. They wore them with such pride that the doctors felt neglected; and so, in 1952, Service Pins were awarded to all members of the Active Staff who had served the Hospital continuously for 25 years or more. On that Ether Day, 16 physicians received pins bearing the designation "25 years", and Dr. Joe V. Meigs received a pin with three stars, denoting 30 years on the Active Staff.

Furthermore, the high regard for the pins led the Trustees to establish a new category for five years of service. This pin bears no star, but at the end of five more years may be exchanged for a pin bearing one star, denoting ten years of service.

Pins go very well on ladies' clothes but not so well on men's coats, and so, in deference to the men's wishes, since 1954 the men have received smaller lapel buttons of the same design as the pins still issued to the ladies.

It would be historically impressive if I could tell you how many persons have received this honorable badge of recognition for years of service at the M.G.H. Unfortunately, the records have not been accurately kept. Some years are complete; others are blank. Also, the record is complicated by reason of persons graduating from one decade to another, from one star to two stars and upward. It is fair to say, however, that well over 2,000 persons have received Service Pins.

While an accurate record would be interesting and impressive, it is not really important. What *is* important is the fact that Service Pins are recognized as an honorable reward for faithful service, an honor both to the wearer and to the

Hospital, and that they are worn as such with pride.

I should like to close these remarks with a personal comment. Although I have served the Massachusetts General Hospital at three different times—first as a House Officer, next as an Assistant Director, and lastly as Director, I have not accumulated enough consecutive years of service to be awarded a Service Pin. The tenth commandment says: "Thou shalt not covet . . . any thing that is thy neighbor's", but I now confess that I do envy those of you who can wear an M.G.H. Service Pin.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Pathak, M. A.
Mechanism of psoralen photosensitization and *in vivo* biological action spectrum of 8-methoxypsoralen.
J. Invest. Dermat. 37:397.

Seiji, M., Shimao, K., Fitzpatrick, T. B., and Birbeck, M. S. C.
The site of biosynthesis of mammalian tyrosinase.
J. Invest. Dermat. 37:359.

General Surgery

Barnes, B. A., and Cope, O.
Carcinoma of the parathyroid glands: Report of 10 cases with endocrine function.
J.A.M.A. 178:556.

Grillo, H. C., and Potsaid, M. S.
Studies in wound healing: IV. Retardation of contraction by local X-irradiation, and observations relating to the origin of fibroblasts in repair.
Ann. Surg. 154:741.

Laboratory Science

Hakomori, S.-I., and Jeanloz, R. W.
Isolation and characterization of glycolipids from erythrocytes of human blood A (plus) and B (plus).
J. Biol. Chem. 236:2827.

Mills, J. A., Calkins, E., and Cohen, A. S.
The plasma disappearance time and catabolic half-life of I^{131}-labeled normal human gamma globulin in amyloidosis and in rheumatoid arthritis.
J. Clin. Invest. 40:1926.

Perlmann, P., and Morgan, W. S.
Immunological studies of microsomal structure and function.
In Biological structure and function. T. W. Goodwin and O. Lindberg, Editors, New York, Academic Press, Inc., vol. 1, p. 209.

Orthopedic Surgery

Rowe, C. R., and Sakellarides, H. T.
Factors related to recurrences of anterior dislocations of the shoulder.
Clin. Orthop. 20:40.

Rowe, C. R., and Sakellarides, H. T.
Recent advances in treatment of osteomyelitis following fractures of the long bones.
In Surgical Clinics of North America. Philadelphia, W. B. Saunders Company, vol. 41, no. 6, p. 1593.

Physiology

Blank, I. H., and Gould, E.
Penetration of anionic surfactants into skin. II. Study of mechanisms which impede the penetration of synthetic anionic surfactants into skin.
J. Invest. Dermat. 37:311.

Psychiatry

Abram, H. S., and Gill, B. F.
Predictions of postoperative psychiatric complications.
New England J. Med. 265:1123.

Talland, G. A., and Cairnie, J.
Aging effects on simple, disjunctive, and alerted finger reaction time.
J. Gerontol. 16:370.

Next month's issue of THE NEWS will be the last in which 1961 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American Chemical Society.
Searching the chemical literature.
Washington, D.C., American Chemical Society, 1961.
(36Hh)

Bakulev, A. N. (Editor)
Surgical treatment of mitral stenosis.
Moscow, State Publishing House for Medical Literature, 1958.
(15E)

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BIOGLETS

Dr. Howard B. Corning, Intern in Medicine—born in New York City, February 21, 1935; attended Groton School; A.B., Harvard College, 1957; M.D., Columbia University College of Physicians and Surgeons, 1961; single.

Dr. Robert W. Farkas, Resident in Psychiatry, McLean Hospital — born in York, Pennsylvania, December 24, 1918; B.A., University of Maryland, 1941; M.D., University of Maryland Medical School, 1944; Intern (rotating), Sinai Hospital, Baltimore, Maryland, 1944-45; military service: Lieutenant (jg), Medical Corps, USNR, Pacific Area, 1945-46; Assistant Resident in Surgery and Obstetrics, York Hospital, York, Pennsylvania, 1946-47; Resident

No. 100 in a series of Staff photographs
Dr. Stephen M. Krane, Assistant Physician—Chief of the Arthritis Unit of the Medical Services

in Obstetrics and Gynecology, Sinai Hospital, Baltimore, 1947-51; private practice in Obstetrics and Gynecology, York, Pennsylvania, 1951-52; military service: Lieutenant, Medical Corps, USNR, U.S. Naval Hospital, Chelsea, Massachusetts, 1952-54; private practice in Obstetrics and Gynecology, York, Pennsylvania, 1954-61; Diplomate, American Board of Obstetrics and Gynecology, 1956.

Dr. William H. Goodson, Jr., Resident in Psychiatry, McLean Hospital — born in Huntsville, Alabama, June 12, 1936; B.A., Vanderbilt University, Nashville, Tennessee, 1957; M.D., Vanderbilt University, 1960; Intern in Medicine, Vanderbilt Hospital, 1960-61; presently in "Berry Plan" — 1st Lieutenant, U.S. Army Reserve.

* * *

New addresses:

Dr. Anton T. Appels (clin. fel. *M.* 1961), Hermanstrasse 3, Freiburg im Breisgau, Germany

Dr. Austin W. Cheever (a.d. 1948), 232 Merchant St., Honolulu, Hawaii

Dr. William H. Eger (a. psychiat.), Boston University School of Medicine, 80 E. Concord St., Boston 18, Mass.

Dr. Ira A. Ferguson, Jr. (*S.* 1953), Emory University Clinic, Atlanta 22, Ga.

Dr. Richard M. Hays (clin. & res. fel. *M.* 1960), Albert Einstein Medical School, Bronx, N. Y.

Dr. Donald K. Lewis (assoc. s. *Otolar.*), 1 Emerson Place, Charles River Park, Boston. Mass.

Dr. A. David McGugan (r.p. *D.* 1961), St. John's Hospital for Diseases of the Skin, Leicester Sq., London, England

Dr. Clarence N. McPeak (r.p. *R.* 1929), Henry Heywood Memorial Hospital, Gardner, Mass.

Dr. Saul M. Marcus (*Bd. of Cons.*), 270 Commonwealth Ave., Boston, Mass.

Dr. Richard L. Rovit (r.s. *N.S.* 1958), Jefferson Medical College, Philadelphia 7, Pa.

Dr. John W. Smillie (*E.S.* 1944), 326 N. Ingalls St., Ann Arbor, Mich.

Dr. Jerome Waldman (a.r.s. *Or.* 1949), 1616 Grand Ave., Waukegan, Ill.

Dr. Roy R. Wheeler (*W.M.* 1922), 57 Marmion Way, Rockport, Mass.

* * *

Christmas cards arrived as usual, this year, from many MGH alumni and past members of our Staff. The greetings bore the postmarks of several cities and towns from here to California and from such faraway places as Thailand. Each card was enjoyed very much. Because the Christmas letter from our past chaplain, the Very Reverend William B. Spofford and his family, would be of interest to all who knew "Bill" while he was here, we give it to you now. The letter reads:

> We debated staying out of the Christmas letter business again this year, and sending the equivalent amount to feed some one of the world's children, but your cards and letters started to arrive and we missed you and wanted to talk with you. . . . We won't give you two years' accumulation of news—just the high spots:
>
> Bill left Massachusetts General Hospital chaplaincy in mid-October in 1960 to become Dean of St. Michael's Cathedral, Boise. He keeps trying to figure out how one administers a large parish pastorally. He now has accumulated a complete and highly-trained staff, each member of which is qualified to train seminarians and clergy, so his basic interest in relating the work of the parish to seminary education is kept alive. For recreation, he skis, is a member of Boise Little Theater (just got through hamming in The Desk Set), and batted .302 for the St. Michael's soft-ball city champs in the summer. Like accounts of Mark Twain's death, accounts of his heart attack were exaggerated.
>
> Polly runs the house and, also, is attending Boise Junior College to get her degree in education so that, when the "mob" gets in college, we can help them along. Her recreation runs towards skiing and working with the League of Women Voters.
>
> Tim completed two years at Lenox School and then, this fall, transferred to Boise High, since the distance to Massachusetts and the cost were too much for us to manage. He pushes six feet in height and is, currently, exploring colleges to attend.
>
> The triplets are also monster-like (in size and, on occasion, in action): Steve works regularly in a bicycle shop; Mark and Andy take care of irrigating, lawn-mowing, and snow-shoveling activities. They seem to enjoy life to the full, but parents keep having to recall that we did sing "Three Itty Fitties", which isn't much more refined than "Who Put the Bomp in the Bomp-a-Bomp".
>
> Dan practises the piano and relates to our four-legged family members (Grundoon, who is getting a bit grey, but doesn't seem too senile, and Churchy La Femme, who lives up to his name in a caterwauling manner!). All the boys do well in school, thank heavens, and each and all are wild about skiing.
>
> For our vacation, this year, we went up to Glacier and hiked. A tremendously refreshing and humbling experience.
>
> We do miss all our friends on the East Coast, but are continually thrilled by the bigness and openness of the inter-mountain West.
>
> In October, naturally, we remained confident that the best team would win. It did! To our anti-Yankee friends we maintain a haughty, but compassionate, attitude.
>
> The state of the world bothers us, as it should all men. Outside of Christ working in people, we see no resolution. But we know that the Holy Spirit bloweth where He listeth and still calls men to repentance and conversion. We were proud that the Episcopal delegation to New Delhi saw a vision of a reunited Church and that the entire Church, at Detroit, intends to do something about it.
>
> Our love to you all, and may the world win through to a fuller measure of peace and the abundant life for all men in 1962. The forces of struggle and dissension are always more noisy than the quiet forces of love and goodness. We continue to stake our souls and beings on the latter, and hope to continue to light a "small candle of understanding" in our lives.

The letter is signed "Bill, Polly, Tim, Mark, Andrew, Stephen, Daniel, Grundoon, and Churchy La Femme".

The News

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No. 211 Boston, Mass. March 1962

THE RESEARCH ACTIVITIES OF THE GASTROINTESTINAL UNIT

In 1957, when Dr. Chester M. Jones retired from his position as Head of the Gastrointestinal Unit at the Massachusetts General Hospital, this Unit and the laboratory, which he had personally established, had achieved a position of eminence and excellence at the clinical level, in the care and treatment of the sick, and in the investigation of diseases of the gastrointestinal tract. We have attempted to maintain the high standards and goals set by Dr. Jones, and the present report will deal with some of the investigative activities of the laboratory during the past five years.

The research activities of the Gastrointestinal Unit have continued to be those related to the physiology and pathophysiology of the gastrointestinal tract and liver. While some of our problems have frequently been approached along biochemical lines, we continue to carry out investigations on patients, realizing that by studying and observing the patient and his disease, we may not only learn something of the abnormal state but, also, if we are astute enough, enhance our knowledge of basic physiologic processes.

One of the major interests in our laboratory has been in the area of the absorption and malabsorption of fat by the small intestine. It will be recalled that normally, when fat is ingested, it is broken down or hydrolyzed partially, if not completely, in the lumen of the small intestine by the combined action of pancreatic lipase and bile salts. In the course of this digestive process, approximately 50 to 60 percent of the ingested neutral fat (triglyceride) is completely hydrolyzed into its component parts (viz., glycerol and fatty acids), and another 30 to 40 percent is partially broken down to monoglycerides and diglycerides. We have concentrated our efforts on learning more of the mechanism whereby these major products of lipid digestion cross the intestinal mucosa and enter the systemic circulation. In the case of fatty acids, it has been observed by others that long-chain fatty acids, after they traverse the intestinal mucosal cell, appear in the lymphatic system in the form of triglyceride rather than as free fatty acids. In other words, as the fatty acid passes through the cell, it is re-esterified to a triglyceride. It was previously believed that this re-esterification process was carried out by a lipase, similar to if not the same as pancreatic lipase. This problem was investigated by Dr. Anthony M. Dawson, who came to us from Professor Sheila Sherlock's laboratory in London. Dr. Dawson demonstrated that the esterification of fatty acids by the intestinal mucosa was in fact an energy-requiring process, not catalyzed by a lipase, and required specifically two cofactors—adenosine triphosphate (ATP) and coenzyme A (CoA). It is of interest and importance that this esterification mechanism is greatest and most active in the upper segments of the small intestine, where fat absorption *in vivo* is normally also maximal. In subsequent studies, Dr. John R. Senior, who will shortly be returning to the University of Pennsylvania Medical School, demonstrated that the initial step in fatty acid esterification was the formation of an "activated" fatty acid—that is, the formation of a fatty acid-CoA derivative. Dr. Senior also observed that this fatty acid activating enzyme system, as well as other enzymes responsible for lipid synthesis, is located in the microsomal membranes of the intestinal epithelial cell. This finding is significant, since it has been found by cytologists that when the mucosal cell is viewed under the electron microscope the absorbed fat is surrounded by specific membranes which seem to be similar to the microsomal membranes isolated by Dr. Senior.

The mechanism of monoglyceride transport and absorption has also been investigated. We have attempted to ascertain by which pathway monoglycerides are converted to diglycerides and then to triglycerides in the mucosal cell. In the course of these studies, Dr. Senior has discovered a completely new pathway for the esterification of monoglycerides—one not previously observed in any other tissue. The specific reaction involves the direct esterification of the monoglyceride molecule with activated fatty acids. This pathway has such great activity in the intestinal cell that it undoubtedly plays an important role in the metabolism and transport of monoglycerides within the intestinal epithelial cell.

In the course of these studies, it became evident that bile salts influence fat absorption not only by functioning as emulsifying agents or detergents in the intestinal lumen, but also by exerting an effect directly on metabolic processes within the cell. In studies carried out by Dr. Dawson, and more recently by Drs. Peter R. Holt and Herbert A. Haessler, it has been shown that the naturally occurring bile salts, such as glycocholate and taurocholate, markedly stimulate such processes as fatty acid esterification, glucose utilization, and the conversion of glucose (a 6-carbon sugar) to the glycerol molecule which forms the 3-carbon "backbone" of the triglycerides in the cell. Of importance has been the demonstration that while conjugated bile salts, such as taurocholate and glycocholate, enhance lipid transport and synthesis in the cell, free bile salts, such as cholate or deoxycholate, lack this property and, in fact, exert an inhibitory influence on many metabolic reactions. The adverse effects of the free bile salts is even apparent morphologically. Dr. Dawson was able to demonstrate that, even in the presence of relatively low concentrations of free bile salts, the mucosal cells are damaged and are subject to necrosis. Since bacteria in the intestinal tract are able to convert conjugated bile salts to free bile salts, it is possible that these free bile salts contribute to the malabsorption often found under conditions where an abnormal or excessive bacterial flora occurs in the small intestine.

Dr. Haessler, who came to our laboratory from the Children's Service and is interested in gastrointestinal disorders of children, has also observed that, contrary to previously held concepts, the glycerol liberated by the hydrolysis of neutral fat is in fact actively utilized by the mucosal cell. He is currently attempting to elucidate the pathway (or pathways) by which this metabolism of glycerol occurs.

While attempting to obtain a better understanding of mechanisms and factors influencing the normal absorption of fat, we have also directed our attention to the investigation of diseases in which malabsorption of fat occurs. Whipple's disease is one such entity which is characterized by the accumulation in the intestinal mucosa of macrophages containing material giving a positive periodic-acid-Schiff (PAS) reaction. In electron microscopic studies conducted by Dr. Alan S. Cohen, formerly of the Arthritis Unit, together with Drs. Peter R. Holt and Elihu M. Schimmel of our group, it was found that these macrophages contain unusual dense bodies, whose ultrastructure resembles that of microorganisms. These observations have now been confirmed by workers in other laboratories, and thus the findings suggest that this rare disorder may indeed be an infectious disease. We now must attempt to prove this theory by direct microbiologic procedures. Sprue or celiac disease has long been of interest to the laboratory, even back to the time when the Unit was under the direction of Dr. Jones. It is now well known that the symptoms of patients with this disorder usually disappear when the wheat protein gluten is omitted from their diet. There is evidence to suggest that after these patients ingest gluten, glutamine-containing peptides appear in the blood stream. This seems to us to be an important clue to the nature of this hereditary disorder. Therefore, Dr. Paul A. Crabbe, a Fulbright scholar from the University of Louvain, Belgium, and Gerald Sandler, a fourth year medical student from New York University, are currently attempting to characterize and isolate these peptides from the serum by the technique of high-voltage electrophoresis.

In addition to the intestinal tract proper, our laboratory is also actively investigating various phases of liver physiology and disease. We have carried out numerous studies on the metabolism and conjugation of bilirubin. Several years ago we demonstrated that the liver, in addition to converting bilirubin to bilirubin glucuronide, also synthesizes and secretes a sulfate conjugate of bilirubin into the bile. In animals and in man, a hereditary form of jaundice exists which is associated with a deficiency in one of these conjugating mechanisms—namely, the one responsible for the formation of glucuronide conjugates. We have studied this glucuronide conjugating enzyme system, called glucuronyl transferase, which is located in the microsomal fraction of the liver cell. During the past year, we succeeded for the first time in solubilizing this enzyme (i.e., releasing it from the microsomal membranes) and purifying it. As a result, we have been able to demonstrate that more than one glucuronyl transferase exists in the microsome of the liver cell. This observation has now been extended by others, with the finding that only one of these glucuronyl transferases is deficient in patients with congenital non-hemolytic jaundice.

The manner by which alcohol causes derangements in liver function and produces liver damage (i.e., fatty liver, cirrhosis) has also been under intensive study during the past three years. One of the most intriguing and clinically important questions relates to the mechanism whereby alcohol ingestion produces a fatty liver. This problem was first investigated in our laboratory by Dr. Gilberto Rebouças, a Kellogg Fellow from the University of Bahia, Brazil, and more recently by Drs. Robert H. Schapiro and Yoshitaka Shimizu—the latter a Fulbright Fellow from the University of Tokyo. The problem thus far has been studied primarily in the rat and, to a large extent, by utilizing the technique of the artificially perfused isolated liver. As a result of these studies, it has become evident that most of the fat which accumulates in the liver is not synthesized *de novo* in the liver, but comes to the liver from the peripheral adipose tissue stores via the blood stream in the form of free fatty acids. The recent studies of Drs. Schapiro and Shimizu also emphasize that alcohol causes a decrease in the release of fat from the liver. The findings to date suggest that alcohol causes 1) a release of epinephrine which results in an increased mobilization of fat from peripheral fat stores, and 2) a decreased release of fat from the liver, perhaps by a direct inhibition of hepatic lipoprotein synthesis in the liver microsomes. These observations have thus far been carried out only in animals, and we now hope to extend them to patients in order to determine whether the same phenomena obtain in the patient with alcoholism.

One of the problems frequently encountered on our wards is that of cirrhosis. We see both Laennec's cirrhosis, in which alcoholism appears to be a significant etiologic agent, and also many cases of postnecrotic cirrhosis, which may follow clinical or subclinical episodes of viral hepatitis. Dr. Robert Schapiro and Dr. Gerald R. Plotkin of our Unit, and Dr. Wallace A. Jones of the Pathology Department are currently conducting a controlled study to determine whether corticosteroid therapy may have beneficial effects in influencing the course of chronic liver disease, and, more specifically, to ascertain whether such treatment may prevent the development of cirrhosis in patients with so-called "subacute hepatic necrosis"—a severe form of viral hepatitis. While this study is a long-range one, we are hopeful that the results will provide us with a sounder basis for the use of corticosteroids in acute and chronic liver disease.

One other metabolic consequence of alcohol ingestion in man and in animals is the inhibition of galactose utilization by the liver. This problem has been investigated together with Dr. Stephen M. Krane of the Arthritis Unit. It was observed that alcohol ingestion strikingly alters the levels and the ratios of oxidized and reduced diphosphopyridine nucleotides (DPN and DPNH) in the liver cell. The increased level of DPNH markedly inhibits a specific enzymatic step in the metabolism of galactose, and accounts for the impairment of galactose utilization following alcohol ingestion, even in otherwise normal human subjects.

Our interest in disorders of galactose metabolism stems from our previous studies on the enzymatic defect in the congenital disease, galactosemia. These earlier studies (reviewed in THE NEWS in 1956) were initiated at the National Institutes of Health in association with Dr. Herman M. Kalckar, who, during the past year, has come to the M.G.H. as Chief of the Biochemical Research Laboratory. Although the nature of the enzymatic lesion in this disease has been elucidated, many important problems remain—such as the manner by which these patients develop cataracts, mental retardation, and liver disease. There is much to suggest that the clinical manifestations are due to the accumulation of galactose-1-phosphate in the tissue, but just how this phosphorylated sugar interferes with cellular metabolism is one of the problems under active investigation. Although patients with galactosemia have a complete absence of galactose-1-phosphate uridyl transferase activity, one of the questions we are trying to answer is whether this is due to an actual *lack* of the specific enzyme protein, or whether these individuals perhaps possess an *altered protein,* which, because of a subtle difference in structure or amino acid composition, lacks the transferase activity. We hope that by means of enzymatic purification and immunologic techniques it may be possible to find the answer to this genetically important question.

From the foregoing review of the research activities of the Gastrointestinal Unit, it is quite apparent that we could not be successful in these efforts and still meet our two other major objectives—namely, better patient care and teaching—without the support and participation of a strong clinical staff. We are most fortunate in having not only a clinically superior but also a dedicated group of internists who form the core of our clinical and teaching activities. I wish to take this opportunity to express my indebtedness and appreciation to Drs. Perry J. Culver, Daniel S. Ellis, Walter W. Point, and Edwin P. Maynard, III, for their enthusiastic support and their devoted participation in all the activities of the Gastrointestinal Unit.

Kurt J. Isselbacher, M.D.,
Assistant Physician
and *Chief of the Gastrointestinal Unit*

The Board of Trustees, at their meetings on December 22, 1961, and January 5 and 19, 1962, voted:

That the Surgical Service be granted an additional Intern, to be assigned to Gynecology, making a total of eleven Interns in Surgery to be supported by the Hospital;

To accept with regret the resignation of Dr. Noel H. Aldridge from the position of Assistant Radiologist, effective January 15;

To accept the resignation of Dr. John F. Bertles from the position of Assistant in Medicine, effective as of December 19, 1961.

To appoint:

Dr. Rodolfo A. Arellana as Out-Patient Resident on the Children's Service, for the period January 1 through June 30;

Dr. John M. Bennett as Clinical Fellow in Dermatology, for the months of January and February;

Dr. Jane M. Berman as Clinical Fellow in Psychiatry, effective July 1;

Dr. Caesar Briefer, Jr. as Resident in Medicine for one year, beginning July 1;

Dr. Stanley E. H. Brooks as Clinical Fellow in Pathology for one year, beginning February 1;

Dr. Martha A. Carpenter as Exchange Assistant Resident on the Children's Service, for the period January 16 through February 26;

Dr. William D. Cochran as Assistant Pediatrician, beginning January 1;

Dr. James E. Drorbaugh as Assistant Pediatrician, beginning January 1;

Dr. Homayoun Kazemi as Resident in Medicine for one year, beginning January 1, 1963;

Dr. John B. Little as Clinical Assistant in Radiology, beginning January 1;

Dr. S. Bert Litwin as Third Assistant Resident in Surgery, beginning January 1;

Dr. Edward Los as Assistant in Anesthesia, beginning January 15;

Dr. William McDonald as Assistant Resident

in Anesthesia, beginning July 1;
Dr. Luis F. de Q. Mattoso as Second Assistant Resident in Radiology, beginning February 1;
Dr. Egbert H. J. Mueller as Assistant Psychiatrist at McLean Hospital, beginning September 22, 1961;
Dr. Nancy T. P. Nichols as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;
Dr. Philip I. Salib as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;
Dr. Robert H. Schapiro as Resident in Medicine for one year, beginning January 1;
Dr. Donald D. Sheffel as Clinical and Research Fellow in Neurosurgery for one year, beginning January 1;
Dr. William E. Strole, Jr. as Resident in Medicine for one year, beginning October 1;
Prof. George P. Wadsworth as Consultant in Mathematics to the Physics Research Laboratory;
Dr. Hibbard E. Williams as Resident in Medicine, for the period July 1, 1962 through December 31, 1962, and as Chief Resident in Medicine for one year, beginning January 1, 1963;
Dr. Nicholas T. Zervas as Clinical Assistant in Neurosurgery, beginning January 1;
Dr. Leonard Zinman as Assistant Resident in Urology, for a period of six months, beginning December 1, 1961;
Dr. Klaus A. Zuppinger as Clinical and Research Fellow in Medicine for one year, beginning July 1.

The Trustees also voted to appoint the following as Residents in Psychiatry at McLean Hospital, beginning July 1:

Dr. John Bachman
Dr. Guido Belsasso
Dr. Randolph Catlin, Jr.
Dr. Robert M. Chalfin
Dr. Jack Ellenberg
Dr. Robert W. Farkas
Dr. William H. Goodson, Jr.
Dr. Albert E. Herman
Dr. John B. Livingstone
Dr. Michael T. McGuire
Dr. Judith G. Ronat
Dr. Christopher Van A. Rowland, Jr.
Dr. Melvyn B. Schupack
Dr. Richard Sens
Dr. John S. Strauss
Dr. Olga S. Wermer
Dr. Emmett Wilson, Jr.
Dr. Jacob C. Wolterbeek

At their meetings on December 27, 1961, and January 3, 10, and 24, 1962, the General Executive Committee voted:

To promote:

Dr. Stanley P. Bohrer to the position of Resident in Radiology, beginning March 1;
Dr. A. Erik Gundersen to the position of First Assistant Resident in Surgery, beginning January 1;
Dr. James J. Pollard to the position of First Assistant Resident in Radiology, beginning January 1.

To reappoint:

Dr. Frederick W. Ackroyd as Second Assistant Resident in Surgery, beginning January 1;
Annemarie Closse, Ph.D. as Research Fellow in Biochemistry (Medicine), for the period February 1 through September 1;
Dr. Cesare G. Coletta as Clinical Fellow in Anesthesia, for the period November 1, 1961 through April 10, 1962.

To appoint:

Mr. John A. Stout as Research Fellow in Psychology in the Department of Psychiatry for one year, beginning December 1, 1961;
Dr. Ronald B. Wilcox as Research Fellow in Medicine for one year, beginning January 1.

At their May 10, 1961 meeting, the General Executive Committee voted to promote Albert H. Solway, Ph.D. from Assistant Chemist to Associate Chemist (Neurosurgery), for the three-year period beginning July 1, 1961. This vote was delayed in reaching the office of The News until the last week in January.

Seventy years ago the Vincent Club presented its first show for the benefit of the Vincent Memorial Hospital. The curtain was barely down on the final performance of last year's political spoof, "Winning Ways", before the Vincent Club was hard at work worrying about this year's Show. The location—New England Life Hall (formerly New England Mutual Hall)—and the dates—April 3 through 7—had already been decided upon. It had also been decided to keep the same producer, director, and orchestra.

During the past summer, various Vincent members worked on scripts. By November, one was settled upon, and the Show Committee moved into second speed, meeting with the director to discuss the book, music, scenery, and costumes, while the Script and Music Committees met weekly.

At the time of this writing, the advertising campaign is almost over, and the back office is beginning to pile up with proof from the advertisers. The Front of the House Committee is now being organized. "Front of the House" is our term for activity taking place in front of the footlights. The traditional lavender and yellow uniforms are being refreshed, and the chairmen of flowers, programs, and waitresses are meeting to discuss their mutual problems.

Once a week, during January and February, there were practice sessions in singing, dancing, and dialogue at the Club House. The membership patroness lists have been brought up to date and the envelopes have been hand-addressed, stuffed, sealed, stamped, and mailed, as has also the Show letter. The response to this mailing gives the Show Committee and the Front of the House a clue as to how many assistant or potential actresses are planning to help on this year's Show.

Rehearsals for the Show are now going on. "Hold Your Hats" will be a lighthearted satire on the Roaring '20's, complete with financial tycoons, speakeasies, cruises on luxury liners, adventures in Paris, a circus, and a football hero from Princeton. The original script was written by three talented and experienced Vincent members—Mrs. Samuel S. Drury, Mrs. Wallace Lincoln Pierce, and Mrs. Joseph T. Ryerson, Jr., with some provocative ideas contributed by Mrs. Charles B. Barnes.

The Ticket Committee is busy at the box office at New England Life Hall, 225 Clarendon Street, Boston. Tickets ranging in price from $1.25 to $6.00 will be available at the box office from March 19 through the date of the final performance of the Show on April 7. The box office will be open from 9:30 A.M. until 5:30 P.M. This year's box office telephone number is COmmonwealth 6-1740.

Dr. Howard Ulfelder, who has been identified since 1942 with teaching, research, and clinical activities concerned with gynecology at the Harvard Medical School, the Vincent Memorial Hospital, and the Massachusetts General Hospital, has been named the first Joe Vincent Meigs Professor of Gynecology at Harvard.

The Meigs Professorship, established by Harvard in 1955, was recently activated, following the successful completion of a campaign for $500,000. Funds were contributed by the friends, associates, and former patients of Dr. Meigs, who retired from Harvard in 1955 to become Clinical Professor of Gynecology, Emeritus.

Since 1955, Dr. Ulfelder has been Clinical Professor of Gynecology at the Harvard Medical School, Chief of Staff at the Vincent Memorial Hospital, and Chief of Gynecology at the Massachusetts General Hospital. He is Senior Surgeon at the Pondville Hospital.

Dr. Ulfelder's teaching responsibilities for the Harvard Medical School involve medical students in the second, third, and fourth years. Included is a course in gynecological diagnosis for second-year students, clinics and ambulatory clinic assignments for third-year students, and elective clerkships for fourth-year students. In addition, Dr. Ulfelder, with Dr. Francis M. Ingersoll, Assistant Clinical Professor of Gynecology at Harvard and Associate Visiting Surgeon at the Massachusetts General Hospital, is responsible, at the Vincent Memorial Hospital, for the annual organization of a postdoctoral course in gynecology under the Harvard Medical School's Courses for Graduates.

The Gynecology Service, under Dr. Ulfelder, is responsible for the care of patients with diseases in this area admitted to the Massachusetts General Hospital. Major emphasis is placed on the treatment of malignant disease of the uterus. An active research program is carried on at the Vincent Memorial Hospital in the field of pituitary and ovarian endocrine physiology. Dr. Ulfelder has contributed numerous articles to the scientific press.

Among the many scientific and professional organizations in which Dr. Ulfelder holds membership are the American Gynecological Society, American Surgical Association, and the Obstetrical Society of Boston (president, 1961).

Dr. Ulfelder was born of American parents in Mexico City, Mexico, on August 15, 1911. He received the A.B. degree in 1932 and the M.D. degree in 1936 from Harvard. During World War II he served from 1942 through 1945 in the U.S. Army Medical Corps as Chief of Surgical Service at the 55th General Hospital.

SOME FACTS ABOUT HONG KONG

Hong Kong is a British crown colony. It was ceded to Britain by China in 1841, and later, in 1860, when it included the Kowloon Peninsula. In 1898, an additional substantial stretch of the mainland, called New Territory, was leased to Great Britain by China for 99 years.

Hong Kong is situated on the southeast coast of China, at and near the mouth of the Pearl River—one of the three largest rivers in China. It is just inside the Torrid Zone, being less than 100 miles south of the Tropic of Cancer.

The city of Victoria, on Hong Kong Island, covers about 30 square miles, the peninsula of Kowloon is about 3 square miles, and the New Territory is roughly 365 square miles. Thus, the total area of Hong Kong is less than 400 square miles. The land is of low fertility, and granitic rocks practically cover the mountains and hills. The farm produce, composed mainly of rice and vegetables, is limited and is far from being sufficient.

According to the latest census, there are no less than 3 million people in Hong Kong. If all the land were available for habitation, there would be 7,500 people per square mile. Since most of Hong Kong is either rocky or hilly, one can well imagine how dense the population is along the coast and on the flatlands. Along the water fronts and among the foothills, thousands and thousands live together in small quarters. With the influx of refugees, some live even way up on the hilltops in a section called "squatters".

Of the three million or more in Hong Kong, about 99 percent are Chinese. Among the non-Chinese are the British, the Europeans, the Americans, and others. There are less than 3,000 Americans, most of whom are engaged in business, some in education, and others in the diplomatic service.

The Chinese in Hong Kong have come from all over China, plus quite a number from over seas. A most trying problem of language exists, as one can see; but, by and large, Cantonese is the predominant tongue. Thus, Cantonese is the spoken dialect in Hong Kong, while English is the official language in business transactions, etc.

The population in Hong Kong has not been stable, and I believe it will never be. There is the inherent problem of uncontrolled birthrate, as well as that of the influx of refugees. Roughly, we have about 120,000 babies born annually. This figure, minus the number of deaths each year (about 20,000), leaves us with an annual increase in population of 100,000. In addition, there is the continuous immigration of refugees from nearby countries—notably from the Chinese mainland. It is difficult, and probably never will be possible, to give an exact figure on these refugees, for most of them are smuggled into Hong Kong. The proximity of the Chinese mainland to the New Territory of Hong Kong is such that one can easily *swim* across the dividing line, which is a one-mile-wide stream.

Hong Kong has not produced enough rice and vegetables for her consumption because of the geographical limitations, therefore she has relied very much on imports from over seas. Most of the rice has come from southeast Asia and the Indochina area, most of the poultry and beef from all over the world—Australia, Japan, the U.S.A., and Europe. Our vegetable supply has been imported largely from the neighboring Chinese mainland. Fish, however, is one of the few foods that we have in plenty for most of the year—so much fish, in fact, that we are able to export it. The annual income from fishing alone is valued at round 60 million Hong Kong dollars, or 10 million U.S. dollars.

With regard to industry—Hong Kong has occupied a very important position in southeast Asia. In 1939 she had less than 1,000 factories, but in 1960 she had over 5,000 of many kinds. Besides shipping, textile, clothing, rubber, and plastic industries are the notable ones. There are also lighter industries, such as those for light metal products, electrical appliances, and electronic supplies. This growth in industrial activities is a very important stabilizing factor, for without it there would have been chaos, with thousands and thousands of unemployed.

With economic conditions as they are in Hong Kong, one cannot pass on without pointing out the importance of "tourism". Hong Kong is a very attractive spot, and is a "must" in your itinerary if you wish to see the world. We have had thousands and thousands of visitors in Hong Kong every year. The effect of this is both immediate and far-reaching; for, materially, the amount of money Hong Kong has made from the tourist business is enormous (so much so, there is no actual way of estimating it); and the morale of the local populace has thus been much enhanced with a sense of security because of the continuous presence of these visitors. Americans have done their very best in this respect. We have more American tourists than all the rest combined.

There are less than 1,000 western-trained registered medical doctors in Hong Kong, 400 dentists, 2,000 nurses, and 2,000 midwives. At first glance it would seem that the medical profession in Hong Kong would be taxed to its fullest possible ability to handle such a vast population. But this has not always proved to be the case, for there are many doctors who could have been more fortunate than they have been. Some have had to find jobs as ship surgeons. And there are many, many healthy people in Hong Kong who do not need western medicine.

In addition, the paradoxical situation is that not all the people there believe in western medicine, let alone surgery. The memory that the knife only cut, and rarely cured, still remains in the depths of many minds. Thus, there has been in effect for many, many years a most lucrative business for the local herbalist "physicians", the acupuncturists, the bone setters, and the so-called orthopedic specialists. How much damage this form of medical practice has done to the public will probably never be known. I have seen death from typhoid perforation, internal hemorrhages, and acute abdominal catastrophies so treated. On the other hand, it does alleviate the problem of shortage of doctors—though, I must admit, at a terrific price!

We have a number of large hospitals —some run by the government, others of private ownership. There is rarely the problem of securing a hospital bed and of admitting patients to the private hospitals, although the government hospitals are always filled. The total number of hospital beds is a little over 8,000, or 1.7 to each thousand of the estimated population.

We have about 1,700 schools for secondary education and one university, with about 20,000 teachers. Over half a million students are enrolled each year, yet not everyone can afford to go to a private school or be able to enter a public school because space is so limited. As a result, many children will not have the opportunity to secure an education. With the rapid population increase every year, there seems always to be a lag behind, no matter how many new schools are put up each year.

The university is a small but a fine one. It is staffed by an excellent faculty. Many of them are Chinese who have returned from abroad—chiefly from Great Britain. The entire pattern of teaching is British. The main problems lie, I believe, in money and manpower, both of which the schools badly need.

Chiu-an Wang, M.D.,
(*W.S.* 1944)

[At our request, Dr. Wang has given us a short addendum to the above article. It describes more fully the medical situation in Hong Kong. It will appear in our next issue.——*Editor*]

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Arthritis

Ward, J., Cohen, A. S., and Bauer, W.
Acute suppurative arthritis.
Bull. Rheumat. Dis. 12:259, 1961.

General Medicine

Hardy, H. L.
Case 40-1961. Case records of the Massachusetts General Hospital. (Discussion)
New England J. Med. 264:1154, 1961.
Hardy, H. L.
Farmer's lung. (Editorial)
New England J. Med. 264:1313, 1961.

General Surgery

Grillo, H. C., and Gross, J.
Thermal reconstitution of collagen from solution and the response to its heterologous implantation.
J. Surg. Res. 2:69, 1962.
McDermott, W. V., Jr.
Upper gastrointestinal hemorrhage, the liver, the spleen, the gall bladder and biliary tract.
In Surgery—A concise guide to clinical practice, Nardi, G. L., and Zuidema, G. D., Editors, Boston, Mass., Little, Brown & Co., 1961, chap. 17.
McDermott, W. V., Jr., Henneman, D. H., and Laumont, C.
Biochemical changes associated with the administration of glutamic acid and arginine to patients with hyperammoniemia.
J. Surg. Res. 1:307, 1961.
Phillips, A. W., and Cope, O.
Burn therapy. II. The revelation of respiratory tract damage as a principal killer of the burned patient.
Ann. Surg. 155:1, 1962.

Neurology

Brown, M. R.
Prosper Menière.
J.A.M.A. 179:62, 1962.

Orthopedic Surgery

Florence, D. W., and Caplan, M. A.
Orthopaedic stroller chair: An aid in the treatment of congenital dislocation of the hip.
J. Bone & Joint Surg. 43-A:1243, 1961.

This is the last issue of The News in which 1961 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Bergel, F.
Chemistry of enzymes in cancer.
Springfield, Ill., Charles C. Thomas, 1961.
(5C)
Brown, J., and Pearson, C. M. (Editors)
Clinical uses of adrenal steroids.
New York, McGraw-Hill Book Company, Inc., 1962.
(22U)
Duchenne, G. B.
Duchenne's physiology of motion.
Philadelphia, W. B. Saunders Company, 1959.
(4E)
Gamble, J. R.
Chemistry of digestive diseases.
Springfield, Ill., Charles C. Thomas, 1961.
(16D)
Goodwin, T. W., and Lindberg, O. (Editors)
Biological structure and function, vol. 1.
New York, Academic Press, Inc., 1961.
(2Am)
Henry, A. R.
Extensile exposure, ed. 2.
Baltimore, The Williams & Wilkins Company, 1957.
(18E)
McDonald, D. A.
Blood flow in arteries.
London, Edward Arnold Publishers Ltd., 1960.
(15F)
Mercer, W.
Orthopaedic surgery, ed. 5.
Baltimore, The Williams & Wilkins Company, 1959.
(18P)
Pack, G. T., and Ariel, I. M. (Editors)
Treatment of cancer and allied diseases, ed. 2, vol. 5.
New York, Paul B. Hoeber, Inc., 1962.
(13V)
Pecsok, R. L. (Editor)
Principles and practice of gas chromatography.
New York, John Wiley & Sons, Inc., 1959.
(5A)
Potter, E. L.
Pathology of the fetus and the infant, ed. 2.
Chicago, The Year Book Publishers, Inc., 1961.
(26A)
Rice, S. A., and Nagasawa, M.
Polyelectrolyte solutions. (Molecular biology, vol. 2)
New York, Academic Press, Inc., 1961.
(36 Hp)
Smillie, I. S.
Osteochondritis dissecans.
Edinburgh, E. & S. Livingstone Ltd., 1960.
(18E)
Smith, F. M.
Surgery of the elbow.
Springfield, Ill., Charles C. Thomas, 1954.
(18E)
Sobotka, H., and Stewart, C. P. (Editors)
Advances in clinical chemistry, vol. 4.
New York, Academic Press, Inc., 1961.
(7D)
Stern, C.
Principles of human genetics, ed. 2.
San Francisco, W. H. Freeman and Company, 1960.
(2Am)
Umbreit, W. W. (Editor)
Advances in applied microbiology, vol. 3.
New York, Academic Press, Inc., 1961.
(9A)
West, E. S., and Todd, W. R.
Textbook of biochemistry, ed. 3.
New York, The Macmillan Co., 1961.
(5A)

* * *

Dr. Richard P. Stetson, President of the Medical Foundation, has announced a three-year fellowship for basic research to Dr. Robert G. Ojemann. Dr. Ojemann is an Assistant in Neurosurgery at the Massachusetts General Hospital and an Assistant in Surgery at the Harvard Medical School. The Medical Foundation, a United Fund Agency, supports young investigators in basic research through fellowships.

Dr. Ojemann is particularly concerned with two areas of investigation. The first is the study of some aspects of cerebral vascular disease—a disease of the blood vessels of the brain. His investigation of this problem will include the measurement of blood flow in the arteries of the neck which supply the brain. A new electromagnetic instrument will be used for this purpose. This should help to improve the treatment of certain diseases where hardening of the arteries causes obstruction of these vessels, and in other instances where the arteries in the neck are deliberately closed off to reduce the pressure after bleeding from a weak artery in the brain.

His second area of investigation is in exploring the possible use of special forms of radiation treatment for brain tumors. By using the giant nuclear reactor at Massachusetts Institute of Technology, radioactive isotopes with a very short half life (less than three hours) can be produced. The possibility of injecting the isotope into a separate circulation involving the vessels of the neck and head with a pump oxygenator may allow a high concentration of the isotope to be maintained in the area of a brain tumor. Because of the short half life, most of the radiation effect will take place during the circulation and the isotope which does escape into the general body will rapidly decay. Dr. Ojemann is also assisting Dr. William H. Sweet, Chief of the Neurosurgery Service at Massachusetts General Hospital and Associate Professor of Surgery at the Harvard Medical School, in developing other applications for the M.I.T. reactor in its use of the neutron beam for destroying tumor cells in the brain.

Dr. Ojemann graduated from the State University of Iowa in 1951, and from the College of Medicine, State University of Iowa in 1955, where he ranked first in his class.

* * *

VOLUNTEER GROUPS

MGH Service League

On February 7, the Massachusetts General Hospital Service League (formerly the MGH Staff Wives) gave a luncheon at the Harvard Club. Guest speaker at the luncheon was Mrs. Isabella Halsted, Executive Director of the Boston Council for International Visitors. Her subject was "Boston's international opportunities".

The Boston Council for International Visitors was incorporated last spring as a result of the experience of a number of educational, industrial, and civic organizations in this area which were concerned with the large numbers of our international visitors. Finding that the interests of these visitors frequently extended beyond the facilities of any one member organization, they established an office at 55 Mount Vernon Street, Boston, to serve as a clearing house for visitors' affairs. The Massachusetts General Hospital is one of 23 sponsoring organizations of the Boston Council for International Visitors.

Chairman for the luncheon was Mrs. Farahe Maloof of Milton. Serving on her committee were Mrs. Stephen M. Krane, Mrs. Lewis W. Kane, and Mrs. Walter S. Kerr, Jr. of Milton, Mrs. Alfred L. Weber of Quincy, Mrs. Francis G. Barnum, Jr. of Brookline, Mrs. George L. Nardi and Mrs. Richard H. Wohl of Belmont, Mrs. Stuart Fell of Boston, and Mrs. Alexander Leaf of Winchester.

Distaff Club

On Valentine's Day the Club gave a party for the children in Burnham, which included refreshments, motion pictures, and other entertainment.

Husbands, as well as Club members, were invited recently to a lecture on "The fakes in art", given at the Boston Museum of Fine Arts.

We look forward to a joint meeting with other Boston hospital Wives Associations some time in March.

Fabian Bachrach

NO. 101 IN A SERIES OF STAFF PHOTOGRAPHS
DR. KURT J. ISSELBACHER, ASSISTANT PHYSICIAN—CHIEF OF THE GASTROINTESTINAL UNIT

BIOGLETS

Dr. Hugh P. Chandler, Assistant Resident in Orthopedic Surgery — born in Boston, Massachusetts, June 15, 1931; A.B., Harvard College, 1954; M.D., Harvard Medical School, 1958; Intern in Surgery, University of California at Los Angeles Medical Center, Los Angeles, California, 1958-59; Assistant Resident in General Surgery, U.C.L.A., 1959-60; Assistant Resident in Orthopedic Surgery, Children's Medical Center, Boston, Massachusetts, 1960-61.

Dr. Thomas R. Hakala, Intern in Surgery — born in Sault Sainte Marie, Michigan, June 15, 1936; A.B., Stanford University, 1958; M.D., Harvard Medical School, 1961; home address: 1003 North I Street, Aberdeen, Wash.

Dr. Newton E. Hyslop, Jr., Intern in Medicine — born in Newton, Massachusetts, October 14, 1935; Dummer Academy, 1953; A.B., Harvard College, 1957; M.D., Harvard Medical School, 1961; married; one child.

Dr. John N. Loeb, Intern in Medicine — born in New York City, December 17, 1935; Phillips Exeter Academy, 1953; A.B., Harvard College, 1957; M.D., Harvard Medical School, 1961.

Dr. S. Michael Marcy, Intern on the Children's Service — born in Berlin, Germany, October 25, 1936; B.A., Pomona College, Claremont, California, 1957; M.D., University of Pennsylvania Medical School, 1961; single.

Dr. Roger H. Morris, Assistant Resident in Anesthesia — born in Albuquerque, New Mexico, August 9, 1931; A.B., Harvard College, 1953; M.D., Harvard Medical School, 1957; Intern in Medicine, Stanford University Hospitals, San Francisco, California, 1957-58; military service: Lieutenant, Medical Corps, U.S. Navy, 1 year in Japan, 2 years at the Philadelphia Naval Shipyard, 1958-61; married; two daughters.

* * *

Brief bits:

In late November 1961, Dr. and Mrs. William V. McDermott, Jr. traveled to Buenos Aires, where Dr. McDermott was an invited guest speaker at the Sixth Argentine Congress of Gastroenterology, together with Professor Marion, from France, and Dr. Lester Dragstedt. Following the conclusion of the Congress at Mar del Plata, Dr. McDermott spent a week at the University and various hospitals in Buenos Aires, where the activities consisted of the usual succession of lectures, rounds, conferences, etc.

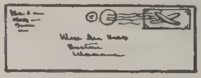
Dr. Peter Schuntermann has informed us that his promotion to the position of Assistant Resident on the Children's Service was rescinded because of his decision to accept an appointment as Assistant Resident in Child Psychiatry at Duke University.

Dr. Byron H. Waksman was invited to give an address on "Experimental aspects of the autoimmune mechanism" before the 20th Annual Meeting of the American Academy of Dermatology and Syphilology. He was also invited to participate in a discussion of "Mechanisms of hypersensitivity in CNS" at the Conference on "Underlying mechanisms of demyelination", held at the UCLA Medical Center, January 30 through February 1.

Dr. Edward W. Webster of our Department of Radiology has been appointed a special consultant to the Division of Radiological Health of the U.S. Public Health Service.

New addresses:

Dr. M. Henry Clifford (a.r.p. 1935), Veterans Administration Hospital, Rutland Heights, Mass.
Dr. John L. Fromer (clin. assoc. *D.*), 66 Arnold Rd., Wellesley, Mass.
Dr. John W. Josse (*M.* 1957), Johns Hopkins University School of Medicine, Baltimore 9, Md.
Dr. David M. Klein (r.s. *N.S.* 1961), Edward J. Meyer Memorial Hospital, Buffalo, N. Y.
Dr. Alfred E. Miller (*S.* 1957), University Health Service, Harvard College, Cambridge, Mass.
Dr. William A. Perkins (*E.S.* 1917), 3001 Benvenue Ave., Berkeley 5, Calif.
Dr. Harold N. Segall (a. *M.* 1924), 5845 Cote des Neiges Rd., Montreal, Canada
Dr. William E. Wilson (sr. r.s. *Or.* 1961), 4460 Sherbrooke St., West, Montreal, Canada



This letter has come from Mr. John B. Rideout, R.N., who resigned his position as Administrative Assistant to Mr. Joseph W. Degen on July 31 to become Director of Nurses at Danvers State Hospital:

The latest issue of THE NEWS arrived today and I am pleased that you thought to send it.

I never fully realized the amount of work that goes into the publication of this periodical, nor the amount of material that is in it. . . .

I have had one visitor from Massachusetts General already. Mr. Gladwin stopped in a few weeks ago and brought me up to date on some of the happenings there since I left.

I thoroughly enjoy my work and have a good staff of supervisory personnel to help me. In all, there are approximately 500 nursing personnel and 40 ward areas. We have a modern operating suite of 2 rooms and central supply unit, in a new Medical Building.

Recently, Dr. Peter Sifneos and Dr. John Lamont, from your Psychiatry Department, gave the first lectures of a series to our nursing and medical staffs. We are looking forward to a continuing relationship with the Massachusetts General Hospital in this regard.

We provide a 12-week affiliation in Psychiatric Nursing for 6 hospitals and we average from 30 to 40 students in each group. Our nursing education staff is very active in conducting the various programs necessary to keep our personnel up to date.

Please extend my best regards to all at M.G.H., and tell them to stop in when they are in this area. Danvers State Hospital is located at the junction of Routes 1 and 62.

The News

No. 212 Boston, Mass. April 1962

To all members
of the M.G.H. family:

It is easy to greet one's friends and acquaintances, and certainly we are no strangers. As I sat and pondered the form of my greeting, I thought to myself, how can I best convey what I feel and what I know the Staff and employees of the M.G.H. feel as they come to work each day. Is it pride in the age of the Hospital and its now almost traditional pre-eminence? Is it the spirit and environment of *caring* that makes us feel that we perhaps are *giving* something to humanity and to each other as well as receiving something? Is it that we are all united in a common goal, the best possible care of and care for the sick, that makes us feel the strength and support we derive from each other? Is it that each one of us as individuals feels he is directly contributing to the care of the patient and the excellence of the Hospital, be he housekeeper, messenger, photographer, administrator, accountant, practicing physician, research worker, nurse, pharmacist, dietician, or librarian? It is all these things and more. The strength of any institution is determined by the character of the people within its walls. The M.G.H. is 151 years old and has a vigorous look about it — because all its employees and Staff feel that they individually play a crucial role and do a crucial job which only they can do — and what they do contributes directly to the most humane of all human pursuits, the care of the sick. I salute you all for the part you play — you are the institution.

All of us value our roles in the Hospital and the part we may play in maintaining its excellence and pre-eminence as one of the oldest institutions in the country devoted to the preservation and restoration of human life and the relief of suffering. Is there a better way to spend one's life or a better place to spend it?

My best wishes to you all.

John H. Knowles, M.D.,
General Director
and *Associate Physician*

* * *

THE CARDIAC CLINICS AND LABORATORY ✓

In an earlier report to The News (1950), the origin and evolution of cardiology and of the Cardiac Unit at the Massachusetts General Hospital were reviewed in some detail. This is one of the oldest of the special groups at the Hospital, dating back to the establishment of the Cardiac Laboratory by Dr. Paul D. White more than forty years ago. In the ensuing decades this laboratory has served as a focal point, not only for electrocardiography but also for clinical research and for the training of physicians from this country and abroad. The chief function of the unit and its strongest forte remain in the field of clinical cardiology, with emphasis on the long-term study of patients, on the application of new methods and techniques, and on the development with our surgical colleagues of a conservative program for the relief of cardiovascular deformities.

The special clinics (Adult, Children's, and Rheumatic Fever), as well as private patients, have served through the years as a reservoir of material of great value in teaching and research. From studies conducted therein there has accrued a wealth of information now available to present-day investigators as a legacy from their medical predecessors. Of special note are the long-term series of Robert S. Palmer (hypertension), of Paul D. White (coronary disease), and of Edward F. Bland and the late T. Duckett Jones (rheumatic fever) conducted both at the House of the Good Samaritan and at the M.G.H. This last study now encompasses a thirty-year follow-up of 1,000 children and is approaching its conclusion and final report.

During the decade since our previous report on this unit the number of new units which have been established at the Hospital for the study of special aspects of cardiovascular disease attests to the mounting complexity of cardiac research and the need for special disciplines to acquire more precise information concerning the basic factors which contribute to the Number 1 health hazard of our age — cardiovascular disease.

In contemplating the future and the formidable challenge of the present-day problems of atherosclerosis and of hypertension, one may take heart from the truly remarkable progress of the past two decades, both in the prevention and in the control of other types of heart disease. For example, as recently as 1941 rheumatic fever was still a very prevalent and an often-fatal illness in children and adolescents by injury to the heart. Bacterial endocarditis was a frequent and a uniformly fatal complication of scarred valves and congenital defects. Furthermore, at that time only a few operations were available for the simpler congenital defects, and no surgical relief could be offered those with acquired valvular disease. Electrocardiography and X-ray were the only special methods of study commonly employed.

In 1942 the introduction of penicillin (and subsequently of other antibiotics) changed dramatically the rheumatic fever picture from a violent and frequently fatal disease to one of a milder nature, shorter duration, and with consequently much less risk of serious injury to the heart. A recent report from this Hospital and the House of the Good Samaritan (1959) pointed out that an eight-fold reduction in mortality has occurred. Likewise, bacterial endocarditis can now be cured in 75 to 80 percent of instances.

In the single decade since 1950 operations on the heart have become commonplace procedures and new techniques are being developed each year. The extraordinary advances in blood replacement, in electrolyte control, in anesthesia techniques, in monitoring and maintaining by electrical stimulation faltering hearts, and, in particular, in the development of pump oxygenators now permit open-heart operations of one or more hours' duration. Thus, the majority of congenital defects are now amenable to surgery, and even the badly scarred and often calcified valves of adults, a heritage of childhood rheumatism, are being successfully repaired and in some instances actually replaced. Our oldest patient to date who has undergone an open-heart procedure is a lady of seventy-five with a severely calcified aortic valve, who, six months ago, was successfully relieved of her near-fatal symptoms of pain (angina pectoris), fainting, and heart failure.

This brief reference to recent progress in clinical cardiology leads to a consideration of the current activities of the Cardiac Unit and future plans.

The Cardiac Laboratory

The chief function of the laboratory, from the point of view of the Hospital, is its responsibility for the taking and the interpretation of electrocardiograms for all divisions of the institution and for members of the staff who request this service. Actually, however, the laboratory has played a far more significant role in the life of the Hospital than its day-to-day responsibility implies. It has served as the spiritual and functional headquarters for a nucleus of staff physicians, beginning with Dr. Paul D. White and followed by a host of his associates and disciples, who, in this country and abroad, have achieved for cardiology a top priority as one of the chief specialties of our time.

Along with its broader role in research and teaching, the laboratory continues to operate for the Hospital as a service unit, to an extent clearly indicated by the phenomenal increase in the number of electrocardiograms in recent years, as shown by the following tabulation:

Number of electrocardiograms

1921 — 1,406
1931 — 2,220
1941 — 6,120
1951 — 7,041
1961 — 18,257

This increase in the past ten years has been at a steady rate of about 1,000 tracings per year, of which 60 percent are from the general services and 40 percent from the private floors. Eight technicians perform the taking and processing of these records, and five members of the professional staff and the clinical trainees are responsible for the interpretations. Thus, the daily load ranges from 70 to 100 tracings, all of which are processed, photostated, interpreted, and made available for the staff by 7 P.M. or earlier on the day they are taken. Our top record to date is 122 tracings on February 12, 1962.

Since 1955 vectorcardiography has been employed at the Hospital as a research tool and teaching aid. Dr. Conger Williams has been our specialist in this field and, with the help of graduate students and trainees, he has studied certain atypical patterns of myocardial infarction which he and Dr. Donald McCaughan reported at the meeting of the American Heart Association last fall. Under the special circumstances of "atypical" infarction, and also in the determination of ventricular hypertrophy, vectors, in addition to the usual electrocardiogram, are of considerable value. Hence, they are made available in limited numbers to the staff as an aid in difficult cases.

Cardiac catheterization

In 1928, Forssmann in Germany first catheterized the human heart (his own) and for this feat he shared, somewhat belatedly, the Nobel prize with Richards and Cournand in 1956. His description of the event follows:

> Following the successful investigations in the cadaver I undertook the first study in living man in the form of a *research on myself.* Next I arranged in a preliminary test to have my right elbow punctured with a thick needle by a colleague who kindly placed himself at my disposition for this purpose. I introduced then, as in the case of the researches on the cadaver, a well-oiled ureteral catheter of 4 Charrières thickness through a cannula into the vein. The catheter allowed itself to be introduced very easily to a length of 35 cm. Since going further seemed too dangerous to the colleague we stopped the investigation at that point even though I myself felt quite well. After a week I undertook a further investigation alone. Since a puncture of the vein with a thick needle on my own body was technically too difficult, I made under local anesthesia a venesection in my left elbow and introduced the catheter without any resistance in its whole extent of 65 cm. This length appeared to me, after measuring the surface of the body, to agree with the distance from the left elbow to the heart. On introduction of the catheter I had, during the procedure, merely a feeling of slight warmth in the wall of the vein similar to the sensation after intravenous injection of calcium chloride. On backward movement the catheter touched the upper and lower wall of the subclavian vein. I then felt an especially intensive warmth behind the collarbone under the insertion of the sternocleidomastoid. Simultaneously, doubtless through the stimulation of the vagus branches, I felt a slight tendency to cough.
>
> *The position of the catheter* I confirmed *in a Röntgen photograph* and observed the shadow of the catheter itself by means of a mirror held by a sister before the fluoroscopic screen.

(Translation by P. D. White in *Heart disease,* 4th edition, page 227, New York, The Macmillan Company, 1951.)

For a number of years this was considered too bold and dangerous a procedure for clinical use and actually it was not employed at the M.G.H. until 1945. Certain circumstances of World War II were significant in its introduction here and, lest the details be forgotten, I have asked Dr. William C. Bridges (now of Seattle, Washington) to relate for the record his remembrance of this event. Dr. Bridges writes as follows:

> I shall do my best to recall my early experiences with cardiac catheterization at the M.G.H.
>
> In 1945, I was privileged to work with Drs. White and Mandel Cohen on the O.S.R.D. project studying neurocirculatory asthenia. Dr. White had a few soldiers suffering from "combat fatigue" flown back from the Battle of the Bulge for us to investigate. In carrying out this study, the question arose as to the best method of computing their cardiac output. Dr. Cohen felt the best way to clarify this would be to combine the Fick principle with right heart catheterization. In the previous year, I had been a guinea pig in New York, before my sympathectomy, when I had my own cardiac output estimated. Perhaps on this account I was elected to help on the project. I made a trip down to Bellevue where Drs. Richards and Cournand most graciously permitted me to observe a catheterization. Dr. Cournand was good enough to give me a large cannula through which the catheter was threaded in those days, and a Lindamen needle for the arterial sample. The room next to Ed Wheeler's office downstairs was outfitted for the procedure. Dr. Robbins supplied the necessary x-ray equipment which consisted of a portable machine with which we could watch the course of the catheter and take pictures to verify its location. Although there were many problems, Dr. White was always anxious to help and without his wonderfully kind, enthusiastic way, I am sure it would not have succeeded.
>
> In those days, pressures were measured by a Hamilton manometer, such a temperamental instrument that we confined our observations to the cardiac output alone. I believe Dr. Cohen and I catheterized about three soldiers with this equipment. The catheter was threaded only to the right atrium and that is probably why we did not encounter any worrisome arrhythmias.
>
> After the project was finished, we lacked a technician to perform the gas analyses. Dr. Carl Josephson from Denver worked hard trying to master the Van Slyke technique for doing this and was very helpful in keeping the team together. Dr. Lewis Dexter also frequently lent his valuable ear to our problems. Altogether we catheterized about six patients and without any complications, I am happy to report. At about this time, 1947, Dr. Gordon Myers was back from the war and was chosen to continue the catheterization work. I need not mention the many improvements he achieved but it was very satisfying to me to see the work continued by one as competent as he.

Thus was instituted at the M.G.H. a technique which has now become an essential tool to cardiologists and their surgical colleagues. It has been responsible for a better understanding of the mechanics of the circulation, especially through the lungs, and is a necessary adjunct in the selection of the majority of patients for cardiac surgery.

Dr. Myers was soon joined by Dr. Allan L. Friedlich, and, in collaboration with Dr. J. Gordon Scannell (Surgery) and Dr. Stanley M. Wyman (Radiology), they have constituted the catheterization team. A special laboratory was constructed in 1949 through the efforts of Dr. White and the generosity of the late Mrs. Theodore E. Brown for this and related research. However, during the past few years the laboratory facilities have become outmoded and the program has been increasingly hampered by lack of space and of personnel to keep abreast of the mounting demands for this special service. Currently there is often a backlog of patients of two or more months awaiting study. This has become even more pressing this past year with the return of Dr. W. Hardy Hendren (Pediatric Surgery) and the consequent number of infants and children with congenital defects often requiring early and sometimes emergency study (catheterization) and operation.

Fortunately, relief is in sight as to space and also a respite is in store for Drs. Myers and Friedlich, who have carried the brunt of this load voluntarily and as their contribution to the Hospital and its cardiac-surgical program. In July 1962, Dr. Charles A. Sanders, who shared in this work in 1958-1960, will return from his service with the Air Force to become the full-time director of this activity and head a new, to-be-constructed catheter laboratory.

The training program

The activity of the unit continues to place special emphasis on the research and clinical fellows who function as cardiac "residents". In this role currently are Dr. Andrew Huvos, Dr. Daniel Allensworth, and Dr. William Bush. Dr. Roman DeSanctis continues as our senior (second-year) fellow, and Dr. Donald McCaughan for a second year is assisting with the vector program.

During the sixteen years of its existence, 231 physicians from the following countries have trained here in the eight months' graduate course, in recent years under the supervision of Dr. Edwin O. Wheeler:

UNITED STATES (113)
CANADA (21)
CENTRAL AMERICA and WEST INDIES (17)
    Costa Rica
    Cuba
    El Salvador
    Guatemala
    Haiti
    Jamaica
    Mexico
    Panama
    Puerto Rico
SOUTH AMERICA (10)
    Argentina
    Bolivia
    Brazil
    Chile
    Colombia
    Venezuela
EUROPE (25)
    Austria
    Belgium
    England
    France
    Germany
    Greece
    Iceland
    Ireland
    Italy
    Poland
    Turkey
MIDDLE EAST (5)
    Iraq
    Jordan
    Lebanon
    Syria
    (Turkey)
AFRICA (5)
    Egypt
    South Africa
FAR EAST (35)
    China
    India
    Indonesia
    Japan
    Korea
    Malaya
    New Zealand
    Pakistan
    Philippines
    Taiwan
    Thailand

In many respects this program has been a unique and a notable contribution to cardiology and, perhaps even more important, to the furtherance of international good will.

Related activities

The creation by an act of Congress in 1948 of the National Heart Institute has led to a succession of significant consequences to the M.G.H. Unhappily, however, it deprived the Cardiac Unit of the services, although not the inspiration, of Dr. Paul D. White, who felt obliged to relinquish his duties here in order to accept the responsibilities of Executive Director of the National Advisory Heart Council and Chief Consultant of the National Heart Institute through its formative years. The wisdom of his decision has been borne out by the impetus and the support which this program has provided cardiovascular research at national and international levels.

As a direct result of this new interest of the Federal Government in heart disease the Hospital received in 1949 a construction grant of nearly a half million dollars to assist with the new Research Building, and also with it acquired an obligation to promote and extend basic research in cardiovascular diseases. This led to the establishment of the Atherosclerosis Unit, under Dr. Ivan D. Frantz, Jr. until his acceptance of a full-time post at the University of Minnesota. This unit is now under the direction of Dr. Frederick T. Hatch, where he and his collaborators are studying the formation and breakdown of lipoproteins — substances suspected of playing a role in atherosclerosis.

Likewise, another special unit directly related to circulatory disorders was established as the Cardiorenal Unit under Dr. Alexander Leaf, where he and Dr. Howard S. Frazier are studying the mechanisms involved in the transport of fluids and electrolytes across cell membranes.

Finally, a third special unit under Dr. Lot B. Page in hypertension is carrying on the clinical studies initiated by Dr. Palmer in 1928, as well as an investigative program of unilateral renal disease in the causation of high blood pressure and of the role of the catechol amines in hypertension.

Thus, the stake of the M.G.H. in the total field of cardiovascular disease has mounted sharply during the past ten years. It is of impressive proportions and its importance is further emphasized by the creation at the Hospital last year of a Cardiovascular Research Center through a grant from the U.S.P.H.S. for the furtherance of research, for the training of investigators, and for the welfare of patients.

These exciting events augur well for the future, but new techniques and multiple disciplines will be required if the enigmas of atherosclerosis and hypertension are to be solved and if the nation's Number 1 health hazard is to be curbed for the next generation.

Edward F. Bland, M.D.,
Consulting Visiting Physician

The Board of Trustees, at their meetings on February 2 and 16, voted:

To change the title of Dr. Bruce W. Fischberg from Resident in Psychiatry to Clinical Fellow in Psychiatry at McLean Hospital, effective January 1;

To grant leave of absence to Dr. Leo T. Kelly, Assistant in Anesthesia, because of service in the Armed Forces.

To promote:

Dr. Paul R. Dinsmore from Clinical Fellow in Psychiatry to Assistant Psychiatrist at McLean Hospital, effective July 1;
Dr. Suzanne R. van Amerongen from Assistant Attending Psychiatrist to Associate Attending Psychiatrist at McLean Hospital, effective February 16.

To appoint:

Dr. George E. Battit as Assistant in Anesthesia, beginning February 16;
Dr. Jack Braunwald as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Edward D. Churchill to the Board of Consultation, effective July 1;
Dr. Roman W. DeSanctis as Clinical Assistant in Medicine at McLean Hospital, effective January 1;
Dr. Larry J. Embree as Assistant Resident in Neurology, for the period February 1 through June 30;
Dr. David S. Feingold as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Sumner Frank as Clinical Fellow in Medicine, beginning January 1;
Dr. Andrew G. Frantz as Assistant in Medicine, beginning February 1;
Dr. John W. Harthorne as Clinical and Research Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1:
Dr. Peter B. Jenney as Assistant Psychiatrist at McLean Hospital, effective August 15;
Dr. Mark M. Kartchner as Second Assistant Resident in Surgery, beginning February 1;
Dr. Gabriel T. Koroxenidis as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. Arthur S. Kunin as Clinical and Research Fellow in Medicine, beginning March 1;
Dr. Ruth M. Landolt as Research Fellow in Neuropathology at McLean Hospital, effective January 1;
Dr. Norman D. Levine as Clinical and Research Fellow in Radiology, beginning September 1;
Dr. John G. Morgan as Clinical Fellow in Anesthesia, beginning May 1;
Dr. Paul A. Rudnick as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Theodore Sack as Assistant Attending Psychiatrist at McLean Hospital, effective February 1;
Dr. Roberto F. Santos as Visiting Fellow in Medicine for one year, beginning November 1, 1961;
Dr. Eugen Schmid as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. William E. Strole, Jr. as Clinical and Research Fellow in Medicine and to grant him a Dalton Scholarship of $1250 for a period of three months, beginning July 1;
Dr. Louis Weinstein as Associate Physician for one year, beginning January 1.

At their meetings on January 31 and February 14, the General Executive Committee voted:

To extend the appointment of:

Dr. Yuji Miyazaki as Clinical and Research Fellow in Neurosurgery from September 1, 1961 through November 30, 1962.

To reappoint:

Arthur B. Callahan, Ph.D. as Research Fellow in Physics (Medicine) for one year, beginning March 1;
Dr. Anne Wight Phillips as Clinical and Research Fellow in Surgery for one year, beginning January 1.

To appoint:

Mr. Stephen Lorch as Assistant in Mathematic (Psychiatry), effective December 1, 1961;
Dr. Michio Sakanoue as Research Fellow in Neurosurgery for one year, beginning February 1;
Olga Sears, M.A. as Research Fellow in Psychology, beginning February 1.

* * *

THE NEUROLOGY RESEARCH LABORATORY

The Neurology Research Laboratory, now located on the third floor of the Warren Building, has grown up about the study of a single disease, experimental auto-allergic encephalomyelitis — a demyelinative process produced by sensitizing experimental animals against their own nervous tissue and apparently comparable to post-rabies vaccination encephalomyelitis in man. Because this laboratory disease shows certain resemblances to multiple sclerosis and to post-infectious encephalomyelitis, it is of great interest to neuropathologists. It is of equal interest to immunologists because it was the first of the experimental "auto-allergies" to be carefully studied.

The late Dr. L. Raymond Morrison, working in the department of Dr. Stanley Cobb, in 1947 described the production of allergic encephalomyelitis in rabbits. In 1949 he asked Dr. Byron H. Waksman, who had been trained as an immunologist under Heidelberger at Columbia, to join him in the study of this disease. After Dr. Morrison's untimely death in 1950, the study was continued by Waksman under the aegis of Dr. Cobb. When Dr. Raymond D. Adams became the head of the Neuropathology group, he gave this work strong support and has been a major participant in many of the studies carried on over the past twelve years.

From our early investigation of allergic encephalomyelitis, several major lines of research developed. First is the deeper study of the disease itself as an immunologic process. Evidence has been gathered to show that it is a "delayed" hypersensitive reaction comparable to a tuberculin reaction occurring in the nervous system. Investigation of its pathogenetic mechanism (by techniques discussed below) has shown that the lesion is produced by "sensitized" lymphoid cells coming from the circulation and begins with accumulation and proliferation of these cells around veins. Myelin destruction appears to be produced by direct action of the invading cells and not to involve humoral antibody. A collaborative study with Dr. Jordi Folch-Pi and his co-workers at the McLean Hospital, directed at isolating and characterizing the antigenic substance of nervous tissue responsible for the production of allergic encephalomyelitis, has shown that the antigen is probably proteolipid — a lipid-protein complex of the type first described by Folch-Pi and his collaborators. It is only recently, within the last two or three years, that medical scientists have begun to accept the possibility that inflammatory lesions of the auto-immune type may be produced by a cellular mechanism. It was our study of allergic encephalomyelitis, more than ten years ago, which gave the first impetus to this line of investigation in relation to the experimental auto-allergies and to the human diseases which they appear to resemble.

Secondly, the laboratory has concerned

itself with the investigation of related neuropathological problems, especially those concerned with myelin and processes in which myelin is destroyed. One of these is diphtheritic polyneuritis. Our first study showed that this disease is not an allergic process, as many people believed, but a primary toxic effect of diphtheria toxin on myelin-forming cells. In later investigations, the effect of toxin on Schwann cell metabolism (a joint study with Guido Majno and Manfred Karnovsky of the Departments of Pathology and Biochemistry at Harvard Medical School) and the ultrastructural changes in involved nerve (with Dr. Henry deF. Webster of our own department) were examined in detail. Another study was concerned with the blood-nerve barrier, which we described for the first time and were able to relate to the distribution of veins in the peripheral nervous system. A careful histologic investigation of primary white matter lesions produced by viruses showed these to be quite distinct from the allergic encephalomyelitis lesion and from the lesions of human demyelinative disease, but rather to be comparable to subacute sclerosing leukoencephalitis and progressive multifocal leukoencephalopathy in man. Similarly, neurotropic measles virus was shown to produce primary disease of grey matter and ependyma, quite unlike allergic encephalomyelitis on the one hand and post-measles encephalitis in man on the other. This group of studies has been of particular value in correcting the widely-held view that demyelinative lesions in multiple sclerosis, post-infectious and post-vaccinal encephalomyelitis and neuritis, and acute hemorrhagic necrotizing encephalitis must be the result of a direct attack of some agent on myelin. We have shown that viral or toxic processes in which there is such a direct attack are non-inflammatory and that conversely, in experimental inflammatory disease resembling these human processes, demyelination occurs as a secondary effect following the invasion of nervous tissue by sensitized mononuclear cells.

A third major line of investigation involved the study of other auto-allergies comparable to allergic encephalomyelitis. Needless to say, this has become a very popular field in the last few years. By now, experimental auto-allergic processes have been described which affect the CNS, PNS, lens, uvea, thyroid, testis, adrenal, kidney, skin, and gastric mucosa. In 1955 Waksman and Adams described the disease now known as experimental allergic neuritis, which provides the only available animal model for the Guillain-Barré type of polyneuritis in man. These authors also carried out a detailed histologic study of experimental allergic orchitis. At present several members of our group, in collaboration with Dr. Martin H. Flax of the Pathology Service, are engaged in active study of experimental allergic thyroiditis. One of our principal concerns has been to show that the various experimental auto-allergies described hitherto, when examined from the histologic and immunologic standpoint, represent the same basic lesion occurring in different tissues. We have reported successful passive transfer experiments of allergic encephalomyelitis and neuritis, and more recently, with the collaboration of Dr. Derrick Felix-Davies, from the Department of Medicine, of allergic thyroiditis. We have demonstrated that the vascular bed and blood-tissue barriers play a role in other auto-allergies comparable to that described in the central and peripheral nervous systems, and have shown that both allergic encephalomyelitis and thyroiditis can be prevented by appropriate pretreatment with the tissue antigen, perhaps on the basis of some type of "immunologic tolerance". While our major purpose has been to seek underlying principles of lesion formation in different disease states, a major effect of our studies has been to counteract the fragmentation of knowledge resulting from study of one experimental disease entity by neuropathologists, a second by thyroid specialists, and a third by ophthalmologists. We have, with the use of histologic, immunologic, and radioautographic methods, succeeded in establishing not only the probable unity of mechanism in different experimental auto-allergies, but also their essential identity with other delayed hypersensitive reactions.

A fourth line of investigation has been concerned with the arthritis produced in rats following a single injection of mycobacterial adjuvant. This disease is one of the best models described hitherto for rheumatoid arthritis and its congeners, and it seemed possible at first that it might be auto-allergic in character. The evidence obtained suggests that it is, in fact, an immunologic process, probably of the "delayed" type, but that the antigen is derived from the injected mycobacteria rather than from a tissue constituent. In addition to the arthritis, diseased animals were found to have nodular lesions on bare skin surfaces (i.e., ears and tail), exanthematous rashes, dermatitis comparable to keratodermia blennorrhagica, iridocyclitis, balanitis and urethritis, and diarrhea. The process was felt to resemble Reiter's syndrome more than rheumatoid arthritis. Much of the work with this disease was carried on in collaboration with Dr. Carl M. Pearson (a.r.p. *Path.* 1948) of U.C.L.A., who first described it, later with Dr. S. J. Bullington of the Retina Foundation, and still more recently with Dr. Flax.

A final major line of investigation has been a more profound study of "delayed" allergies in general. The basic histologic lesion of various delayed reactions (among them the tuberculin reaction, the delayed reaction to purified protein, the reaction of contact allergy, the rejection of solid vascularized skin homografts, and the various auto-allergies) was shown to be essentially constant: the perivenous accumulation of mononuclear cells. Suppression of the level of circulating lymphocytes by injection of an anti-lymphocyte antiserum was found to abolish various types of delayed response. More recently, with the use of tritiated thymidine and radioautography, it has been possible to show, in both allergic encephalomyelitis and thyroiditis, as well as in simpler delayed reactions such as tuberculin reaction, that the infiltrating cells are largely or entirely hematogenous and that they proliferate actively at the site of the lesions. The work with thymidine has been carried on largely by Dr. Timo U. Kosunen (our Finnish collaborator), together with various members of our research group. It was shown in an earlier study with Mrs. Matoltsy that mononuclear cells from tuberculin-sensitized animals, when exposed under suitable test conditions to tuberculin in a tissue culture system, show signs of stimulation and proliferation which correspond to the cell proliferation found by application of the thymidine method in the developing tuberculin reaction *in vivo.* Most recently, Drs. Barry G. Arnason (a.r.p. *N.* 1959), Branislav D. Jankovic, and Waksman have demonstrated that, in rats thymectomized at birth and allowed to mature, all reactions of the delayed hypersensitive type are abolished or markedly reduced and there is an almost complete absence of small lymphocytes from the major lymphoid tissues.

Throughout the period covered by the present report we have collaborated effectively with other scientists in the Boston area who were interested in subjects which we were investigating. Our work with Dr. Folch-Pi's group has already been mentioned. A metabolic study of diphtheritic polyneuritis was carried out in collaboration with Drs. Majno and Karnovsky, and a subsequent electron microscopic examination of this disease process with Dr. Webster of the Neurology Service. We have collaborated with Dr. Sidney Leskowitz of the Allergy Service in a comparative investigation of antibody formation and delayed sensitization in rabbits immunized by different techniques, and with Dr. Bullington of the Retina Foundation on a series of immunologic problems involving the eye. More recently we have collaborated with Dr. John T. Sharp of the Medical Service and with Dr. J. Peter Kulka (a.r.p. *Path.* 1947) of the Robert Breck Brigham Hospital in our investigations of the arthritis lesions. Dr. Flax of the Pathology Service has been an active co-worker in several of the more recent projects. The subject of Immunopathology has attracted a number of young medical men to our laboratory, where they worked for periods of one or more years as fellows on the problems described above. The first of these was Dr. N. Joel Ehrenkranz (*M.* 1950), who, as a National Polio Foundation Fellow, spent the year of 1955 in the study of the tissue culture phenomenon in tuberculin sensitivity. The second was Dr. Arnason, a Fellow of the Multiple Sclerosis Society from 1959 to 1961. Fellows at present in the laboratory include Drs. Kosunen, a Fulbright scholar and Foreign Fellow on the NIH, 1960-62, Jankovic of the Faculty of Pharmacy in Belgrade, 1961-62, Joseph N. Blau, a Nuffield Fellow for the current year, and I. Karin Samuelsson, who is spending a few months with us. An early collaborator was Dr. Douglas Bocking, then a Fellow in the Arthritis Service. Dr. Herbert Mansmann of the Allergy

Service participated in our first study of diphtheritic polyneuritis. More recently Dr. Felix-Davies, also of the Arthritis Service, worked with us on allergic thyroiditis. At various times fellows in the Neurology Service or in Neuropathology have joined us for brief periods to work on experiments related to experimental allergic encephalomyelitis and neuritis, among them Drs. Ruth E. Stauffer, Karl Åström, and Francoise Robert. Finally, many medical students have been moved to investigate Immunology more deeply with us, either as summer fellows or during their third and fourth years. These have included at various times Don Pearl, Arnold Weinberg, Michael Frank, Karl Wegner, Stuart Danovitch, Jim Stephans, Polly Cogan (a college student at the time), and John Mendelsohn. Hal Dvorak worked during 1960-61 as a post-sophomore fellow on problems related to homograft rejection.

The technical staff of the laboratory has grown to meet the demands of the increasing professional personnel and the increasing diversity of problems being studied. Our first technician was Donald Gaulitz. When the laboratory moved to its present quarters in the Warren Building, Don accepted a position as head of the Warren Animal Farm but continued to work part time with us. Now he has moved to higher things by becoming head of the Research Building Animal Farm and of other animal farms within the Hospital. Mrs. Matoltsy was our second technician and devoted most of her time with us to study of the tissue culture phenomenon and passive transfer in tuberculin sensitivity. She was followed by Christine Wennersten. For briefer periods, Simone Arbouys and Nicole Briquelet joined us as exchange technicians from France. The present laboratory staff includes Christine, Anne Newton (who carries out many of the functions formerly performed by Don), and Edna Scott. The histology laboratory, on which we depend heavily, is under the direction of Margaret Carroll. The physical plant occupied by all these people has also expanded to meet growing needs. A small laboratory under the Bulfinch roof, in the area now occupied by the Hematology offices, was the scene of Morrison's and Waksman's first immunologic studies of allergic encephalomyelitis. We subsequently took over Dr. Fritz Lipmann's laboratory, immediately next door, when he moved to roomier quarters in the Research Building, and four years ago we moved to the present space on the third floor of the Warren Building.

The last decade has seen the development of Immunopathology into a full-fledged area of investigation concerned with the production of different types of lesions by various immune mechanisms. The best known laboratories in this field have been those of Dixon at the University of Pittsburgh (now at the Scripps Institute in La Jolla), Good at the University of Minnesota, and Stetson, Benacerraf, and others at New York University, as well as a small number of laboratories in England and France. Our own laboratory has been a major participant in this field of activity since its inception, and is recognized as one of the leading experimental groups concerned with auto-immunity and its pathological consequences. The Neurology Service, in the person of Dr. Adams, has adopted the view that any advance in knowledge of pathogenetic mechanism, no matter what disease process is being studied, will be reflected in an increased understanding of mechanisms of lesion formation in the nervous system. We have thus far been slow to apply information gained in the laboratory to patients with diseases of unknown origin, such as multiple sclerosis, first, because there is as yet no satisfactory *in vitro* method for identifying the delayed hypersensitivity mechanism and, second, because skin testing of patients with tissue suspensions is a relatively unsatisfactory procedure, fraught with dangers to the patient. In collaboration with Dr. Stauffer, we carried out a program of skin testing of patients with multiple sclerosis and other demyelinative diseases with white matter suspensions, and more recently Dr. Arnason has extended these studies; but they have not thus far proved fruitful. However, *in vitro* methods for identifying cytopathogenic effects of sensitized lymphoid cells on target cells (e.g., colon epithelium, thyroid epithelium, synovial cells) have been described within the last year or two. These may make possible a new attack on a whole series of human diseases of unknown origin.

Byron H. Waksman, M.D.,
Associate Bacteriologist
and *Chief of the Neurology Research Laboratory*

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Endocrinology

Benedict, P. H.
Endocrine features in Albright's syndrome (fibrous dysplasia of bone).
Metabolism 11:30.

General Surgery

Mixter, C. G., Jr., Keynes, W. M., and Cope, O.
Further experience with pancreatitis as a diagnostic clue to hyperparathyroidism.
New England J. Med. 266:265.

Miscellaneous

Garland, J.
A voice in the wilderness: *The New England Journal of Medicine* since 1812.
Brit. M. J. 1:105.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Adams, R. D., and others.
Diseases of muscle, ed. 2.
New York, Paul B. Hoeber, Inc., 1962.
(18D)
American Association for the Advancement of Science, Publication No. 64.
Calcification in biological systems, edited by R. F. Sognnaes.
Washington, D.C., American Association for the Advancement of Science, 1960.
(8K)
American Medical Association. Council on Drugs.
New and nonofficial drugs, 1962.
Philadelphia, J. B. Lippincott Company, 1962.
(22F)
Biochemical Society Symposia No. 21.
The structure and biosynthesis of macromolecules.
New York, Cambridge University Press, 1962.
(5A)
Ciba Foundation Study Group No. 11.
The mechanism of action of water-soluble vitamins, edited by A. V. S. de Reuck and M. O'Connor.
Boston, Little, Brown and Company, n.d.
(5N)
Colowick, S. P., and Kaplan, N. O. (Editors)
Methods in enzymology, vol. 5.
New York, Academic Press, Inc., 1962.
(22Em)
Farnsworth, P. R. (Editor)
Annual review of psychology, vol. 13.
Palo Alto, Annual Reviews, Inc., 1962.
(19L)
Holt, L. E., Jr., McIntosh, R., and Barnett, H. L.
Pediatrics, ed. 13.
New York, Appleton-Century-Crofts, Inc., 1961.
(26D)
Holub, M., and Haroskvá, L. (Editors)
Mechanisms of antibody formation.
New York, Academic Press, Inc., 1961.
(8G)
International who's who, ed. 25.
London, Europa Publications Ltd., 1961.
(1E)
Khorana, H. G.
Some recent developments of phosphate esters of biological interest.
New York, John Wiley & Sons, Inc., 1961.
(5C)
Montagna, W.
Structure and function of skin, ed. 2.
New York, Academic Press, Inc., 1961.
(27B)
Palay, S. L. (Editor)
Frontiers in cytology.
New Haven, Yale University Press, 1958.
(2Am)
Smith, A. U.
Biological effects of freezing and supercooling.
Baltimore, The Williams and Wilkins Company, 1961.
(23Z)
Webster's Third New International Dictionary, unabridged.
Springfield, Mass., G. & C. Merriam Co., 1961.
(Ref.)
Williams, R. H.
Textbook of endocrinology, ed. 3.

No. 102 in a series of Staff photographs
Dr. Byron H. Waksman, Associate Bacteriologist — Chief of the Neurology Research Laboratory

Philadelphia, W. B. Saunders Company, 1962.
(14L)

Wolfrom, M. L. (Editor)
Advances in carbohydrate chemistry, vol. 16. New York, Academic Press, Inc., 1961.
(5D)

* * *

VOLUNTEER GROUPS

MGH Service League

On March 6, the Massachusetts General Hospital Service League (formerly the Staff Wives Association) gave their spring tea in honor of our professional visitors from many lands who are studying and working at the Hospital. Because of the inclement weather, not as many guests came as had been expected; but the smaller gathering made it possible to carry on more deliberate conversations than would otherwise have been possible, with the result that many of our guests from other countries felt much better acquainted with us by the time the party was over.

Mrs. George L. Nardi, Chairman of the tea, was assisted by many members of the League, who received the guests, acted as hostesses, and poured at the tea and coffee tables.

Distaff Club

On April 24, Mrs. Mary I. Bunting, President of Radcliffe College, will discuss with members of the Club the education of women — particularly the education of those who have both children and jobs.

Brief bits:

Dr. Joseph C. Aub has left for Europe, and he plans to visit Israel, where he will lecture on the research work being done in his laboratory in the Warren Building.

Dr. Clemens E. Benda, who has been elected an Affiliate of the Royal Society of Medicine, London, England, has been invited to act as a Visiting Professor of Psychiatry at the Psychiatric University Clinic in Munich for the summer and possibly for the following winter semester of 1962. In July, the Instituto Experimental del Mongolico in Buenos Aires, Argentina, will hold a meeting on mongolism from July 7 to 15. Dr. Benda, as guest of honor, will preside at the meeting and will attend the dedication of the Institute's new library, which will be named for him. Dr. Benda, who is an honorary member of the Pediatric Society of Uruguay, will then go on a lecture tour through Uruguay, Brazil, and Venezuela, on the invitation of their respective Ministers.

Dr. Arthur B. Callahan of Dr. Gordon L. Brownell's laboratory attended the Fifth International Symposium on Radioactive Isotopes in Clinical Medicine and Research, held in Bad Gastein, Austria, from January 9 to 12.

Dr. Bradford Cannon attended the regional meeting of the American College of Surgeons in San Juan, Puerto Rico, and spoke on "Reconstructive surgery of the extremities and facial injuries".

In addition to his office in Providence, Rhode Island, Dr. Hannibal Hamlin has recently taken office space on the 9th floor of the Warren Building at M.G.H. for the practice of neurosurgery.

Dr. Alexander Leaf served as Consulting Scientist at the meeting of the Medical Research Council of the Tropical Metabolism Research Unit, held at the University College of the West Indies, in Jamaica, W.I., on February 10 through 26.

Dr. J. Roger Newstedt (r.s. 1950) of Cincinnati paid us a nice visit on March 12. We had a most interesting talk about many facets of medical practice and associated subjects.

Dr. Richard L. Rovit (r.s. *N.S.* 1958), informs us that he has been appointed Professor in Neurosurgery at Jefferson Medical College Hospital in Philadelphia.

This letter has come from Dr. Jack J. Greenberg (*S.* 1957), written from the United Leeds Hospitals in England:

> Many thanks for sending along The News to me. It is really my only contact with the General. During the past year it has been very pleasant to read the reports about the doings in the Hospital.
>
> My year in England has been very useful and professionally rewarding. The Leeds General Infirmary has 700 beds, of which 90 are thoracic and I am kept quite busy. I recently presented a paper to the Thoracic Society of Great Britain and Ireland at their Grand Annual Meeting. My subject was "Myocardial metabolism and function".
>
> I shall be returning to the General on July 1 to complete my surgical residency, and shall look forward to thanking you personally for sending me The News.

As a result of our note of thanks to Dr. Elbert L. Persons (*E.M.* 1929) for his usual contribution to The News, over and above the regular subscription fee, a very nice letter has come from him. Among other comments which we appreciate very much, Dr. Persons has this to say which will be of general interest:

> . . . I was a grateful recipient of The News when it was revived at the time of World War II and I decided that my own subscription, because of the excellent . . . treatment of activities at the M.G.H., was worth $5.00 per year.
>
> I should like to congratulate you on the continued high level of interest which has been maintained in every issue of The News, and the fact that it seems to be actually *read* by those who receive it. I have frequently referred issues to individuals on the Duke staff, with the result that I had a special invitation to witness one of the four-way cardiac catheterizations where tubes are pushed in from every direction.
>
> I am writing to congratulate you on . . . the fact that The News is now approaching its twentieth birthday as an interesting publication.

The News

No. 213 Boston, Mass. May 1962

MASSACHUSETTS EYE & EAR INFIRMARY

THE DEPARTMENT OF OTOLARYNGOLOGY

Scientific thought and methodology have finally applied themselves to otology—that discipline of medicine which deals with the ear and its disorders. It is not surprising that the surge of interest in the hearing organ should occur later than similar revolutions in related medical specialties. After all, the inner ear is hidden deep in the skull in a casing of hard bone. Thus, while it is protected from environmental and physical abuses, it also becomes more difficult to study.

Not until recently has the impact of deafness been fully appreciated in terms of its social, occupational, and economic effects. The public still is not fully aware of the communicative disability which results from deafness. The blind individual is pitied, but the deaf one is often "kidded". Why is this? It may be that blindness has a greater pull on the heart strings because everyone experiences the effects of loss of vision at sundown or by merely closing the eyes. On the other hand, it is not possible to divorce one's self from auditory stimulation. Placing plugs in the ear canals is comparable to only slight diminution of vision. Even in an elaborate soundproof room, the sounds of breathing, chewing, and the circulation of blood in the head provide constant awareness of auditory function.

One of the most exciting developments in otology is the stapedectomy operation for otosclerosis. Otosclerosis is a bony disorder of the otic capsule which causes ankylosis of the stapes bone and varying degrees of inner ear degeneration. Much of the credit for developing the stapedectomy operation belongs to Dr. John J. Shea of Memphis, Tennessee, a former Resident in Otolaryngology at the Massachusetts Eye and Ear Infirmary. He replaces the stapes with a vein graft and plastic prosthesis. This operation was first performed successfully by him about five years ago. I adopted the principle of total stapedectomy soon afterward and developed a modification, using earlobe fatty connective tissue and a steel wire prosthesis, believing this method had certain technical advantages. Today both methods are in common use and are equally successful, with hearing being restored in over 90 percent of patients. More important than the choice of method is that of surgical skill. The operation is performed through the ear canal, under local anesthesia, with the aid of an operating microscope. It is very gratifying to teach this operative technique to residents, for they learn these microsurgical techniques quickly.

Another attractive field of ear surgery is reconstruction of the middle ear following partial destruction by infection or trauma. These procedures, termed tympanoplasty, are sometimes highly successful in restoring hearing but, in general, the surgical principles are less well defined and the results are less predictable.

Two of four research laboratories in the Department of Otolaryngology are concerned solely with otological problems. The Neurophysiology Laboratory, under the direction of Nelson Kiang, Ph.D., is studying stimulus coding in the auditory nerve. The key to success has been the collection of data on magnetic tape, followed by computer analysis at the Massachusetts Institute of Technology, thanks to the help of Walter Rosenblith, Ph.D. It takes little imagination to realize the significance of this work. When the coding mechanism is known, it is entirely possible that electronic devices can be built to stimulate the neural centers directly and, in this way, restore hearing to an individual with deafness due to cochlear degeneration. A knowledge of neural coding for auditory stimuli might apply in principle to all sensory systems.

The experimental histopathology and surgery laboratory, under my direction, is concerned with the morphology, neuroanatomy, pathology, and physiology of hearing, as well as the development of therapeutic procedures for auditory and vestibular disorders.

Human ears for histological study from patients with deafness and/or dizziness are received by bequests and are acquired by permission from the diener of the Massachusetts General Hospital. Histological preparation requires six months. Because frequency has a spacial orientation in the cochlea, it is necessary to record pathological changes as a function of distance along the cochlear partition. About 600 sections are made of each ear and the pathological changes are recorded quantitatively on graphic reconstructions. Dr. Makoto Igarashi, our Research Fellow in Temporal Bone Pathology, has acquired about 30 valuable specimens in the past nine months. Recent new observations have been made which help define the pathogenesis of Ménière's disease, deafness due to kanamycin, positional vertigo, acoustic tumor, and sudden deafness.

Stapedectomies are being performed on cats to determine the fate of tissue autografts, tolerance to plastic and metal prostheses, and inner ear reactions to surgical trauma. Dr. George H. Williams is studying in animals the nature of the high-tone, inner ear type of deafness which occasionally follows stapedectomy.

Drs. Heinrich H. Spoendlin and Richard R. Gacek are studying the distribution of efferent nerve fibers to the ear. This fascinating nerve bundle arises in a retro-olivary cell group, crosses the midline, and innervates the auditory sense organ on the opposite side. We know it ends in the organ of Corti and *not* in blood vessels or secretory cells. What is its function? It probably modifies the afferent neural pattern, and one attractive theory is that it inhibits unwanted or unattended auditory stimuli. A very important and exciting new discovery in our laboratory has been the finding in the cochlea of a new system of fluid channels which probably carry perilymph to the organ of Corti. These channels may have a significance equal to that of the canals of Schlemm in the eye.

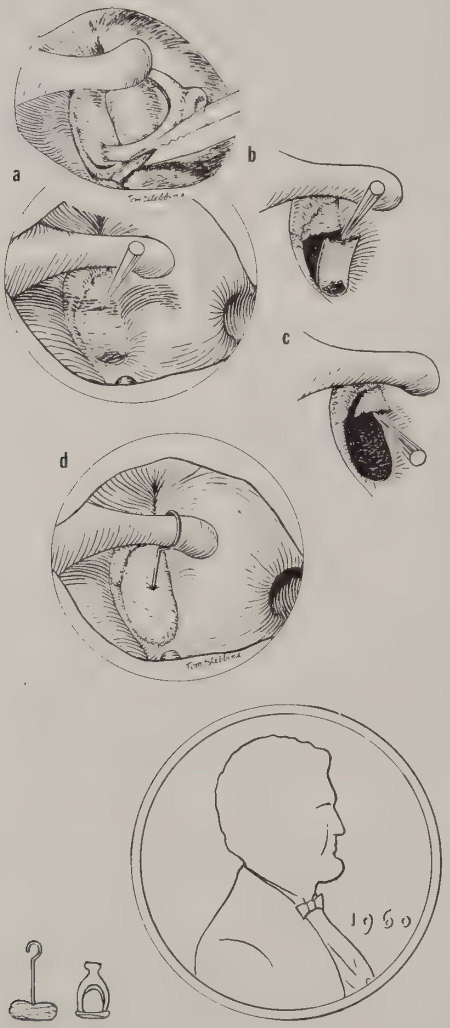
Among the newly planned activities in the Histopathology Laboratory will be electron microscopy performed by Robert S. Kimura, who is currently spending a year at the Wenner-Gren and Karolinska Institutes in Stockholm, and histochemical research under the direction of Dr. Károly Balogh of the Department of Pathology at the Massachusetts General Hospital, who has been appointed Pathologist in Otolaryngology at the Massachusetts Eye and Ear Infirmary, effective July 1, 1962, following the retirement of Dr. Werner Mueller.

I personally believe that nerve deafness is not at all a hopeless problem, for a recent experiment suggests that atrophic changes in the endolymphatic sac may lead to nerve deafness. This problem needs more study immediately and only time will tell whether this exciting finding will pay off.

Other laboratories working on equally important problems are the Biochemistry Laboratory, under the direction of S. Peter Marfey, Ph.D., and the Microcirculatory Laboratory, under the direction of Dr. John W. Irwin. Dr. David L. Pierce, a research fellow, and Dr. William W. Montgomery are studying in animals the histopathology of free graft obliteration of the frontal sinus. This research relates to chronic frontal sinusitis and the obliteration operation as practised by Dr. Robert L. Goodale of our staff.

In conclusion, may I state that I have found the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary a stimulating environment in which to practise medicine and to perform research.

Harold F. Schuknecht, M.D.,
Chief of the
Department of Otolaryngology



SURGICAL STEPS IN THE STAPEDECTOMY OPERATION FOR OTOSCLEROSIS

a. *In the top view the superstructure of the stapes is being removed with an alligator forceps.*
In the lower view a small opening is created with a pick.

b. *The posterior segment of the footplate is removed with a hook.*

c. *The anterior segment of the footplate is removed. Notice the thick ridge of otosclerotic bone at the anterior-superior margin of the footplate.*

d. *The stainless steel wire prosthesis with attached earlobe graft has been introduced and the wire has been locked onto the incus.*

Comparative sizes of a penny, a stapes, and a wire prosthesis with fatty connective tissue graft.

The Board of Trustees, at their meetings on March 2, 16, and 30 voted:

To accept the resignation of Francis W. Hatch as a Trustee of the Massachusetts General Hospital with great regret and with sincere gratitude for his constructive contributions during his fifteen years of service in this capacity. It was thereupon voted to elect Francis W. Hatch as an Associate Trustee to serve for one year, it being noted that he would become the first person to hold this title;

Unanimously to elect Francis H. Burr as a Trustee of the Massachusetts General Hospital on the part of the Corporation to fill the vacancy created by Mr. Hatch's resignation;

To accept with regret the resignation of Dr. Albert S. Murphy from the position of Clinical Assistant in Surgery.

To promote:

Robert D. Schnitzer, Ph.D. from Assistant Psychologist to Associate Psychologist at McLean Hospital, effective March 19.

To appoint:

Saul Aronow, Ph.D. as Associate Applied Physicist (Medicine), for a three-year period, beginning July 1;

Dr. Sheldon S. Baddock as Intern in Pathology for one year, beginning July 1;

Dr. Ann R. Brace as Intern in Surgery, assigned to Gynecology, for one year, beginning July 1;

Dr. George W. Brumley as Exchange Assistant Resident on the Children's Service, for the term February 27 through April 9;

Dr. Marianne Dierks as Clinical Fellow in Anesthesia, beginning July 1;

Dr. Ronald W. Dunbar as Assistant Resident in Anesthesia, beginning July 16;

Dr. Reinhard Fricke as Clinical and Research Fellow in Medicine, beginning May 1;

Dr. Robert P. Germanos as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Kenichiro Higashi as Clinical and Research Fellow in Neurosurgery for one year, beginning September 1;

Dr. Michael E. Jabaley as Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Edwin J. Madden as Clinical Assistant in Orthopedic Surgery for one year, beginning April 1;

Dr. Arthur M. Pappas as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Dr. Edward F. Rabe as Assistant Pediatrician, beginning March 1;

Dr. William E. Reeves as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Charles A. Rodman, II, as Assistant Resident in Anesthesia, beginning August 1;

Dr. Jose A. Rodrigues as Clinical and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. James A. Rourke as Assistant in Radiology, beginning July 1;

Dr. William Sharpe, Jr. as Assistant in Psychiatry, beginning April 1;

Dr. William G. Stewart, Jr. as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Pierre J. Stoffyn, Ph.D. as Associate Biochemist, for a three-year period, beginning July 1;

Dr. Jon B. Tingelstad as Exchange Assistant Resident on the Children's Service, for the term April 10 through May 21;

Dr. Kanji Torizuka as Clinical and Research Fellow in Medicine, beginning September 1;

Dr. Dorothy B. Villee as Assistant Pediatrician, beginning July 1;

Dr. Roland G. Ware, Jr. as Second Assistant Resident in Radiology, beginning July 1.

To appoint the following Interns for one year, beginning July 1:

Medicine

Dr. J. Michael Bishop
Dr. Verne S. Caviness, Jr.
Dr. David T. Harper, Jr.
Dr. Edward D. Harris, Jr.
Dr. Brian E. Henderson
Dr. James R. Lehrich
Dr. Robert C. Moellering, Jr.
Dr. William A. Robinson
Dr. George N. Rogentine, Jr.
Dr. John N. Sheagren
Dr. Philip F. Sparling
Dr. Herbert S. Waxman

Surgery

Dr. Alfred J. Defalco
Dr. Dexter W. Lawson
Dr. Ralph A. W. Lehman
Dr. Peter B. Mansfield
Dr. Michael N. Margolies
Dr. George A. May, Jr.
Dr. William R. Moore
Dr. Dennis D. O'Keefe
Dr. Robert L. Waldron, II
Dr. LeRoy S. Wirthlin

At their meetings on March 7, 21, and 28, and April 4, the General Executive Committee voted:

To accept the resignation of James L. Pinter from the position of Research Fellow in Physics (Medicine), effective as of March 23;

To change the title of Dr. Prafulchandra M. Dalal from that of Clinical and Research Fellow in Neuropathology to that of Clinical and Research Fellow in Neurology, to act as Resident in Neurology, for a period of six months, beginning March 1.

To reappoint:

Dr. Jorgen G. Jacobsen as Clinical and Research Fellow in Medicine, beginning April 1;

Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning April 28;

Gerald L. Mechanic, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning March 1;

Dr. Isadore Starr as Clinical Fellow in Medicine, beginning April 15.

To appoint:

Dr. Yoichi Saito as Research Fellow in Psychiatry for one year, beginning June 1;

Mrs. Judith Sharir as Research Fellow in the Department of Psychiatry for one year, beginning January 15;

Neil R. Williams, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1.

Mr. Francis H. Burr, partner in the Boston law firm of Ropes and Gray, was unanimously elected a Trustee of the Massachusetts General Hospital, at a meeting of the Trustees held on March 30.

Mr. Burr is a Director of American Airlines, Inc., State Street Investment Corporation, Fiduciary Trust Company (N. Y.), Federal Street Fund, Old Colony Trust Company, and the Radio Shack Corporation. He is a Fellow of Harvard College and a Trustee of the Humane Society of the Commonwealth of Massachusetts, Employers Group Associates, Massachusetts Foundation, Industrial School for Crippled Children, and the Massachusetts Savings Bank. He is a member of the Board of Managers-Adams House (Adams Nervin) and a Vice President and Director of the United Fund.

ERRATUM

In the article on "The Cardiac Clinics and Laboratory", which appeared in the April issue of THE NEWS, the date of the construction of the catheterization laboratory was erroneously given to us. This date, which appears in next to the last line of the middle column on page 2, should read 1949.

* * *

OFFICIAL NOTICE

Over the past few months two Massachusetts General Hospital projects have been discussed with various committees and individuals in the Hospital. These groups include: the Board of Trustees, the Hospital Committee of the Board of Trustees, the General Executive Committee, the Staff Associates' Executive Committee, and a subcommittee of the Associates' Executive Committee. Both of these projects have the approval of the above-mentioned groups.

The projects are:

Project I

To set up a suite of offices at the Massachusetts General Hospital in the present Clinics Building, in which a group of internists and one or more general surgeons would combine private practice on a fee-for-service basis with a medical care program in which care would be given to a significant number of individuals who have purchased diagnostic and critical care services on a prepayment plan.

Project II

To establish in conjunction with the Massachusetts Port Authority a Massachusetts General Hospital connected medical facility at Logan International Airport. This unit will provide on-the-scene medical direction for employees of various Airport facilities, visitors to the Airport, and passengers of airlines using the Airport. It will be involved with disaster planning for the Airport and it is expected to collaborate with the Harvard School of Public Health on a study program.

John H. Knowles, M.D.,
General Director

* * *

MASSACHUSETTS GENERAL STAFF ASSOCIATES

This is the first of what is hoped will be a series of reports from the Executive Board of the Massachusetts General Staff Associates on the activities of this body. The Associates is recognized by the Trustees as a staff organization advisory to the Trustees.

During the autumn of 1961, a subcommittee of the Associates' Board studied with an administrative committee the complex problems of the Baker system for the setting and collecting of fees—problems created by the increasing number of patients for whom there is third-party payment. Following a meeting of the membership of the Associates in December, a recommendation that the Baker system be changed was forwarded to the Trustees for their consideration. This action of the Associates stimulated a great deal of interest on the part of the staff, which is reflected in further study of this matter by the Director of the Hospital, by the Baker Fee Committee, and by the Associates.

In light of the staff interest generated by this report and the recommendation which came from it, the Executive Board of the Associates is encouraged to go ahead with other plans for informing the staff of the problems of the Hospital and of practice within the Hospital, in order to keep abreast of the rapidly changing picture of medical care in our present world.

Bradford Cannon, M.D.,
Chairman

* * *

ENDOSCOPY—1933-1962

Twenty-nine years ago the first flexible gastroscope ever used in the United States was passed at the Massachusetts General Hospital. The instrument used was the Wolf-Schindler flexible gastroscope, and its passage marked the beginning of the Endoscopy Service at this Hospital. At that time the other peroral endoscopic procedures, namely bronchoscopy and esophagoscopy, were performed by the Ear, Nose and Throat Service at the Massachusetts Eye and Ear Infirmary. This was a very cumbersome arrangement, necessitating temporary transfer to the Infirmary of many General Hospital patients just for bronchoscopy or esophagoscopy. As Thoracic Surgery developed, it became obvious to Dr. Edward D. Churchill that we should have our own facilities for endoscopy in our own Hospital. At the same time, the late Dr. Arthur W. Allen felt that it would be worth while to do peritoneoscopies in suitable cases. Accordingly, instruments were obtained, and space and assistants were found for peroral endoscopy in the Out-Patient Department. Arrangements were made for overnight stay in the Emergency Ward.

For several years thereafter endoscopies were also performed in the Baker and Phillips House operating rooms, and in the temporary Quonset hut operating room used for ward cases during construction of the White Building. When the White Building was completed in 1940, Room 4 on White 3 was set aside for endoscopic work on Monday, Wednesday, and Friday afternoons. Expensive endoscopic instruments began to accumulate rather rapidly and could not be satisfactorily taken care of when they had to be moved from one operating room to another. They became damaged in transit and the nurses in the three operating rooms could not become familiar with sterilizing them, cleaning them after the procedures, and setting up the operating room in the special manner required. Furthermore, it could not be anticipated what instruments might be needed in a given case. One might plan an esophagoscopy and then find it necessary to do a gastroscopy or a bronchoscopy in addition. The only answer was to have one operating room for all peroral endoscopic procedures. Several years after the completion of the White Building, permission was granted to take care of Baker and Phillips House patients for endoscopy, as well as all endoscopy instruments, on White 3.

At the present time we have the following instruments, very ably inventoried and cared for in the White 3 operating room, under the direction of Mrs. Frances Chase: 8 laryngoscopes, 22 bronchoscopes, 17 esophagoscopes, 7 gastroscopes, 8 telescopes, 1 peritoneoscope, 24 biopsy and foreign body forceps, besides bougies, sponge carriers, aspirators, etc. Instruments of different sizes and shapes are needed to take care of babies and children of all ages, and of various anatomical and pathological situations.

During the early years of endoscopy the House Staff did not participate. Graduate students from all over the world were taken for a few months or up to one year. Beginning in 1941, they enrolled at the Harvard Medical School Courses for Graduates. They came from all parts of the United States and many from foreign countries, including Chile, Cuba, Venezuela, Paraguay, Canada, Lebanon, Brazil, Luxembourg, Portugal, Guatemala, China, South Africa, Turkey, Mexico, the Philippines, Taiwan, Italy, and Cyprus. In 1952, in reply to a questionnaire sent out by Dr. Churchill, the surgical resident staff expressed interest in learning to do the various endoscopies. Therefore, graduate students were no longer accepted, and attention was directed to the teaching of our own surgical resident staff. Ear, Nose and Throat residents and anesthesia residents continued to take part in the M.G.H. Endoscopic Teaching Program. For many years third year clinics in endoscopy have been given to Harvard Medical students. During the past twenty-nine years, endoscopic teaching has been given to 366 doctors, including 72 graduate students, 73 surgical residents, 119 ENT residents, and 102 anesthesia residents. Over 16,000 endoscopies have been done, including 9697 bronchoscopies, 2214 esophagoscopies, 3106 gastroscopies, and 1023 peritoneoscopies. Almost all of these procedures have been diagnostic. Many additional therapeutic bronchoscopies have been done on the wards by the Anesthesia Service.

The Anesthesia Service has become so expert in intravenous anesthesia for procedures of short duration that there has been a recent tendency toward using general anesthesia more frequently, especially for esophagoscopy and sometimes for gastroscopy. This, of course, makes endoscopic procedures easier for the patient, and increases the safety of the patient in the hands of trainees.

Since the beginning of the Endoscopy Service, over one hundred articles by members of the MGH staff have been written on endoscopy and allied subjects. In addition, two books have been published, one on endoscopy (1) and the other on the esophagus (2). The most important recent studies in endoscopy have been concerned with the value of bronchoscopy in determining the inoperability of carcinoma of the lung (3), the role of benign esophageal obstruction in the development of carcinoma of the esophagus (4), and benign inflammatory postoperative esophageal stenosis (5).

At the present time we are evaluating the use of esophagoscopy in the diagnosis of gastric reflux and its symptomatology in the absence of hiatus hernia. We also are working on the value of esophagogastroscopy in the diagnosis and localization of acute upper gastrointestinal hemorrhage (6). The importance of the Hirschowitz gastroduodenoscope (7, 8) is being studied, and efforts are being made through Flexi-Optics, Inc. to incorporate a directional mechanism and biopsy forceps in a similar type of fiberglass instrument.

Edward B. Benedict, M.D.,
Endoscopist

REFERENCES

(1) Benedict, E. B.: Endoscopy as related to diseases of the bronchus, esophagus, stomach, and peritoneal cavity, Baltimore, The Williams and Wilkins Company, 1951.

(2) Benedict, E. B., and Nardi, G. L.: The esophagus: Medical and surgical management, Boston, Little, Brown and Company, 1958.

(3) Benedict, E. B.: The value of bronchoscopy in determining the inoperability of carcinoma of the lung, J. Thoracic Surg. *37*: 646-650 (May) 1959.

(4) Joske, R. A., and Benedict, E. B.: The role of benign esophageal obstruction in the development of carcinoma of the esophagus, Gastroenterology *36*: 749-755 (June) 1959.

(5) Benedict, E. B.: Benign inflammatory postoperative esophageal stenosis, Gastroenterology *39*:285-292 (Sept.) 1960.

(6) Palmer, E. D.: Diagnosis of upper gastrointestinal hemorrhage, Springfield, Ill., Charles C Thomas, 1961.

(7) Hirschowitz, B. I.: Endoscopic examination of the stomach and duodenal cap with the fiberscope, Lancet *1*: 1074 (May 20) 1961.

(8) Hirschowitz, B. I., Curtiss, L. E., Peters, C. W., and Pollard, H. M.: Demonstration of a new gastroscope, the "fiberscope", Gastroenterology *35*: 50 53, 1958.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore, we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Eylar, E. H., and Jeanloz, R. W.
Oligosaccharides from the $\alpha_1$acid glycoprotein of human plasma.
J. Biol. Chem. 237:622.

Houston, C., Adams, L. C., McDermott, W. V., Jr., and Field, R. A.
Effect of insulin on glucose uptake by the isolated perfused canine liver.
Lancet 1:357.

Jeanloz, R. W.
2-amino-2-deoxy-α-D-allose hydrochloride.
From D-glucosamine by interconversion.
In Methods in carbohydrate chemistry, R. L. Whistler and M. L. Wolfrom, Editors, New York, Academic Press, Inc., vol. 1, p. 212.

Jeanloz, R. W.
2-amino-2-deoxy-α-D-gulose hydrochloride.
In Methods in carbohydrate chemistry, R. L. Whistler and M. L. Wolfrom, Editors, New York, Academic Press, Inc., vol. 1, p. 231.

Jeanloz, R. W.
2-amino-2-deoxy-α-D-talose hydrochloride.
In Methods in carbohydrate chemistry, R. L. Whistler and M. L. Wolfrom, Editors, New York, Academic Press, Inc., vol. 1, p. 238.

Jeanloz, R. W., and Stoffyn, P. J.
2-amino-2-deoxy-α-D-galactose hydrochloride.
In Methods in carbohydrate chemistry, R. L. Whistler and M. L. Wolfrom, Editors, New York, Academic Press, Inc., vol. 1, p. 221.

Jeanloz, R. W., and Stoffyn, P. J.
Chemical structure of hyaluronic acid.
Federation Proc., vol. 21, p. 81, 46th Annual Meeting, Atlantic City, N. J.

Stoffyn, P. J., and Jeanloz, R. W.
Chemical structure of dermatan sulfate (β-heparin, chondroitin sulfate B).
Federation Proc., vol. 21, p. 81, 46th Annual Meeting, Atlantic City, N. J.

Endoscopy

Benedict, E. B.
Esophagoscopy, gastroscopy, and peritoneoscopy.
Gastroenterology 42:171.

General Surgery

Malt, R. A., and Mullinax, P. F.
Carbon dioxide generator for stimulating respiration.
Anesthesiology 23:132.

Mixter, C. G., Keynes, W. M., and Cope, O.
Further experience with pancreatitis as a diagnostic clue to hyperparathyroidism.
New England J. Med. 266:265.

Raker, J. W., Henneman, P. H., and Graf, W. S.
Coexisting primary hyperparathyroidism and Cushing's syndrome.
J. Clin. Endocrinol. 22:273.

Neurology

Waksman, B. H., Burnstein, T., and Adams, R. D.
Histologic study of the encephalomyelitis produced in hamsters by a neurotropic strain of measles.
J. Neuropath. & Exper. Neurol. 21:25.

Orthopedic Surgery

Sakellarides, H.
A follow-up study of 172 peripheral nerve injuries in the upper extremity in civilians.
J. Bone & Joint Surg. 44-A:140.

Pathology

Weinberger, H. W., Ropes, M. W., Kulka, J. P., and Bauer, W.
Reiter's syndrome, clinical and pathologic observations: A long term study of 16 cases.
Medicine 41:35.

Pediatrics

Brazelton, T. B.
A child oriented approach to toilet training.
Pediatrics 29:121.

Psychology

Whiskin, F. E., Dibner, A. S., and Rhudick, P. J.
Psychological, cultural, and health characteristics of aging smokers and nonsmokers.
J. Gerontol. 17:69.

Surgical Research

Monaco, A. P., Buckley, M., and Raker, J. W.
Carcinoma of the oral cavity. I. Carcinoma of the anterior two thirds of the tongue: Results of surgical treatment.
New England J. Med. 266:575.

Thyroidism

Chapman, E. M.
Action of antithyroid drugs associated with the treatment of hyperthyroidism with radioactive iodine.
Medicine et Hygiene, Geneva, Jan. 31:64.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Academy of Sciences, USSR.
Works of the Institute of Higher Nervous Activity. Physiological Series, vol. 1-2.
Moscow, Academy of Sciences, USSR, 1955-56.
(19A)

American library and book trade annual, ed. 6.
New York, R. R. Bowker, 1961.
(1C)

Anfinsen, C. B. (Editor)
Advances in protein chemistry, vol. 16.
New York, Academic Press, Inc., 1961.
(5B)

Ash, L. M.
Subject collections.
New York, R. R. Bowker, 1961.
(1Ba)

Bourne, G. H., and Danielli, J. F. (Editors)
International review of cytology, vol. 12.
New York, Academic Press, Inc., 1961.
(2Am)

Brainerd, H., Margen, S., and Chatton, M. J.
Current diagnosis and treatment.
Los Altos, Calif., Lange Medical Publications, 1962.
(7D)

Cawson, R. A.
Essentials of dental surgery and pathology.
Boston, Little, Brown and Company, 1962.
(30F)

Charnley, J.
Compression arthrodesis including central dislocation as a principle of hip surgery.
Edinburgh, E. & S. Livingstone, Ltd., 1953.
(18E)

Council for International Organizations of the Medical Sciences.
Directory.
Paris, Council for International Organizations of Medical Sciences, 1961.
(38M)

Florkin, M. (Editor)
Comparative biochemistry, vol. 3A: Constituents of life.
New York, Academic Press, Inc., 1962.
(5A)

Foskett, D. J.
Information service in libraries.
New York, Philosophical Library, 1959.
(1C)

Freud, S.
Standard edition of the complete psychological works, vol. 3.
London, Hogarth Press, 1962.
(19Op)

Gale Research Company.
Directory of university research bureaus and institutions.
Detroit, Gale Research Company, 1961.
(1R)

Gardner, J. W.
Excellence.

New York, Harper & Bros., 1961.
(1A)
Glick, D. (Editor)
Methods of biochemical analysis, vol. 9.
New York, Interscience Publishers, Inc., 1962.
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THE SOUTH SURGICAL SERVICE

Dr. Faxon has written a most interesting and informative 47-page book about the South Surgical Service—a department of the Hospital where he received his training as a house pupil. One copy has been deposited in Dr. Knowles's office, another in Treadwell Library, and a third in the Archives Department.

An epitome of Dr. Faxon's book is given in his preface, which reads:

> This story of the South Surgical Service has been written mostly for my own enjoyment but also with the thought of recording for posterity an episode in the history of the Massachusetts General Hospital and a way of life at the Hospital that will soon be forgotten.
>
> While reliving my days as a House Pupil at the Massachusetts General Hospital and refreshing my memory from the official records, it occurred to me that a rather detailed account of the physical arrangement of the Hospital during that period, of its organization and how it operated, would be worth while. Also I have enumerated and have tried to explain some of the forces which, working within and without the Hospital, led to the establishment of and then to the demise of the South Surgical and the formation of a new Staff organization.
>
> The information here set down has been collected from the Minutes of the Board of Trustees, the Annual Reports, the Surgical Staff Secretary's Records, the Records of the Medical Board, the Medical Records of the South Surgical Service, and Dr. F. A. Washburn's History of the Massachusetts General Hospital. The period covered is from 1894 to 1911 but mostly it is the Massachusetts General Hospital of 1905 as I remember it.

Seven appendixes give such information as the names of the South Surgical staff and house pupils and their years of service, the number of beds and their location in the Hospital, names of the directors and members of the Corporation during this period, and complete lists of the names of the MGH staff in 1894 and 1912, which show the growth of the Hospital round the period of the existence of the South Surgical Service.

This book will be appreciated equally by present-day readers and future historians of the Massachusetts General Hospital.

♣ ♣ ♣

VOLUNTEER GROUPS

On May 19, the Massachusetts General Hospital holds its Annual Spring Dance, sponsored by the Trustees, the MGH Service League, and the Distaff Club. It will be held in the Crystal Ballroom of the Hotel Continental in Cambridge. We will dance to the music of Marshard's Orchestra.

DISTAFF CLUB

The *Hints for housing*, compiled by Mrs. George P. Canellos, is now complete. It lists, among other things, names of real estate agents, desirable locations, information about schools, and other helpful and pertinent data for Boston newcomers or residents.

We look forward to our annual family picnic in June.

It was nothing short of an inspiration that led me one day to the Massachusetts General Hospital. I knew it to be one of the best of all hospitals, and I hoped that I might find something of interest to do there—something which was in line with my professional training and experience. Luckily for me, I was referred to Miss Mary Ruth Wolf, Director of Volunteers, who was just about to launch a new program. As I listened to her unfold her plans, I comprehended the scope of her ideas, admired her progressive thinking, and caught her enthusiasm.

Over a period of years, there have been increasing requests from hospital administrators across the country and from such far-away places as Nigeria, asking Miss Wolf to give of her experience to newly appointed directors of volunteers. Appreciation of the importance of this post is growing, and a director of volunteers is coming to be recognized as a really professional member of hospital staffs.

After World War II, an expanded program for hospital volunteers started and has been growing ever since—but growing more or less like Topsy. As yet there is no national association to stabilize and guide the directors of this service, and there has been no nationally accepted type of training, though the American Hospital Association has offered each year a two-day basic and a two-day advanced institute in various sections of the country. A few years ago, the Committee of Directors of Volunteers of Metropolitan Boston, under the chairmanship of Miss Wolf, was instrumental in obtaining the interest and cooperation of Boston University, which offered a workshop —the first of its kind in New England— for the training of directors of hospital volunteers. But Miss Wolf's fertile imagination and sincere concern for her profession have led her to further thinking. Since M.G.H. is a pioneering hospital, why not pioneer in this relatively new field? Why not offer a course for directors of volunteers at the Hospital, including in-service training, observation, and experience? Miss Wolf presented her plans to the administration and they gave their approval for this pioneering postgraduate course.

The course was first given in the month of October. Four carefully selected students were accepted on the basis of receipt of a college degree, professional training or experience, and personal qualifications. Attendance was daily from 10 A.M. to 4 P.M., with a few evening sessions, from October 2 through 27.

The aim of the course was to offer education and training in the complexities of hospital organization and management, and the understanding of the role of the volunteer department in the total hospital structure. Special emphasis was placed on the executive responsibilities of the director of volunteers and on her relationship to the administration, the hospital staff, and other hospital auxiliary groups. Massachusetts General provides unique opportunities for students to receive practical on-the-job experience and the acquisition of technical knowledge of the manner in which the volunteer department functions on the administrative level and how it is integrated with its own advisory committee, under the able leadership of its chairman, Dr. Chester M. Jones, and with other committees both within and without the Hospital. We were privileged, also, to attend weekly administrative meetings. Because of the advantageous location of M.G.H., students have the added opportunity of visiting other hospitals and attending such meetings as those of the Greater Boston Council for Directors of Hospital Volunteers.

Lectures were given by Miss Wolf and others of the professional personnel at the Hospital. We had the opportunity to visit many departments and to confer with their directors. Also of value was our attendance at the orientation sessions for new volunteers and at the volunteer training sessions for such services as child recreation, adult recreation, and patient care. Under the guidance of volunteers we observed admitting areas, clinics, communication centers, etc. We viewed unusual programs, such as that offered by the Institute of Contemporary Art. We learned in what way volunteers could or could not be used by Pharmacy or Central Supply. Our understanding of the Hospital service was enhanced by conferences with the chairmen of the Ladies' Visiting Committee, the M.G.H. Service League, and the Metropolitan Boston Chapter of the American Red Cross. It was not only possible to study techniques of selecting and training volunteers, but to examine records of office procedures, public relations, and recruiting, and to delve into the history of the volunteer movement and the current literature—books, pamphlets, articles, and records. The course was so thorough and of such breadth that we also had the opportunity to evaluate our own interests, aptitudes, and abilities.

Our visits to other hospitals (which differed in locale, size, and service) were helpful, as was our contact with other directors of volunteers. In these outside visits we seemed to feel at home, for our training in a hospital made possible our understanding of what we saw and heard.

To whatever kind or size or location of hospital the students may go as directors of volunteers, this course has not only provided exceptional administrative and technical training, but inspiration as well. The example set by M.G.H. in its dedication to the care of the sick, the mutual respect between departments and the cooperation of each with the others—all of this should engender such high aspirations that each of us will be an asset in her new post. I cannot but think that this course is a big step in the right direction toward sound and thorough training.

The four of us who took the first course are proud of our certificates, are staunch admirers of the Massachusetts General Hospital, and are grateful to Miss Wolf for her outstanding leadership.

Acile Harrison

BIOGLETS

Dr. Guido Belsasso-Prister, Assistant Resident in Psychiatry—born in Trieste, Italy, December 8, 1935; B.S., Centro Universitario, Mexico, 1952; M.D., National University of Mexico, Medical School, 1959; Assistant, First Seminar for Medical Students, University of Michigan, Ann Arbor, 1959; military service: Captain in the Medical Corps, Mexican Army, 1959-60; Intern (straight in Medicine), Instituto Nacional de Enfermedades de la Nutrición, Mexico, 1959-60; Assistant Resident in Medicine, Instituto Nacional de Enfermedades de la Nutrición, 1960-61; single.

Dr. Randolph Catlin, Jr., Assistant Resident in Psychiatry—born in New York City, November 17, 1925; lived in Tuxedo Park, N. Y., for several years, then moved to Charlottesville, Virginia; educated at St. Paul's School, Concord, New Hampshire and at the University of Virginia; M.D., University of Virginia Medical School, 1952; Intern, New York Hospital, 1952-53; military service: Flight Surgeon, USAF, Korea, 1953-55; Resident in Neurosurgery, University of Virginia, 1955-56; further military service: special work in aviation medicine, Harvard School of Public Health and USAF School of Aviation Medicine, 1957-58; assigned as Flight Surgeon and Hospital Commander with the Strategic Air Command at a base near Oxford, England, 1958-61; married to the former Marian Woolston (HMS 1956); 2 children.

Dr. Albert E. Herman, Resident in Psychiatry, McLean Hospital—born in Edgemont, South Dakota, August 28, 1928; B.A., University of Nebraska, 1950; M.D., University of Nebraska, 1953; military service: Captain, U.S. Army Medical Corps, 1953-56; Resident, University of Colorado, 1957-58.

Dr. Axel Hoffer, Intern in Medicine—born in Gablonz, Czechoslovakia, July 23, 1936; University of Munich, 1955-56; B.A. Harvard College, 1957; M.D., Harvard Medical School, 1961; married.

Dr. John B. Livingstone, Resident in Psychiatry, McLean Hospital—born in Boston, December 26, 1932; graduate of Moses Brown School, Providence, Rhode Island; A.B., Brown University, Providence, 1954; M.D., Harvard Medical School, 1958; Intern in Surgery, University of Minnesota, Minneapolis, 1958-59; Resident in Surgery, Beth Israel Hospital, Boston, Massachusetts, 1959-60.

Dr. Gordon K. MacLeod, Assistant Resident in Medicine—born in Boston, Massachusetts, January 30, 1929; A.B., Blackburn College, Carlinville, Illinois, 1954; Engineer, Procter and Gamble Company, Cincinnati, Ohio, 1954-56; M.D., University of Cincinnati Medical School, Cincinnati, Ohio, 1960; Intern, I and III Medical Service, Boston City Hospital, 1960-61; married; one son.

Dr. Dale E. Wenlund, Intern in Surgery—born in Cokoto, Minnesota, May 17, 1931; military service: USAF, Middle and Far East 1950-54; B.A., University of Minnesota, Minneapolis, Minnesota, 1958 and B.S., 1959; University of Minnesota Medical School, 1958-59; M.D., Harvard Medical School, 1961; single.

* * *

New addresses:

- Dr. William T. Butler (*M.* 1959), 5903 Greenlawn Drive, Bethesda 14, Md.
- Dr. Frank F. Davidoff (*M.* 1960), 5823 Greenlawn Drive, Bethesda 14, Md.
- Dr. Norris B. Finlayson (a.r.p. *Path.* 1960). San Francisco General Hospital, San Francisco, Calif.
- Dr. Edward A. Gall (r.p. *Path.* 1937), Cincinnati General Hospital, Cincinnati 29, Ohio
- Dr. Gilbert Hermann (*S.* 1955), 1320 Garfield St., Denver 6, Colo.
- Dr. Gerald Kenner (a.r.s. *Or.* 1961), 540 Parker St., Newton 59, Mass.
- Dr. Edward J. Ottenheimer (*E.S.* 1924), 3707 Stanford Drive, Phoenix 18, Ariz.
- Dr. James A. Pittman, Jr. (*M.* 1953), Veterans Administration Hospital, Birmingham 3 Ala.
- Mr. Elliot L. Richardson (Trustee), 73 Tremont St., Boston 8, Mass.

* * *

Brief bits:

- Dr. Edward B. Benedict delivered the Fried Lecture at Newton-Wellesley Hospital last February 15. His subject was "Peroral endoscopy, special considerations".
- At its annual meeting on April 6, held at the Rhode Island Hospital in Providence, the New England Society of Plastic and Reconstructive Surgery elected Dr. Bradford Cannon as President.
- On March 21, Dr. Earle M. Chapman gave a talk on "The medical aspects of thyroid disease". The occasion was the observation of Mercy Hospital Clinical Day, in Rockville Centre, N. Y.
- Dr. Oliver Cope was the Sommer Memorial Lecturer in Portland, Oregon, April 4 through 6. He spoke on "Non-toxic nodular goitre: Uses and limitations of medical and surgical therapies"; "Hyperthyroidism: Considerations of the choice of therapy"; and "Hyperparathyroidism: Experiences in diagnosis and management of 300 cases".
- Dr. Richard A. Field was invited to speak to the Alabama Diabetes Association in Point Clear, Alabama, on February 25, concerning "Hypophyseal stalk section in the treatment of advancing diabetic retinopathy".
- Dr. Hannibal Hamlin presented a paper before the Eastern Association of Electroencephalographers, at their meeting in Ste. Adele, Quebec, on March 9. His subject was "Therapeutic effect of brain stem electrostimulation in traumatic suppression of the recticular activating system".
- Dr. Harilaos Sakellarides addressed the New England Surgical Society meeting at the Massachusetts General Hospital on March 28. He spoke on "Surgical correction on rheumatoid hands".
- Dr. Edward W. Webster acted as moderator for one of the panels in the Symposium on Technological Needs for the Reduction of Diagnostic X-ray Exposure, held by the U.S. Public Health Service, Division of Radiological Health, in Washington, D.C., on March 5 and 6. Dr. Webster also contributed an introductory paper entitled "Dose and information in diagnostic radiography".

* * *

When we published Dr. Chiu-an Wang's article on Hong Kong in our March issue, we said that a short addendum would follow. More recently we secured a copy of a talk Dr Wang gave here in the Hospital, and we feel that it should be made available to all our readers. Dr. Wang, who practises surgery in Hong Kong, is spending a year at the General.

MEDICAL PRACTICE IN HONG KONG

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A PERSONAL EXPERIENCE

Medical practice in Hong Kong is intricately involved in her many social and economic problems. Over-population and over-crowding, illiteracy and poverty play an important role in our health problems. Geographically, Hong Kong is a small colony with an area less than 400 square miles, in which over 3,000,000 people live — 99% of them Chinese. Over 80% live along the coastal fringes of the harbour — some on boats. They represent the middle and lower classes. Some are of moderate means, others are indeed very poor.

In Hong Kong, as in other parts of China, the families are often large, and traditionally a man has to support not only his wife and his children (usually four or more), but also his parents who live with him. This large family system creates a serious financial problem, for the average income for this kind of family is low.

A skilled workman receives about $2 or $3 per day, and an office worker or a school teacher from $3 to $5 per day. Out of this meager income rent must be paid, which, of course, varies with the location. In general, for decent living quarters for a family today one must pay at least $50 or more per month. This would be a financial drain, and the only way to a reasonable solution is to sublet a quarter. This has been the general practice. One rents a living quarter, then sublets it to the next family, and the next will sublet to the next, and so on until there is no longer any room for subletting. All these families will now live under a single roof, and many in a family will sleep in one bed within a tiny cubicle. Over-crowding conditions thus account for the spread of many contagious diseases. Besides rent, there are also other expenses to meet — clothing, food, and education. By the time all these bills are paid, there isn't really very much left for saving. Many of these people literally live from hand to mouth. Should illness strike, as it often does, the entire family would feel the pinch and would suffer severe hardship.

Two kinds of medicine are being practised in Hong Kong — the Western and the traditional Chinese herbal medicine, commonly known as Chung Yee. The herbal medicine costs comparatively little, so most laymen are ready to accept it. It is aimed primarily at the symptomatic relief of fever, pain, constipation, etc. It consists mainly of medicinal plants, leaves, seeds, or roots, from which a liquid extract is prepared with boiling water for oral consumption. Snake bile has been claimed to be effective for rheumatism, and snails of certain species have been employed for the treatment of incurable cancers. The results are often questionable, yet this traditional herbal medicine has often been in demand, for it serves to provide symptomatic relief, which is just what most patients want. The cost is little, and the patient can afford it. Then, there is the bone-setter who sets fractures by wrapping the injured part in a dense mass of herbs, presumably to reduce swelling and improve healing. The patient will also be given a tonic, usually containing liquor, for the subcutaneous hemorrhage. There have been some acceptable results, but for many others there is frequently permanent deformity.

Another popular form of treatment is acupuncture. It is said to be effective for neuralgia, rheumatic pain, fibrositis, etc. Some cases of polio are also treated in this manner. The procedure is simple. A long non-sterile needle is inserted, without anesthesia, into the painful site or a selected area somewhere remote from the lesion. After a few artistic motions, the needle is withdrawn. The effect of the treatment is chiefly psychological. Not infrequently infection is introduced, followed by abscess formation.

Western medicine, on the other hand, has taken root very slowly since it was introduced into China some hundred years ago. As a rule it is more costly than the traditional herbal medicine, and there is still much reluctance to accept Western medicine — especially surgery.

According to the 1960 statistics of the Hong Kong government, there were 1001 registered medical practitioners, 393 dentists, 1740 nurses, and 1705 midwives. There were also many non-registered nurses and some doctors who are refugees from the Chinese mainland. While many of these nurses have been taken into practice, the refugee doctors are employed only to attend patients in certain clinics.

We have a limited number of hospital beds in Hong Kong. The latest figures show about 8000 altogether. There are two large government general hospitals — one on the Kowloon side, the other on the island. A new one is about to be completed on the Kowloon side. There are government-assisted hospitals which are jointly run by the local charitable organizations and the government. We have some very well equipped private hospitals, maternity homes, and nursing homes, which accommodate mostly the paid cases.

We have a medical school on the island. The teaching follows a British pattern — that is, a 6-year course leading to a M.B.B.S. Most of our graduates are general practitioners; some of them went abroad for postgraduate training; many returned to work in hospitals. Until very recently there were very few specialists in the Colony.

In our daily practice we have encountered some rather unusual problems. We have many cases of nutritional diseases and avitaminosis. Many of our patients suffer beriberi, with polyneuritis or beriberi heart. Nutritional edema, profound anemia, and hypoproteinemia are common findings. In some of our surgical patients we had to be satisfied if a hemoglobin level reached 10 grams percent or so. Obesity has been an exception, for most of our subjects are under-weight.

We have a high incidence of infectious and parasitic diseases, with some of the most unusual complications. Tuberculosis is very common. There are many acute and chronic pulmonary cases. Tuberculosis of bones and joints, meninges, the intestines and urinary tract is also common. A cold abscess in the right lower quadrant of the abdomen has often led to mistaken diagnosis of appendiceal abscess. Thus, in the differential diagnosis of any illness, tuberculosis is customarily included.

Because of water shortage and restricted supplies during the summer months, typhoid epidemics have been common for years. Typhoid perforation had been a serious problem and had cost many lives prior to Chloromycetin therapy. It is possible now to salvage a certain percentage with better surgical management of the cases and better understanding of the disease.

Small bowel obstruction caused by the roundworm, Ascaris lumbricoides, has been encountered occasionally among children. This is usually precipitated by strong anthelmintics. Symptoms usually will subside with the passage of the parasites by rectum, but in some obstinate cases obstruction will be relieved only by surgery with evacuation of the parasites.

One of our most perplexing problems in biliary surgery is recurrent cholangitis secondary to cholelithiasis, choledocholithiasis associated with the liver flukes (Clonorchis sinensis). No drugs have been found effective, given either orally or locally, for the treatment of this disease, consequently recurrent cholangitis, with or without obstruction, is a common occurrence.

Malaria splenomegaly has been frequently seen. Most of the patients were usually quite ill, with profound anemia. There have been a few cases of malaria in the Colony. One still sees occasionally a comatose patient with a positive blood smear for Plasmodium falciparum.

While we have had much the same kind of malignancy in Hong Kong as in the West, neoplasms that we have seen were almost always in a very advanced stage, and surgery could offer little hope for cure. Most cancer cases had had a trial with herbal medicines before they came to us for treatment. Colostomy has not been generally acceptable in the treatment of cancer of the bowel. It is often rejected.

We have had a number of neoplastic diseases commonly found in Hong Kong, namely, the nasopharyngeal cancer, locally known as Canton tumor because most of the cases were Cantonese. Primary hepatoma and chorionepithelioma were also common. Hepatoma has been found frequently associated with the liver flukes.

Degenerative disease did not seem to pose a very serious health problem, for the incidence has been relatively low. It occurred mostly in the upper classes, such as executives, bankers, lawyers, etc. There have been and still are cases of hypertension and various forms of heart diseases. Recently there seems to be an increase in the number of psychosomatic disorders. Schizophrenia, manic depression, and psychosis have been reported.

In Hong Kong we now have most of the up-to-date medical supplies, antibiotics, chemotherapeutic agents, and parenteral fluids at our disposal. These are costly, naturally, and they have been used very judiciously. Blood transfusions have always been our problem. For one thing, most willing donors were anemic to begin with, and others were reluctant. Traditionally, the people believe that blood, being a vital fluid, must not be given away indiscriminately. There has been a constant shortage of supply of blood. Major operations involving the unlimited use of blood were automatically curtailed to the minimum.

Because of the difficulty involved in blood transfusions and expenses incurred in the use of medical supplies, many of the operative procedures had to be done with discretion. We would delay closure for any contaminated abdominal wounds and drain any cavity being potentially a site of sepsis. We have frequently instituted feeding jejunostomies for cases requiring surgery for protracted gastrointestinal ailment. We would perform staged operations whenever there was the slightest question regarding the risk and the bodily reserve of the patient. Perhaps many of these considerations were over-cautious, but they have been done with gratifying

Dr. Harold F. Schuknecht—Chief of the Department of Otolaryngology, Massachusetts Eye and Ear Infirmary

results.

It seems to me that medical practice in Hong Kong presents a dual challenge. First, there is the disease to cure, which is not easy, but which can be done with care and experience. Then, there is the population to educate and convince that Western medicine can offer more for better health. This requires patience and tact. The basic problem, however, still lies in the solution to the many social and economical difficulties.

Chiu-an Wang, M.D.,
(*W.S.* 1944)

Dr. Khalil Abi-Torbey, Chief Resident in Urology, has been in the United States for six years, four of which have been spent at M.G.H. He returned recently to his native country—Lebanon. Just before his departure, we had a most interesting talk with him, during which he told us of his plans and hopes for the future. Dr. Abi-Torbey and eleven members of his family (two brothers, two nephews, and seven cousins—all American-trained here in university hospitals) will constitute the nucleus of a new diagnostic clinic to be located in Beirut. He proposes to create a center in the Middle East where the techniques and philosophy of the American type of medicine will be practised. Dr. Abi-Torbey expressed no interest in his own personal aggrandizement—in fact, quite the contrary. His one desire is that his country may be the beneficiary of his training over here.

During 1961, Dr. Abi-Torbey published three papers: "Function of the colon after removal of anal sphincters and replacement by denervated ileal segments", which appeared in *Annals of Surgery;* "Replacement of the right renal artery with the hypogastric artery", which came out in the *Argentina Urological Journal;* and "Urethral sphincter substitution with a specially prepared ileal segment providing urinary continence in male and female dogs", which appeared in the *Journal of Urology.* This last paper was a prize-winning essay of the A.U.A. In addition to these papers, a motion picture was made of Dr. Abi-Torbey in action, entitled "Technique and result of right renal artery replacement", and an exhibit on "Use of sero muscular layers of ileum in reconstructive urological surgery — Steps in regenerating of urothelium", prepared by him, was on exhibition at the Chicago meeting of the American College of Surgeons in November 1961. Nine more papers and another motion picture are awaiting publication.

Before ending the interview, Dr. Abi-Torbey said he wished to express his deepest appreciation to Dr. Wyland F. Leadbetter, the Directors of the Hospital, and members of all the services who have so kindly cooperated with him in his work here and thereby contributed to his education. As he rose to leave, he said, "And please include my gratitude for what your country has meant to me during my time here. The International Exchange Visitor Program has been a wonderful means for people to get the proper first-hand knowledge regarding their particular fields of interest. Also, it acquaints the members with the different ways of life and of thinking in various parts of the world. The members are equipped to carry back home information regarding the kind of culture and education they have been exposed to during their time of exchange. It is the very best way to convey messages of good will between all nations."

We wish more of our visitors from other lands would come in and tell us about their plans for the future.

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IMPORTANT NOTICE

It is one of the duties of the Archives Department to revise the Directory section of the Hospital's *Annual Report* each year. A very simple request has appeared in The News many times, asking all our alumni and members of our professional staff, of all categories, to inform the Hospital promptly of any change of address. These appeals have been disregarded by a discouraging number of individuals. Unless each one of you cooperates in this respect, much extra work is entailed to keep our Directory up to date.

Members of the House Staff who are about to finish their services at the Hospital on June 30 are especially urged to comply immediately with this request. If you are planning to travel about for a while, or have not made definite arrangements for the opening of your office or your future association with an institution, please give us an address from which mail may be forwarded to you until your plans for the future are determined. Send your new address to either the Archives Department or the Secretaries' Office, after which it will appear in The News and in the following year's Directory. And please keep us up to date on any subsequent changes.

The News

No. 214 Boston, Mass. June 1962

ORTHOPEDIC RESEARCH LABORATORIES

The new Orthopedic Research Laboratories, which were dedicated September 11, 1960, were the culmination of many years of effort by the Department of Orthopedic Surgery. This event, in the words of Dr. Joseph S. Barr, Chief of the Orthopedic Service, marked the beginning of a new era in orthopedic surgery at the Massachusetts General Hospital and the Harvard Medical School and represented a major shift in the emphasis placed on the role of research, especially in the basic sciences, to orthopedic surgery and to the future training of orthopedic surgeons.

In this report from the laboratories, it would be well, I think, to review the background and philosophy which led to the creation of the laboratories, and which represented a reorientation of the Department of Orthopedic Surgery at the Massachusetts General Hospital and the Harvard Medical School.

Boston and the Department of Orthopedic Surgery of the Harvard Medical School with its two affiliated hospitals—the Massachusetts General Hospital and the Children's Medical Center—are often referred to as the "Cradle of American Orthopedic Surgery". For many years these institutions played important roles in the training of almost every professor of orthopedic surgery in the country. The faculty and the staffs of the two hospitals boasted of some of the most distinguished names in orthopedics—Goldthwait, Brackett, Osgood, Lovett, Allison, Smith-Petersen, Ober, Klein, and others.

These men played major roles in the rapid development of orthopedics that occurred during and after the First World War, when orthopedic surgeons were charged with the care of the tremendous numbers of skeletal injuries resulting from this conflict. Stimulated by these problems, these men and orthopedic surgeons the world over initiated the era of rapid technical development in reconstructive surgery that has characterized orthopedic surgery during the last forty years. During this period orthopedic surgeons made use of the basic research being carried out by other medical and surgical disciplines on shock, infection, anesthesia, bone metabolism, joint physiology, and the like, but contributed little in these areas themselves. The mechanical problems of fracture fixation, muscle transfers, joint reconstruction and the like consumed their energies.

Inevitably, the limits of such an approach to the diseases and deformities of the musculoskeletal system were reached. In recent years the need for a basic understanding of the biology of skeletal tissues and their response to injury and disease has become increasingly clear. Rapid advances in the biological, biophysical, and biochemical sciences had provided the tools and the know-how to investigate skeletal biology but, unfortunately, there was little or no communication between the scientific laboratory and the orthopedic surgeon. For further major advances in the specialty to occur, this iron curtain between basic research and orthopedic surgery had to be set aside, but the task was formidable indeed. The urgency of the reorientation was apparent to the leaders in the field of orthopedic surgery and was the subject of a series of presidential addresses of the American Academy of Orthopaedic Surgeons and the American Orthopaedic Association.

The need to bridge this gap was evident to no one more clearly than to Dr. Barr in 1947, when he became the John B. and Buckminster Brown Professor of Orthopedic Surgery at the Harvard Medical School and Chief of the Orthopedic Service at this Hospital. Starting with a purely clinical service at the M.G.H., with no more space than one of the small rooms on White 3A as an office, he began the hard task of finding personnel and providing space for administrative offices and laboratories. The first accomplishment was the remodeling of White 5 to provide an administrative office, a library, and a conference room now known as "Pete's Joint" in loving memory of Dr. Marius N. Smith-Petersen, Dr. Barr's predecessor.

Next was the research program. Was this to be established with short-term goals, such as the study of one specific disease, or was it to be a broad program designed to investigate normal and abnormal skeletal physiology? The best course for the M.G.H. was not clear at first, but after some preliminary false starts the course was laid out. The major research efforts of the Orthopedic Service were to be aimed at a long-term and continuing study of skeletal metabolism at a very basic level.

The skeletal structures, including bone, cartilage, and teeth, are unique. In these tissues, hard inorganic crystals of calcium phosphate in the form of apatite are deposited, giving them the structural properties necessary for their mechanical functions in the organism. In addition, the large quantity of calcium phosphate and other ions thus stored in the skeleton serves as a vast storehouse of those mineral ions which are available to maintain the constant chemical composition of the body fluids so essential to the maintenance of life.

Under normal conditions the deposition and resorption of these minerals is carefully controlled. They are deposited only when they are needed, and the amount deposited varies with the mechanical requirements of the body. On the other hand, in certain diseases and after some fractures, the deposition of these crystals in bone is impaired, with resultant failure of skeletal growth, deformity, or failure of fractures to unite and heal. Conversely, the situation may be reversed, with calcification occurring in tissues not normally mineralized. Tissues with such abnormal calcification are not confined to the skeleton and are well known to most of us in one form or another: tendons in bursitis, arteries in arteriosclerosis, the heart valves in heart disease, tartar on the enamel of teeth, and many other less well known sites, such as the skin and ligaments.

Clearly, accurate diagnosis, preventive and specific treatment of many diseases of the skeletal system and the many diseases of other tissues which calcify pathologically, must await an understanding of, first, the normal mechanism of calcification and its biological control, and the specific aberrations of these fundamental processes that are responsible for aberrant calcification. There is need to learn how to both prevent calcification (bursitis, arteriosclerosis, and the like) and encourage mineralization (fractures, bone fusion procedures and so forth).

Tissue mineralization is a universal biological process not confined to the calcification of bones, teeth, and cartilage in vertebrates. The process of the hardening of living tissue by the deposition of inorganic crystals occurs in some plants and in most animals from minute unicellular organisms to the most highly organized form of life—man. The shells of oysters, clams, lobsters, sponges, and sea urchins are a few examples. To be sure, the minerals differ in the various species—calcium carbonate, silica, strontium sulfate and the like replacing calcium phosphate—and the composition of the tissue in which the minerals are deposited also differs, but the same basic phenomenon appears to underlie all forms of biological mineralization, as shown by investigators in these laboratories and in many others.

With such a ubiquitous process occurring in all forms of animal life, the investigator has the opportunity to study the mechanisms involved in the simpler animal systems before progressing to the more complex systems of bone, teeth, and calcified cartilage. It is hoped that the knowledge gained from the more simple systems can be applied to the solution of the more complex problems involved in the vertebrates.

Because of this favorable circumstance, the Orthopedic Research Laboratories were organized to investigate basic mechanisms in biological mineralization, not only in bone. Our objective was a long-term, coordinated and integrated, multidisciplinary study of the structure, organization, and physiological function of mineralized tissue at all levels of the anatomical hierarchy—molecule, tissue, and organ. With such an approach, the lines which divide the clinical specialties of medicine, surgery, and dentistry disappear. The mechanisms involved are relevant to bone disease, arteriosclerosis, kidney stones, dental caries and so on.

Such a program required biochemists, electron microscopists, biophysicists, and other highly-trained personnel, not to mention laboratory space and the equipment and supplies necessary for the research. When this program was envisioned, the Orthopedic Service had no basic research in progress. There was no space, no funds, and certainly no trained personnel. The problems confronting the program were large indeed, but in the space of less than three years the funds were raised, an addition to the White Building was finished and the laboratories designed and completed, equipment and supplies were purchased, and a first-rate scientific staff was assembled and engaged in productive research.

That this idea became a reality was due to the dedicated efforts of a great many members of the MGH family. The orthopedic staff, headed by Dr. Barr, worked endlessly. Dr. Edward D. Churchill, Chief of the Surgical Services, Dr. Walter Bauer, Chief of the Medical Services, and Dr. William H. Sweet, Chief of the Neurosurgical Service, contributed advice and essential support. Mr. David C. Crockett, Associate Director for Resources and Development, by his ingenuity, resourcefulness, energy, and unshakable optimism, guided us along the difficult and often discouraging course that led to the successful raising of funds and the completion of the construction.

Financial support for this project came from the United States Public Health Service, from many private foundations, notably the John A. Hartford Foundation, Inc., the Liberty Mutual Insurance Company, the Easter Seal Society, the Green and Stranahan Foundations, and many private individuals, including the friends and family of Drs. Armin Klein, Robert B. Osgood, Joel E. Goldthwait, and Marius N. Smith-Petersen, for whom individual laboratories have been named. We shall be eternally grateful to these agencies and individuals for their confidence and support.

However, as often happens in such large undertakings, the major responsibility for coordinating everyone's efforts fell on one man's shoulders. In this case, it was Dr. Thornton Brown. Dr. Brown devoted more than his full working time to the organization of the laboratories, the building plans, the raising of funds, and the preparation of scores of applications, brochures, and numerous important details, with vigor and enthusiasm and with great personal sacrifice to himself. There is no question that, without his dedicated effort, the laboratories would never have come into being. Not only the Orthopedic Service, but both the Harvard Medical School and the M.G.H. owe him a vote of thanks for his tireless efforts on their behalf.

Our present research program has been in full swing for about two years. It now includes a wide variety of projects ranging from a comparative study of the structure and organization of the mineralized tissues of certain invertebrates, to the study of the structure and organization of dental enamel, to the incorporation of tetracycline into the bone structure of patients with hyperparathyroidism.

Members of the research unit and their fields of interest include Dr. Dorothy F. Travis, Marine Biology; Dr. Ulf A. Friberg, Biophysics (visiting from the Karolinska Institutet, Stockholm); Dr. Murray Vernon King, Crystallography; Dr. Samuel R. Kamhi, Mineralogy and Crystal Chemistry; Dr. Laurence C. Bonar, Crystallography; Dr. Anthony L. Andrikides and Dr. Leighton B. Richards, Organic Chemistry; Dr. Gerald L. Mechanic, Biochemistry; Dr. Elton P. Katz, Physical Chemistry; and Dr. William H. Harris, Bone Metabolism and Physiology. In addition we have had two visiting fellows in Orthopedic Surgery: Dr. Robert W. Jackson, from Toronto, and Dr. Richard L. Jacobs, from University Hospitals of the State University of Iowa, both spending one year with Dr. Harris, studying tetracycline *in vitro* and into bone *in vivo*.

Perhaps Professor Franklin C. McLean of the University of Chicago, in his address at the dedication of the laboratories, has best summarized the previous history of the M.G.H. in relation to our goals and plans. With Dr. McLean's kind permission, his address is reprinted herewith:

THE HOSPITAL AND RESEARCH

I would like to take for my text today a sentence attributed by Dr. Edward D. Churchill to Dr. J. Collins Warren, as follows:

"Suddenly a time arrived when it seemed as though medical science had reached a point where new activities were in order."

While this was written with reference to a new outlook and period of activity in Boston Medicine in the 1840's, it applies equally well to the event we are celebrating today.

To set the stage further for what I have to say, I will quote from a statement made in an Instructional Course of the American Academy of Orthopaedic Surgeons in 1947, by a speaker whom I shall not identify:

> Who is to accept the challenge of the non-traumatic disorders of the skeleton? And my answer is that you will. And you will for the simple reason that in the long run no one will know more about the bones and their idiosyncrasies than you will. Wherever you are in practice you will find that these problems will be laid on your doorsteps, and that your success in practice will be measured not only in terms of your ability to deal with injury and deformity, but equally in terms of your grasp of the metabolic and systemic problems that come to you.

That this challenge is being accepted by orthopedic surgeons is now made manifest by the provision of the Orthopedic Research Laboratories at the Massachusetts General Hospital, which are being dedicated by these ceremonies. This is a noteworthy example of a time when medical science has reached a point where new activities are in order, and I am happy to participate in these exercises. I am also happy that this occasion has been brought about mainly by the efforts of the Massachusetts General Hospital, which has a long and distinguished record of contributions to medical research.

The Harvard Medical School, whose participation in this enterprise is also being celebrated today, has had, in its long history, a number of points where new activities were in order. A few of these may be mentioned briefly. For our present purposes, one of the most important was the establishment of two small physiological laboratories in the North Grove Street buildings of the Harvard Medical School, in 1871. Here Henry Pickering Bowditch, recently returned from study with Karl Ludwig and with Claude Bernard, became the first professional medical scientist in the faculty; the first to devote his full working day to investigation and teaching; and the first teacher in the Medical School who did not choose to practice medicine. With him began a period of devotion to medical research, which continues to characterize the Harvard Medical School to this day.

Marking another point of new activities was the dedication of the new buildings of the Harvard Medical School, in 1906. But if I point to this as the culmination of an era of effort in medical science, I must also say that these magnificent marble buildings included no provision for observation of a patient, or even for the temporary housing of a volunteer subject. To quote from your own Dr. Churchill, "it was thought that, if investigations were contemplated by clinicians, either the work could be carried on for them (or even by them) in the departmental institutes of medical science, or else their efforts would find more congenial surroundings in the pathological laboratories of the associated hospitals." Events moved rapidly after 1906, both in Boston and elsewhere, but I have recorded, in another place, that plans were made for a teaching hospital as late as 1923, with absolutely no provision for research laboratories in the clinical departments. There was provision for pathological laboratories, and the assumption was that any clinicians who might feel the urge to carry out research could find a place to do so in the Department of Pathology. The event of today shows how far medicine has progressed since 1906 and 1923.

My theme today is implied by my title—"The hospital and research". By this I mean not only the hospital as a locus for research, but, more importantly, as an instrument for research. I need go no further than the Massachusetts General Hospital to show how successfully a hospital can perform this function. The story of Ward 4, as told in a delightful and informative manner by James Howard Means, is a case in point, although Dr. Faxon's tabulation of the research accomplishments of the M.G.H. makes it clear that Ward 4 is responsible for only a fraction of these. Ward 4 does illustrate, however, how the hospital can contribute to the advancement of orthopedic science; some of the important pioneer work on the relation of the parathyroid glands to disorders of the skeleton was done in these surroundings.

That research has not always been a recognized function of the hospital, even though practitioners making use of hospital facilities have from time to time made discoveries therein, is self-evident. Medical research was a well-recognized activity by the end of the nineteenth century, but it did not take place in any organized fashion in hospitals. It may be of interest, on this occasion, to determine when research did move into the hospital, and it is possible to do so with considerable precision. Let me first make the statement that the bridgehead over which research advanced into the hospitals of the United States was established early in the decade beginning in 1910; I shall then bring forward some of the evidence which permits us to pinpoint this advance with some degree of accuracy.

The period surrounding the year 1910 was critical for American medical education and research. The American Society for the Advancement of Clinical Investigation held its first meeting in 1909, and S. J. Meltzer, in his presidential address, set forth the need for "a differentiation of clinical medicine into a science and a practice". In 1910 the report of Abraham Flexner on *Medical education in the United States and Canada* was published, and this was destined to revolutionize American medical education. In the same year the Hospital of the Rockefeller Institute for Medical Research was opened in New York, with Dr. Rufus Cole as Director, and with a staff of full-time investigators. Also in 1910 the University of Pennsylvania, in Philadelphia, established a chair of research medicine. The breakthrough at the Massachusetts General Hospital occurred two years later, when in 1912 David Linn Edsall came as Chief of a medical service, and established research in the Hospital in a continuing and professional way. His first concern on taking up his duties was the development of a teaching and investigative clinic. He needed young men, trained both in clinical medicine and in research, but the supply was scant. He picked promising young men and sent them off to acquire the needed training in research methods; they subsequently returned to the M.G.H. These men, together with others selected and given additional on-the-job opportunities, formed the nucleus of Edsall's clinic. The roster of their names is impressive: Walter W. Palmer, James L. Gamble, Louis H. Newburgh, Paul D. White, James H. Means, Joseph C. Aub, George R. Minot—every one of these, together with many who joined the ranks later, has had a profound influence on academic medicine and on the establishment of research in the Hospital. The bridgehead of medical research at the Massachusetts General Hospital was secured in 1912.

Since 1912 research in and under the auspices of the Massachusetts General Hospital has become firmly established. In fact, on April 7, 1919, Dr. Edsall himself, in his first statement of policy as Dean of the Medical Faculty at Harvard Medical School, deplored the fact that a career in clinical investigation was attracting so many of the young men of scientific training and interest away from medical science as a profession; this he attributed to a disparity in financial rewards.

Note the emphasis on the term clinical investigation. I take it that no one will now question the desirability and, under modern conditions, even the necessity of carrying on, in the hospital, research having to do directly with the study of patients. But even here there are differences of opinion concerning the objectives and even the motivation of such research. On the one hand there is the view, as expressed by a former President of Harvard University, that the clinical investigator is a man who is "treating patients or studying by pathological methods the effect of disease on the human organism." Clinical investigators as a group, he said, "may be considered the medical equivalent of what are called development engineers in industry." In their laboratories, "projects are to be reworked and if promising are handed on to the manufacturer for production."

On the other hand is the view, so ably represented by your own James Howard Means, that the terms "clinical" and "basic", so often applied to research as though they were antithetical, are by no means mutually exclusive. "Basic research in medicine may be clinical, and clinical research may be basic. . . . The term 'basic' research implies research designed to discover fundamental truth without any intent of immediate or direct practical application. It is sometimes inaccurately thought of as research conducted only in laboratories by means of planned experiments on animals or otherwise, but equally basic research can be done on patients, and, conversely, laboratory experiments can have very practical objectives."

Over the years there has been a sort of hierarchy in research. Research in the natural and biological sciences, having long become firmly entrenched in our universities, has been referred to as pure or basic research; medical science, as exemplified in the departmental institutes of the Harvard Medical School, dedicated in 1906, occupied a middle ground, somewhere in between basic and applied science; clinical investigation, formally inaugurated at the Massachusetts General Hospital by Dr. Edsall in 1912, was expected to deal with the patient, and certainly began as an applied science; the investigators were called the medical equivalent of development engineers in industry. It may now be shown that there is no essential difference between these three categories, as was in fact done by Dr. Means.

The change in the attitude toward medical research, be it basic or clinical, can be traced through the records of the *Journal of Clinical Investigation,* the pioneer in the field. When the American Society for the Advancement of Clinical Investigation was under organization, in 1909, clinical investigation was defined as "medical research . . . by men actively engaged in the practice of medicine", and the emphasis was on the study of the patient "by the methods of the natural sciences." By 1949 the editors of the Journal found it necessary to publish a letter, in an effort to define "what is and what is not clinical investigation", and arrived at the conclusion that: "Essentially, clinical investigation is the study of the sick person, his past experiences and adaptations, and their relation to his present plight as it is manifest by deviations in structure, function, and behavior, and the internal and external processes upon which they depend." Now, only a decade later, the statement of policy in each issue of the Journal reads: "The *Journal of Clinical Investigation* is designed for the publication of original investigations dealing with *or bearing on* [emphasis supplied] the problems of disease in man, and it is the policy of the editors that the Journal should cover the field of clinical investigation in its broadest sense." While the emphasis is still on disease as it occurs in man, the least common denominator of those engaged in clinical investigation appears to be concern with the diseased state, whether it is observed in man or produced in animals, or even whether knowledge fundamental to an understanding of the disease process is being sought. On perusing the *Journal of Clinical Investigation,* one may at times find it difficult to differentiate its subject matter from that of the *American Journal of Physiology.*

A similar transition is under way in the field with which we are concerned today—that of orthopedics. An important journal in this field is the *Journal of Bone and Joint Surgery,* and orthopedics is still commonly referred to as Orthopedic Surgery. Both of these began with a connotation of concern with operative intervention in diseased or abnormal states. Over the years the term surgery has itself lost some of this connotation; the surgeon is first of all a physician, who has acquired special skills in the treatment of patients. Likewise, the orthopedist is now, as was predicted some years ago, a physician interested in the metabolic and systemic problems posed by the skeleton, as well as in injury or deformity. For this reason, perhaps, we frequently see the word surgeon dropped from his title. Similarly, such publications as the *Journal of Bone and Joint Surgery* and *Clinical Orthopaedics* are now finding it desirable, as a matter of policy, to devote a fair proportion of their pages to the physiology and biochemistry of bone—subjects that would have seemed strange to them only a few years ago. I have even heard suggestions that the term surgeon or surgery be dropped from the titles of organizations or orthopedists and of their publications.

Now the Massachusetts General Hospital has elected to go all the way in this transition. The Orthopedic Research Laboratories, by deliberate policy, will engage in basic or fundamental research, in the extreme sense in which these terms are applied. This does not say that the patient is to be lost sight of; it does say that any research bearing on the musculoskeletal system is a proper field for inquiry, to be carried out in a hospital and under hospital auspices. We may expect to see publications originating from these laboratories, reporting on research carried on by all the methods available in the physical and biological sciences. In a sense, this is a return to the 1909 definition of clinical investigation, which I have quoted, as "medical research . . . by men actively engaged in the practice of medicine", since it is their interest in medicine that brings them together.

I do not mean to imply by this that all of those who work in these laboratories will be physicians; this will by no means be true. As long ago as 1914 physicists were brought into the problem of cancer in the Collis P. Huntington Memorial Hospital for Cancer Research. This tradition has been carried on in the Massachusetts General Hospital up to the present time; the contributions of the Massachusetts Institute of Technology in research at the M.G.H. have been many and important; there is no doubt that this collaboration will continue, as well as collaboration with the "departmental institutes of medical science" at the Harvard Medical School. We may expect every tool available to the investigator in the biological sciences to be brought to bear on the problems to be studied in these new laboratories, and we may expect to have, in a paraphrase of the words of S. J. Meltzer, "a differentiation of orthopedics into a science and a practice."

I would like to close by quoting again from my unidentified source, this time from words written in 1958, referring specifically to the proposed creation of the Orthopedic Research Laboratories that we are now dedicating:

> I know of no place where research on the physiology and biochemistry of bone, as well as on the many clinical problems of orthopedic surgery, can flourish to better advantage than at the Massachusetts General Hospital. The close relationships with the Massachusetts Institute of Technology and with the Harvard Medical School, already in existence, will continue to nourish the Orthopedic Research Laboratory to be established. In addition to the research output of such a laboratory, an important feature will be its stimulus to physicians and students at all levels, including the undergraduate and graduate students at M.I.T., the preclinical and clinical students at Harvard, and the staff of the M.G.H. The impact upon the residents in training at the M.G.H. will be especially great; the research unit will produce investigators of the future, and will have a beneficial effect upon the practice of orthopedics—both medical and surgical.

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I am very pleased to have Dr. McLean's words published in conjunction with this brief story of the "birth" of our laboratories, especially since his careful appraisal reflects the growing understanding that research on any level can and should be carried out in the setting of a university hospital such as ours.

Melvin J. Glimcher, M.D.,
Assistant in Orthopedic Surgery
and *Director of the*
Orthopedic Research Laboratories

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Dr. Richard H. Sweet, who for many years (until his retirement on 1 July 1961) was Visiting Surgeon at the Massachusetts General Hospital and Associate Clinical Professor of Surgery at the Harvard Medical School, died on 11 January 1962.

This year was Dr. Sweet's Presidential Year in the American Association for Thoracic Surgery. The meeting was conducted by the Vice President, but at the scheduled time for the Presidential Address by Dr. Sweet a memorial to him was read. This was followed by a paper read by his associate, Dr. Earle W. Wilkins, Jr., entitled "Experience with 500 cases of hiatus hernia".

The memorial presented to the Association for Thoracic Surgery was selected and prepared by Dr. Churchill. It is reprinted here so that it may be read by the Staff and many graduates of the Hospital who had come to know and admire Dr. Sweet during the long years of his service to the Massachusetts General Hospital.

RICHARD HARWOOD SWEET

(1901-1962)

I shall read to you an ancient Hindu legend as retold by Rudyard Kipling. It is a legend which has been transmitted to us from the remotest ages. It is this: Once upon a time, or rather, at the very birth of Time, when the Gods were so new that they had no names, and Man was still damp from the clay of the pit whence he had been digged, Man claimed that he, too, was in some sort a deity. The Gods were as just in those days as they are now. They weighed his evidence and decided that Man's claim was good—that he was, in effect, a divinity, and, as such, entitled to be freed from the trammels of mere brute instinct, and to enjoy the consequence of his own acts. But the Gods sell everything at a price. Having conceded Man's claim, the legend goes that they came by stealth and stole away his godhead, with the intent to hide it where Man should never find it again. But that was none so easy. If they hid it anywhere on Earth, the Gods foresaw that Man, the inveterate hunter—the father, you might say, of all hunters—would leave no stone unturned nor wave unplumbed till he had recovered it. If they concealed it among themselves, they feared that Man might in the end batter his way up even to the skies. And, while they were all thus at a stand, the wisest of the Gods, who afterwards became the God Brahm, said, "I know. Give it to me!" And he closed his hand upon the tiny unstable light of Man's stolen godhead, and when that great Hand opened again, the light was gone. "All is well," said Brahm. "I have hidden it where Man will never dream of looking for it. I have hidden it inside Man himself." "Yes, but whereabouts inside Man have you hidden it?" all the other Gods asked. "Ah," said Brahm, "that is my secret, and always will be; unless and until Man discovers it for himself."

Thus, then, gentlemen, does the case stand with Man up to the present. Consider, for a moment, the pathos of the poor brute's position! You all know the common formula for him. "Born of Woman, on Woman designed to beget his like—the natural quarry of the Seven Deadly Sins, *but* the Altar of an inextinguishable Hope."

And it is just this search for this unlocated spiritual area, which has preoccupied Man from that day to this. The Priest and the Lawgiver have probed and fished for it all through the ages; but, more than any other, through all the ages, the Leech, the Medicine-Man, the Healer, has been hottest on its track. He has searched wherever he dared—openly or furtively—in safety or at the risk of his life. In the early days the Astrologer-Physician, as he called himself, dreamed that the secret of Man's eternal unrest was laid up in the sun, moon, and stars; and consequently, that an universal medicament for Man's eternal woes could be discovered upon earth. So he searched the earth and the heavens for those twin secrets, and sacrificed himself in the search as a matter of course. Later, when the embargoes on the healing art were lifted—when, at last, he was permitted to look openly into the bodies of mankind—the nature of his dreams changed for a while. He had found more wonders beneath his knife than earth or the planets had theretofore shown him. Once again, the Surgeon, as he had become, renewed his search, and once again sacrificed himself in the search as his passion drove him. There is no anaesthesia so complete as man's absorption in his own job.

In the teeth of the outrageous, the absurd disabilities imposed on him, Man—the imperfectly denatured animal, who cannot trust the evidence of his own senses in the simplest matter of fact; whose evidence on the simplest matter is coloured by his own iniquities—Man, always the hunter, went up against the darkness that cloaked him and every act of his being, to find out what order of created being he might be. He called it scientific research. It was the old quest under a new name. But, this time, the seekers who headed it, unlike the Priest and the Lawyer, admitted that they knew very little. Experience had taught them to be humble. For that reason their knowledge was increased. They moved forward into areas of the body, which, till then, had denied themselves to man's hand. They were turned back, without explanation, from other areas which, as yet, would tolerate no spying. They were bewildered by mysteries which some new marriage of observation and accident, some predestined slip of the knife resolved into—mysteries profounder still! Is it any wonder that the old dreams came back? The dream of the essential unity of all created things—the dream that some day that which men called Life might be led into matter which men called dead—the boldest dream of all, that eventually Man might surprise the ultimate secret of his being where Brahm had hidden it, in the body of Man. And, meanwhile, their days were filled, as yours are filled, with the piteous procession of men and women begging them, as men and women beg of you daily, for leave to be allowed to live a little longer, upon whatever terms.

Is it any wonder, gentlemen, that your calling should exact the utmost that man can give—full knowledge, exquisite judgement, and skill in the highest, to be put forth, not at any self-chosen moment, but daily at the need of others? More than this. Your dread art demands that instant, impersonal vision which in one breath, one beat of the pulse, can automatically dismiss every preconceived idea and impression, and as automatically recognise, accept, and overcome whatever of new and unsuspected menace may have slid into the light beneath your steadfast hands.

But such virtue is not reached or maintained except by a life's labour, a life's single-minded devotion. Its reward is not only the knowledge of mastery and the gratitude of the layman, which may or may not bring content. Its true reward is the dearly prized, because unpurchasable, acknowledgement of one's fellow-craftsmen.

This brief pause in your search is to honor the name of a man by no means the least in your long line of seekers who follow the quest Brahm set them—a fellow-craftsman whom you yourself acknowledged by electing him to be your President, Richard H. Sweet—a Master among Masters.

A fine tribute was paid to Dr. Richard H. Sweet by Dr. Robert Soupault, President of the Académie de Chirurgie, Paris, France. It appeared as an article in the March issue of *Académie de Chirurgie*.

The Board of Trustees, at their meetings on April 13 and 27, voted:

To accept the resignation of Dr. Monroe Cole, Clinical and Research Fellow in Neurology, as of March 30, because of his call to duty in the Armed Forces;

To accept with regret the resignation of Dr. Leonard W. Cronkhite, Jr. from the position of Assistant in Medicine, and that he be extended our best wishes and congratulations on his appointment as General Director of the Children's Medical Center;

To change the title of Dr. Chiu-an Wang from Clinical Fellow in Surgery to that of Clinical Assistant in Surgery, for the period April 1 through July 31.

To appoint:

Dr. Barry J. Agranat as Intern in Dental Medicine for one year, beginning July 1;

Dr. Wallace H. Clark, Jr. as Associate Pathologist for one year, beginning June 1;

Dr. Milton H. Clifford as Assistant Physician, effective as of April 1;

Dr. Leonard W. Cronkhite, Jr. to the Board of Consultation, effective April 15;

Dr. Theodore Dreier, Jr. as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Matthew P. Dumont as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Ruben F. Gittes as Assistant Resident in Urology for one year, beginning July 1;

Theodore A. Kalin, Sc.B. as Consultant in Biomathematics (Psychiatry) for one year, beginning April 1;

Dr. Peter G. Kimball as Resident in Dental Medicine for one year, beginning July 1;

Dr. Donald L. Leake as Intern in Dental Medicine for one year, beginning July 1;

Dr. Regina C. McCormack as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Beale H. Ong as Exchange Assistant Resident on the Children's Service, for the period May 22 through June 30;

Dr. Pietro Paoletti as Clinical and Research Fellow in Neurosurgery, for a period of six months, beginning August 1;

Dr. Larry H. Strasburger as Assistant Resident in Psychiatry for one year, beginning July 1.

At their meetings on January 3, February 21, April 11, 18, and 25, and May 2, the General Executive Committee voted:

To promote:

Dr. A. Colin Markland to the position of Resident in Urology, retroactive to January 1, and through June 30.

To reappoint:

Dr. John H. Bowker as Clinical and Research Fellow on the Orthopedic Service for one year, beginning July 1;

Edna M. Follensby, Ph.D., for one year, effective July 1, with a change of title from Assistant Immunologist (Medicine) to Consulting Assistant Immunologist;

Dr. Abdollah Gashgai to the position of Second Assistant Resident in Surgery, from May 15 through June 30, and to promote him to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Jacobus M. Greep as Clinical and Research Fellow in Surgery for one year, beginning June 15;

Dr. Richard L. Jacobs as Research Fellow in Orthopedic Surgery for one year, beginning July 1;

Leighton B. Richards, Ph.D. as Research Fellow in Orthopedic Surgery, for the period December 1, 1961 through August 31, 1962;

Dr. Edward J. Riseborough as Clinical Fellow in Orthopedic Surgery and Orthopedist-in-Charge of the Orthopedic Ambulatory Clinic for one year, beginning May 1.

To appoint:

Dr. Babatunde K. Adadevoh as Research Fellow in Medicine for one year, beginning June 1;

Miss Valerie E. Jones as Research Fellow in Medicine for one year, beginning January 1, 1963;

Toshiaki Osawa, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1;

Bronnetta L. Scott, Ph.D. as Research Fellow in Electron Microscopy in the Department of Orthopedic Surgery for one year, beginning May 1.

A General Executive Committee vote on January 3 and one on February 21 did not reach the office of The News in time to appear in any previous issue of this paper.

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RADIOLOGY DEPARTMENT

A few weeks ago, three members of the Department of Radiology were elected to membership in the Association of University Radiologists. This group exists for the purposes of encouraging laboratory and clinical investigation in Radiology, stimulating an interest in academic Radiology as a medical career, and advancing Radiology as a medical science. There are about 100 members of the Association in the United States, all of whom hold staff appointments at medical schools.

The members recently elected from the M.G.H. were Dr. Jack R. Dreyfuss, Dr. Henry P. Pendergrass, and Dr. Majic S. Potsaid. Dr. Chiu-chen Wang is also a member.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of The News, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of The News, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biological Chemistry

Eylar, E. H., and Jeanloz, R. W.
Periodate oxidation of the α_1 acid glycoprotein of human plasma.
J. Biol. Chem. 237:1021.

Spiro, R. G.
Studies on fetuin, a glycoprotein of fetal serum. II. Nature of the carbohydrate units.
J. Biol. Chem. 237:382.

Spiro, R. G.
Studies on the monosaccharide sequence of the serum glycoprotein fetuin.
J. Biol. Chem. 237:646.

General Medicine

Friedman, A. P., Finley, K. H., Graham, J. R., Kunkle, E. C., Ostfeld, A. M., and Wolff, H. G.
Classification of headache.
J.A.M.A. 179:717.

Laboratory Science

Schmid, K., Polis, A., and Takahashi, S.
Electrophoresis of human serum albumin at PH 4.0. III. Interpretation of the electrophoretic behavior of different albumin preparations.
Biochim. et biophys. acta 57:48.

Radiology

McCoy, W. T., and Donnelly, E. W.
Congenital heart lesion.
J.A.M.A. 179:131.

Robbins, L. L.
Education of the radiologist: Thence and whence. Annual oration in memory of Donald Smythe Childs, 1888-1960.
Radiology 78:343.

Simon, H., and McCoy, W. T.
Chronic renal disease.
J.A.M.A. 179:119.

Simon, H., and McCoy, W. T.
Osteolytic lesion of the skull.
J.A.M.A. 179:181.

Orthopedic Surgery

Rowe, C. R.
Management of osteomyelitis following fractures of extremities.
New York J. M. 62:1200.

Otolaryngology

Kelemen, G.
Mimetic musculature and animal language.
Logos 5:18.

Psychiatry

Beecher, H. K.
Nonspecific forces surrounding disease and the treatment of disease.
J.A.M.A. 179:437.

Beecher, H. K.
The placebo effect and sound planning in surgery.
Surg. Gynec. & Obst. 114:507.

Benda, C. E.
Bereavement and grief work.
J. Pastoral Care 16:1.

Stoeckle, J. D., and Davidson, G. E.
Bodily complaints and other symptoms of depressive reaction: Diagnosis and significance in a medical clinic.
J.A.M.A. 180:134.

Miscellaneous

Beecher, H. K.
Some fallacies and errors in the application of the principle of consent in human experimentation.
Clin. Pharmacol. & Ther. 3:141.

* * *

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Blechschmidt, E.
The stages of human development before birth.
Philadelphia, W. B. Saunders Company, 1961.
(3G)

Boyd, W. C.
Fundamentals of immunology, ed. 3.
New York, Interscience Publishers, Inc., 1956.
(8G)

Dorfman, R. (Editor)
Methods in hormone research, 2 vols.
New York, Academic Press, Inc., 1962.
(14K)

Falk, J. E., Lemberg, R., and Morton, R. K. (Editors)
Symposium on haematin enzymes, 2 parts.
New York, Pergamon Press, 1961.
(5C)

Hollaender, A. (Editor)
Radiation biology, vol. 3.
New York, McGraw-Hill Book Company, Inc., 1956.
(36Jn)

Kety, S. S., and Elkes, J. (Editors)
Regional neurochemistry. (Proceedings of the 4th International Neurochemical Symposium)
New York, Pergamon Press, 1961.
(19C)

Krantz, J. C., Jr., and Carr, C. J.
Pharmacologic principles of medical practice.
Baltimore, The Williams and Wilkins Company, 1961.
(22C)

Lemberg, R., and Legge, J. W.
Haematin compounds and bile pigments.
New York, Interscience Publishers, Inc., 1949.
(5C)

McHardy, G. (Editor)
Current gastroenterology.
New York, Paul B. Hoeber, Inc., 1961.
(16G)

Neurath, H., and Bailey, K. (Editors)
The proteins, 4 vols.
New York, Academic Press, Inc., 1953
(5B)

Paschkis, K. E., Rakoff, A. E., and Cantarow, A.
Clinical endocrinology, ed. 2.
New York, Paul B. Hoeber, Inc., 1958.
(14L)

Wylie, W. D., and Churchill-Davidson, H. C.
A practice of anaesthesia.
Chicago, The Year Book Publishers, Inc., 1960.
(22Ea)

BIOGLETS

Dr. James J. Pollard, Assistant Resident in Radiology — born in Lynn, Massachusetts, December 5, 1934; A.B., Providence College, Providence, Rhode Island, 1955; M.D., Boston University School of Medicine, 1959; Intern in Surgery, Barnes Hospital, St. Louis, Missouri, 1959-60; married.

Dr. John S. Strauss, Resident in Psychiatry, McLean Hospital — born in Cleveland, Ohio, August 18, 1932; B.A., Swarthmore College, Swarthmore, Pennsylvania, 1954; research in psychology with Prof. Jean Piaget, Geneva, Switzerland, 1956-57; M.D., Yale Medical School, 1959; Intern in Medicine, New England Medical Center, Boston, Massachusetts, 1959-60; Assistant Resident in Medicine, Boston City Hospital, 1960-61.

Dr. Richard A. Weinberg, Assistant Resident in Dermatology — born in Brooklyn, N. Y., August 3, 1932; B.S., Brooklyn College, Brooklyn, N. Y., 1954; M.D., University of Chicago School of Medicine, 1958; Intern, Philadelphia General Hospital, 1959; military service: USAF, Tokyo, Japan, 1959-61; married; one child.

MASSACHUSETTS GENERAL STAFF ASSOCIATES

The Executive Board of the Massachusetts General Staff Associates has had semi-monthly meetings throughout the spring. Many of the topics discussed at these meetings are of local interest only, and have been summarized in reports distributed to the membership. These include the establishment of an Education Committee, whose purpose is to inform the staff by symposia or in other ways of problems posed by third-party payment, fees for service (ward) patients, activities of the Massachusetts Medical Society which are important to all practising physicians, etc. Also discussed has been membership in the Associates. The Executive Board, acting as the spokesman for the staff, has consistently tried to encourage a broader representation from the active staff to strengthen, influence, and fulfill the stated purpose of the Associates: "To provide for the effective discussion of problems of the Medical Staff of the Massachusetts General Hospital and to transmit to the Board of Trustees of the M.G.H. the opinions, suggestions, and recommendations of the members of the Association relative to matters directly concerned with the affairs of the members of the Associates."

In keeping with a forward-looking attitude by the Hospital and a willingness to try new ideas, a pilot experiment to provide all health services to a defined community by the M.G.H. has been projected for the Logan International Airport area. This has been discussed in the Associates' Executive Committee and has the approval of a sub-committee of the Associates.

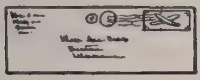
Those of you who have not visited the M.G.H. recently will be astonished by changes in the West End. A redevelopment project has leveled practically all the buildings that were within the triangle formed by the M.G.H., Bowdoin Square, and the North Station. In their place 15- to 23-story buildings are being erected, two of which are completed and occupied. This is not tenement housing and therefore it poses problems in providing adequate care either in private offices or possibly in a private clinic organization. In addition, the buildings in Scollay Square are being demolished to make way for a Government Center, which will draw large numbers of employees to this area and thus place additional responsibilities upon the M.G.H.

The solution of these problems is very much in the minds of the administration and is among the immediate concerns of the Associates' Executive Board repre-

No. 103 in a series of Staff photographs
Dr. Melvin J. Glimcher, Assistant in Orthopedic Surgery—
Director of the Orthopedic Research Laboratories

senting the staff.

Bradford Cannon, M.D.,
Chairman



New addresses:

Dr. Khalil Abi-Torbey (r.s. *U.* 1962), Immeuble Tabet, rue Abdel Wahab, El Inglizi, Beirut, Lebanon
Dr. Arthur E. Baue (*S.* 1955), 620 Jefferson St., St. Charles, Mo.
Dr. Robert W. Chamberlin, Jr. (a.r.p. *C.M.* 1959), Dept. of Pediatrics, University of Kentucky Medical Center, Lexington, Ky.
Dr. Frederick S. Coombs (a.r.p. 1937), 275 W. Federal St., Youngstown 3, Ohio
Dr. Jaime Cortázar (gr. stud. a. *M.* 1951), Apartado aéreo 5100, Bogotá, Colombia
Dr. Edward C. Defoe, Jr. (clin. & res. fel. *C.* 1961), Dept. of Pediatrics, University of Minnesota, Minneapolis, Minn.
Dr. Allan L. Friedlich (*M.* 1943), Zero Emerson Place, Boston, Mass.
Dr. James A. Halsted (*W.M.* 1932), Metropolitan Hospital, 1800 Tuxedo Ave., Detroit 6, Mich.
Dr. John A. Isherwood (gr. a. *R.* 1947), Medical Professional Bldg., San Antonio, Tex.
Dr. Dale G. Johnson (*S.* 1957), Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington, D.C.
Dr. Yosh Maruyama (r.p. *R.* 1961), Dept. of Radiology, Stanford University School of Medicine, Palo Alto, Calif.
Dr. Nobuaki Sasano (res. fel. *Path.*), Dept. of Pathology, Massachusetts General Hospital, Boston 14, Mass. until August; permanent address: Dept. of Pathology, Tohoku University School of Medicine, Kitayobancho, Sendai, Japan
Dr. Adalbert F. Schubart (clin. & res. fel. *M.* 1959), University Hospital, Baltimore 1, Md.
Dr. Rodman D. Starke (*M.* 1959), 490 Post St., San Francisco, Calif.
Dr. Paul I. Yakovlev (cons. *N.P.* (*N.*)), Harvard Medical School, 25 Shattuck St., Boston 15, Mass.
Dr. Alfred Yankauer (*C.M.* 1941), Pan American Health Organization, World Health Organization, 1501 New Hampshire Ave., N.W., Washington 6, D.C.

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An article by Dr. Samuel Proger, Physician-in-Chief and Chairman of the Department of Medicine at Tufts University School of Medicine, which appears in a recent annual report of the Pratt Clinic—New England Center Hospital, has been called to our attention. In one section of the article, Dr. Proger has this to say about academic medicine:

> We hear much about academic medicine and it seems to be variously defined depending upon one's basis of comparison. It is well to remember that a chief goal of all academic medical activities is the highest possible standard of medical practice. If academic medicine is not a means to this goal, it loses a large reason for its existence. It may be that academic clinical medicine is nothing more than the model practice of medicine in an environment that prizes and encourages creative achievement and scholarship along with a concern for patients as people. Students, house officers, and staff then learn to practice good medicine in an academic environment. They do not learn to practice academic medicine. University affiliated hospitals are becoming increasingly aware of the fact that in order to survive, they will have to compete for patients. How fortunate for the patient that there exists this built-in mechanism for his benefit, a mechanism, incidentally, that may do much to insure a proper environment for the proper teaching of medicine. As I have previously indicated, the patient in such an environment assumes new status as a person. The basic concept emerges of *the patient* as a frame of reference for all of the institution's activities rather than the faculty or the student.
>
> Instead of adapting our clinical material to the teaching needs of the institution, . . . we have been attempting . . . to adapt the teaching activities to the patient's needs. Students and house officers come to recognize that they are in the hospital to participate in a program for the care of the patients instead of patients being in the hospital to provide training material for them. . . .

Brief bits:

Dr. Otto E. Aufranc was invited to attend the Congress of the Society of Latin America of Orthopedics and Traumatology, and to participate in their program. The meetings were held in Bogotá, Colombia, during the week of January 13 to 19. During the week of March 26 to 30, Dr. Aufranc was Visiting Professor in Orthopedics at the Columbia-Presbyterian Hospital and on March 30 he delivered the Allan De Forest Smith Lecture. On April 25, he conducted two courses at the Post Graduate Course in Trauma, given by the American College of Surgeons, in Chicago.

Dr. Oliver Cope was the Adolf Gundersen Visiting Professor of Surgery pro tempore at Marquette University School of Medicine from May 14 to 17.

Dr. Humberto Fernández-Morán leaves the M.G.H. in August or September to become Professor of Biophysics in the Division of Biological Sciences at the University of Chicago. He has thoughtfully contributed to our Archives Department a file containing information regarding his family history, his educational background, his postdoctoral studies in this country and in Europe, his professional and governmental appointments in Venezuela, Sweden, Norway, Denmark, and the United States, a list of honors conferred upon him, titles of 82 of his publications, and reprints of articles about him that have appeared in newspapers and journals.

Dr. George L. Nardi was the guest speaker at the Harris County Medical Society meeting in Houston, Texas, on March 14. His subject was "Effects of trauma on surgery".

Mr. Joseph T. Prekup resigned from his position as Administrator of McLean Hospital to become Associate Director of the Maricopa County General Hospital at Phoenix, Arizona. His resignation became effective on May 12.

The News

No. 215 Boston, Mass. October 1962

ARMS AND THE M.G.H.

Last May a twelve-year-old boy whose right arm had been amputated just below the shoulder in a railroad accident, was brought to our Emergency Ward and the arm was successfully reattached. From a surgical point of view, this was not a particularly astounding accomplishment, involving as it did nothing but well-honed principles and practices in the treatment of major extremity trauma. However, the fact that repair had seldom been attempted in so complete an injury, combined with the patient's being a successful twelve-year-old Little League baseball pitcher, resulted in a press coverage similar to that afforded the birth of sextuplets or a major Hollywood scandal—and to the M.G.H. this was an astounding phenomenon.

The case has been so well documented in the daily press, *Time, Look,* etc., that it would be redundant to present it here except briefly. The article in *Look* of August 14 was particularly detailed. Their reporter had apparently made contact with all people and places concerned, and was impressed by the "usual state of disciplined turmoil" of the Emergency Ward where "white clad doctors strode about, sometimes colliding."

The youngster arrived in the EW on a Wednesday afternoon, with his arm, and was swept into the usual competent and expeditious processing applied here to the seriously injured. From the very first, reattachment seemed the natural thing to do, especially with the precedent of repairing all major vascular injuries having been firmly established several years ago. The patient himself fully expected this to be accomplished and would have been aghast had it not been. In the Operating Room, vascular anastomoses and intramedullary bone fixation were performed and the wound was debrided. Delayed wound closure with skin grafting was planned in a few days, delayed nerve suture being left to follow wound healing. The comment was made in the Operating Room, "Wait till the newspapers get a-hold of this one", but the magnitude of the public splash to come was not yet anticipated.

The next morning the house staff had enjoyed the gratification of passing the patient through Surgical Grand Rounds as he was being transferred from Recovery Room to Ward. The sober presentation of the history, concluded by the usual "an operation was performed", was climaxed by offering warm pink fingers and a pulsatile radial artery to the palpating front row in the Bigelow Amphitheatre, and was almost too easy a triumph in roundsmanship.

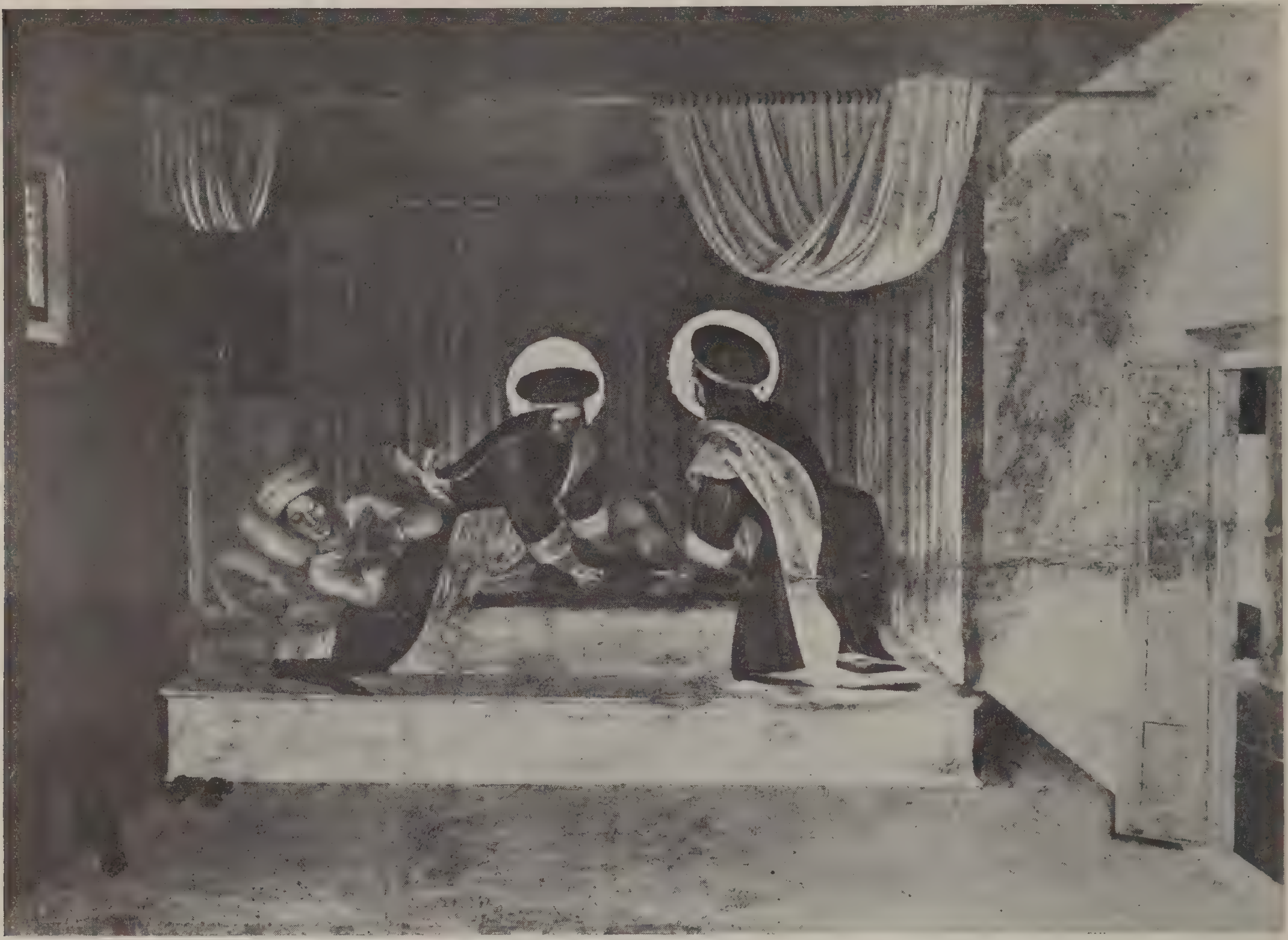
The daily newspapers and the national news services had caught the case by then and the real avalanche of inquiry began. It soon became obvious that if the Hospital were going to continue in operation, some policy and methodology had to be formulated to satisfy these people. Consequently, all reporters were referred to the Administrative Group, who took on the job of extracting a daily medical bulletin from the surgical staff to pass on to them. At the height of things Mrs. Reardon, Mr. Henry J. Murphy's secretary, processed more than fifty calls a day from the press; and in the evening our wives had their lives brightened a little when they answered telephone calls and encountered the Associated Press instead of the usual surgical requirement for their husbands' immediate disappearance. The countless requests for personal interviews were deflected by the promise that a press conference would be arranged for June 13, when all the Hospital staff concerned would be captured and set up as targets which could be interviewed to exhaustion. All of us were keenly conscious of the dreadful anticlimax that failure and reamputation would be after such a hullabaloo; and for this reason, as well as for the feeling that all this was not quite in keeping with the dignity of the institution, we made a determined effort to soft-pedal the whole affair and be very guarded in our comments. I'm afraid all we accomplished was to add the spicy ingredient of suspense to the press reports. The reporters seemed to want to find a single surgical hero whom they could use in their stories, and our failure to produce one underlined for them and for us the unique nature of the conglomerate organism that serves our patients.

The youngster himself did well, had an uneventful and uncomplicated secondary closure of his wound with skin grafts, and was discharged in plaster with a healed wound the morning of the press conference. He had been isolated on wound precautions until healing occurred, and had been protected from other than family visitors until the time of discharge. One enterprising photographer from a Boston daily secured a scoop by disguising himself as a janitor, breaking precautions, securing the boy's picture, and fleeing down the stairs from the twelfth floor of the White Building, pursued by a train of indignant nurses. The youngster's face, as it appeared in that evening's newspaper, wore the most wonderful "Who the hell are you?" expression you can imagine. The Hospital diluted this newsman's triumph by promptly autoclaving our own photographer, having him then secure a large number of appropriately posed pictures, and distributing them to all comers with the compliments of the management.

The great press conference was held in the Nurses' Cafeteria, which had been so transformed that those who were interviewed were made to feel a little like the President of the United States. The staff was protected from the press by a long conference table, and all were appropriately labelled. In addition to representatives of the local press and radio, there were people from the national news services, from New York and Chicago and other newspapers, from some of the national and foreign periodicals, and representatives from the British and European press. This array was backed by the heavy machinery of three television stations, and reinforced by eight or nine cameramen.

Doctor Churchill was superb and a real professor in his introductory briefing. When the question of priority for the first performance of such surgery was brought up, he was quick to point out that we did not claim priority and yielded it to the Syrian surgical team of St. Cosmas and St. Damian who, in 400 A.D., amputated a man's cancerous leg and successfully replaced it with a leg from a recently deceased but otherwise intact blackamoor. He referred us to the documentation of this miracle in early Christian art.

It was inevitable with all this that we should receive a flood of mail, and this was an astonishing demonstration of the effectiveness of modern communications and the degree to which our world has shrunk thereby. Letters have arrived from all over Europe, including Yugoslavia, and from North Africa and Asia. For the most part, this mail has come from humble people in hopeless trouble and it has indeed been touching. Most commonly, these people are searching for some way to replace a missing extremity. Many have old traumatic amputations, usually the result of World War II. Many have children with congenital amputations. Many have some unrelated insoluble deformity or disability and are looking for a miracle. Several of these letters were simply expressions of good will from informed and realistic people who had been touched by tragedy. Common in the mail from the States, but absent in foreign mail, were accounts describing people of the past generation who, in their youth, had suffered trau-



(Ed. Alinari) N. 1527. FIRENZE R. Museo di S. Marco. Un Miracolo dei Santi Cosimo e Damiano. (Beato Angelico)

Copy of an artist's conception of the transplantation of a leg in 400 A.D.

matic amputation of a digit or a foot which had been successfully replaced by the old family doctor, unsung and unhonored. There were some charming letters of congratulations and admiration from children. "Was it hard?" "Do you like your job?" There were, of course, a certain number of crank letters, most often urging us not to be so preoccupied with the body but to make our major effort at saving our patient's and our own souls. Most of these people read ugly things into the newspaper photographs, from the patient's expression, from the way he was holding his dog. The Parents' League for Good Bite was distressed that we spent so much time on his arm and neglected orthodontia.

On a day in mid-September, when the soft tissue wounds and fracture were healed, the patient returned to the Hospital for a second operation. The four major nerves of the upper arm were found and joined, and now will begin the wait of a year or two to see if sufficient nervous regeneration will occur to make the whole effort worth while.

This case was unique in MGH history —not that it represented a surgical accomplishment, but that it had such wide publicity. This was unsought, uncensored, and not a little bit worrisome to conservative New Englanders here. There are some things, however, that we are proud of and hope that we have conveyed to the public. The first is that our paramount concern is for the individual patient; and beside this, individual or institutional glory, or even research efforts, are nothing. The second is a byproduct of the first—namely, that a patient entering this Hospital is not the jealously guarded property of any one physician but, rather, the patient's physician is the instrument for bringing to bear on his case all the minds, the techniques, and the special skills that could be of benefit. This is the reason that the press could not find a hero—a Doctor Kildare—in this case.

Robert S. Shaw, M.D.,
Associate Visiting Surgeon

* * *

VARAZTAD H. KAZANJIAN, M.D.

One of the extraordinary and unique senior surgeons of the Massachusetts General Hospital is Dr. Varaztad H. Kazanjian. Dr. Kazanjian has been an outstanding figure in New England plastic surgery for sixty years and has held world recognition for nearly five decades. He has been honored by many organizations and governments. Recently, under the leadership of his colleague, co-author, and student, Dr. John M. Converse, there was established a Visiting Professorship in Plastic Surgery bearing Dr. Kazanjian's name, at the New York University Medical Center Institute of Reconstructive and Plastic Surgery. The inaugural lecture in this series was given by Dr. Kazanjian himself on May 28, 1962, in the auditorium of the recently completed Alumni Hall of the New York University Medical Center. His title was, appropriately, "A lifetime experience in plastic surgery".

Dr. Kazanjian was introduced by the Dean of the New York University Medical School, Dr. S. Bernard Wortis. Before the introduction, Dr. Converse reviewed Dr. Kazanjian's boyhood in Armenia, his arrival in the United States, his pursuit of further education, the opportunities and challenges of World War II, and finally his many contributions to plastic surgery in the years since. Dr. Converse's familiarity with the many personal facets of Dr. Kazanjian's life made a fascinating story.

The funds for the establishment of the Visiting Professorship were contributed by many of Dr. Kazanjian's patients, friends, and school classmates from the Northeast as well as from remote parts of the world. One of them wrote: "As there has never been any way in which to show my appreciation for a facial operation performed thirty-five years ago, I was, naturally, thrilled and delighted to hear of these plans."

The meeting was attended by members of Dr. Kazanjian's family and by his many devoted professional colleagues. Scattered through the hall were former patients, many of whom showed the evidence of severe trauma or extensive congenital anomalies which had been very effectively and skilfully improved by Dr. Kazanjian's surgical ministrations. It was a most successful occasion and one which should make all of us proud to claim Dr. Kazanjian—a member of the staff of the M.G.H. for four decades.

Bradford Cannon, M.D.,
Visiting Surgeon

On May 31, Dr. Edward D. Churchill was admitted to the Honorary Fellowship (sodalis honorarius) of the Royal College of University Surgeons of Denmark (Collegium Regium Chirurgorum Universitatum Daniae).

* * *

Three letters from Dr. John H. Knowles, our General Director, were sent to all members of the MGH Staff since our last issue. In order that our subscribers who are away from the Hospital may read these letters, THE NEWS gives them to you now.

On July 1st, a distinguished surgical career that has brought honor and distinction to this Hospital culminated in the retirement of Dr. Edward Delos Churchill who becomes John Homans Professor of Surgery, Emeritus, at Harvard Medical School. Dean Berry said, "Dr. Churchill's professional tenure was one of the longest and most important in the history of Harvard Medical School." One of his former pupils wrote in the dedication of a scientific monograph, "To Edward D. Churchill, M.D. who, more than any other, brought the standards of the university into the hospital."

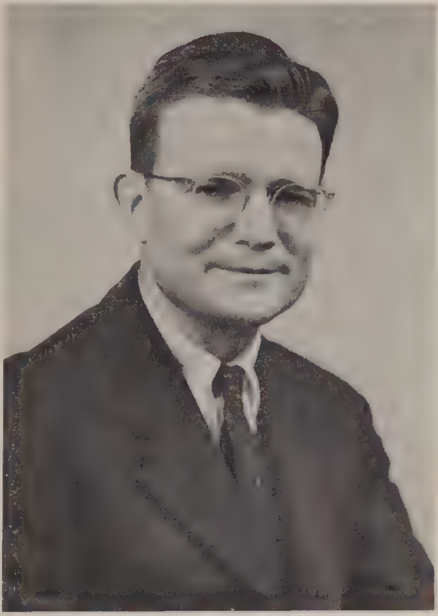
I shall not attempt to eulogize a man of Dr. Churchill's stature nor am I able to express adequately the deep feeling of a venerable institution for one of its most valued Chiefs.

The character of his service to hospital, university, community, and country has been tinctured with sensitivity, scholarship, wisdom, and eloquence.

The M.G.H. wishes Dr. Churchill well and expresses its gratitude as it views with pleasure his contributions in the vineyards of the M.G.H. and the H.M.S. His interest and counsel in the years to come have been assured us—be he in Baghdad or Belmont. A felicitous and warm salute!

It gives me great pleasure to announce that, effective July 1st of this year, Dr. Paul S. Russell succeeded Dr. Edward Delos Churchill as Chief of the General Surgical Services at the Massachusetts General Hospital and John Homans Professor of Surgery at Harvard Medical School.

Paul Russell is an old friend to many of us here at the M.G.H. He came here first as a surgical intern in 1948 after graduation from the University of Chicago Medical School in 1947. He completed his assistant residency here in 1951. Service in the United States Air Force from 1951 through 1953 was followed by his return to the Hospital to start his senior residency. The latter was interrupted for a year of study abroad as a postdoctoral research fellow of the United States Public Health Service under the guidance of Professor Medawar in London. Dr. Russell became Chief Resident in Surgery at the M.G.H. in 1956. Thereafter, until joining the faculty of medicine at Columbia in 1960, he was Instructor, Clinical Associate in Surgery, and Tutor in Medical Sciences at Harvard.



DR. PAUL S. RUSSELL,
CHIEF OF SURGICAL SERVICES

Since 1960 Dr. Russell has been Associate Professor of Surgery at the Columbia University College of Physicians and Surgeons and Associate Attending Surgeon at the Presbyterian and Francis Delafield Hospitals in New York City.

Dr. Russell is a Fellow of the Royal Society of Medicine, London, and a member of the American Association for the Advancement of Science, the Society of University Surgeons, and the Society for Experimental Biology and Medicine.

The M.G.H. welcomes back one of its most distinguished young alumni to one of its most important posts and looks confidently to the future. The Hospital is fortunate in having a man of such vigor, accomplishment, and dedication, and stands ready to provide the best possible environment for his successful launching.

DR. NATHAN B. TALBOT,
CHIEF OF CHILDREN'S SERVICE

It gives me great pleasure to announce that, effective July 1st of this year, the acting Chief of our Children's Service, Dr. Nathan B. Talbot, became the Chief of this service and Professor of Pediatrics at Harvard Medical School.

Dr. Talbot is a Pediatrician who has brought to the medical treatment of the young the skill of the clinician and the concern of the social scientist.

Dean Berry states, "The impact of Dr. Talbot upon American pediatrics has been significant. At the Massachusetts General Hospital he has improved the clinical care of children, particularly through his recognition of the manner in which such other services as neurology, orthopedics, psychiatry, and surgery can contribute to pediatrics."

Dr. Talbot succeeds Dr. Allan M. Butler, who retired in 1960 to become Professor of Pediatrics, Emeritus.

We look forward to the continued advance and success of the Children's Service under Dr. Talbot's guidance, and consider ourselves fortunate in having a man of his stature and accomplishments at the helm.

* * *

The Board of Trustees, at their meetings on May 11 and 25, June 8 and 22, and July 20, voted:

That Dr. Leonard Atkins, Assistant Pathologist, be granted leave of absence for one year, beginning July 1;

That the appointment of Dr. Sumner Frank, Clinical Fellow in Medicine, be concluded as of June 30.

To accept the resignations of:

Dr. Paul J. Catinella from the position of Assistant Dermatologist, effective June 30;

Dr. Virginia L. Clower from the position of Assistant Attending Psychiatrist at McLean Hospital, effective July 31;

Dr. Paul M. G. St. Aubin from the position of Associate Radiologist, effective June 30.

To rescind the appointments of:

Dr. Marianne Dierks as Clinical Fellow in Anesthesia, as of June 30;

Dr. John T. Dunn, recently reappointed a Clinical and Research Fellow in Medicine for the period July 1, 1962 through June 30, 1963;

Dr. Jack Ellenberg as Resident in Psychiatry at McLean Hospital, effective June 30;

Dr. Jose A. Rodrigues as Clinical and Research Fellow in Neurosurgery, as of June 30;

Dr. Robert G. Townley, recently appointed Clinical and Research Fellow in Medicine for the period July 1, 1962 through June 30, 1963.

To change the appointments of:

Dr. Matthew P. Dumont from Assistant Resident to that of Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Mr. Henry J. Langevin from Associate Administrator to Acting Administrator at McLean Hospital, effective April 27;

Dr. Larry H. Strasburger from Assistant Resident in Psychiatry to that of Clinical and Research Fellow in Psychiatry for one year, beginning July 1.

To appoint:

Dr. Harold Abramowitz as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. A. Scott Anderson, Jr. as Clinical Assistant in Psychiatry, beginning June 22;

Dr. John F. Bacon as Assistant Radiologist for one year, beginning September 1;

Dr. George P. Baker, Jr. as Assistant in Medicine, beginning July 1;

Dr. Karoly Balogh, Jr. as Assistant in Pathology for one year, beginning July 1;

Dr. Peter H. Berman as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;

Dr. William C. Bostic, III, as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. Stanley E. Bradley to serve as the James H. Means Visiting Physician, for the week of June 11;

Dr. Jerald S. Brodkey as Clinical and Research Fellow in Neurosurgery, for the period July 1, 1962 through April 30, 1963, and as Assistant Resident in Neurosurgery, beginning May 1, 1963;

Dr. Douglas Buchanan as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Peter T. Choras as Assistant Resident in Psychiatry, beginning July 1;

Dr. Cesare G. Coletta as Clinical Fellow in Anesthesia, beginning July 2;

Dr. Hiram B. Curry as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Giulio J. D'Angio as Consultant in Radiology, beginning July 1;

Dr. Roman W. DeSanctis as Assistant in Medicine, beginning July 1;

Dr. Robert E. Dinsmore as Assistant Radiologist, beginning October 1;

Dr. John P. Donohue as Assistant Resident in Urology, beginning July 1;

Dr. William A. K. Dwyer as Clinical Fellow on the Children's Service, for the period June 1 through August 31;

Dr. Larry J. Embree as Assistant Resident in Pathology, assigned to Neuropathology, beginning July 1;

Dr. Bruce Foster (for Senior Staff) as Fellow in Anesthesia, beginning November 1;

Dr. A. Erik Gundersen as Assistant in Surgery, for the period June 25 through September 6, with the privilege of seeing private patients in Dr. Hendren's office;

Dr. Richard P. Harbord as Visiting Anesthetist, for a period of six months, beginning June 1;

Dr. Stephen E. Hedberg as Assistant in Surgery, beginning July 1;

Dr. Thomas D. R. Hockaday as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Gwendolyn R. Hogan as Clinical Fellow in Neurology, to act as Resident in Pediatric Neurology, beginning July 1;

Dr. Joshua Hollander as Assistant Resident in Neurology for one year, beginning July 1;

Dr. Lore G. Hopff as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Motokazu Hori as Clinical and Research Fellow in Surgery for one year, beginning September 1;

Dr. Douglass H. Howry as Clinical Fellow in Radiology, beginning August 1, with the understanding that when he obtains his permanent Massachusetts license he is to be an Assistant Radiologist;

Dr. John B. Isom as Clinical Fellow in Neurology and Research Fellow in Neurosurgery for one year, beginning July 1;

Dr. George A. Jacoby, Jr. as Clinical and Research Fellow in Medicine, for the period July 5 through September 8;

Dr. Hershel Jick as Clinical Assistant in Medicine at McLean Hospital, beginning July 1;

Dr. Eda M. Kahana as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Paul K. Katrinakis as Clinical and Research Fellow in Neurology, assigned to Electroencephalography, for a period of six months, beginning July 1;

Dr. Bernard Kliman as Assistant in Medicine for one year, beginning July 1;

Dr. George F. Kwass as Assistant in Pathology for one year, beginning July 1;

Dr. Miguel A. Leibovich as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Carl M. Leventhal as Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. Norman S. Lichtenstein as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Ronald A. Malt as Assistant in Surgery, beginning July 1;

Dr. Aleksander Mathé as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Bucknam McPeek as Assistant in Anesthesia, beginning July 15;

Dr. Alexander M. McPhedran as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Edward Messner as Assistant Psychiatrist, beginning July 1;

Dr. Eugene J. Morrissey as Assistant Resident in Orthopedic Surgery, for a period of two months, beginning August 1;

Dr. Norman C. Nelson as Clinical and Research Fellow in Surgery, beginning July 1;

Dr. Shyam S. Pant as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;

Dr. Ernest H. Picard as Assistant in Neurology, beginning July 1;

Dr. Rudolph W. Pierce as Clinical Assistant in Surgery, with the privilege of assisting Drs. Meigs, Ingersoll, and Green in the care of their private patients, for one year, beginning July 1;

Dr. Aldo Pinchera as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Jack R. Rishikof as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robert J. Robl as Clinical Fellow in Radiology for one year, beginning July 1;

Dr. Peter B.-B. Rosenberger as Clinical Fellow in Neurology, to act as Assistant Resident, for one year, beginning July 1;

Dr. Murray K. Rosenthal as Assistant in Pediatrics, beginning July 1;

Dr. Sanford I. Roth as Assistant in Pathology, beginning July 1;

Dr. Byron N. Rudolph as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Charles A. Sanders as Assistant in Medicine, beginning July 1, subject to his having permanent Massachusetts license;

Dr. Allan I. Sandler as Assistant in Medicine, beginning July 1;

Dr. Lewis Sasse as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Evelyne Schwaber as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert B. Scoggins as Clinical and Research Fellow in Dermatology, beginning July 1;

Dr. T. David Seigne as Assistant in Anesthesia, beginning June 1;

Dr. Shyam P. Singh as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Clement B. Sledge as Clinical Assistant in Orthopedic Surgery, for the period of one month, beginning July 1, then be promoted to Senior Resident in Orthopedic Surgery, for the period August 1 through December 31;

Dr. Menno E. Sluijter as Clinical Fellow in Anesthesia, for one year, beginning February 1, 1963;

Dr. Edward L. Socolow as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Sergio Stipa as Clinical and Research Fellow in Surgery for one year, beginning June 1;

Dr. Edgar B. Thompson, III, as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. Robert G. Townley as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Robert Tym as Clinical and Research Fellow in Neurosurgery for one year, beginning September 1;

Dr. Peter H. van der Walde as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Arnold N. Weinberg as Assistant in Medicine, beginning October 1;

Dr. Harold A. Wilkinson as Assistant Resident in Neurosurgery, beginning September 1;

Dr. Dorothy Wilson as Exchange Assistant Resident on the Children's Service, for the period July 1 through August 10;

Dr. Jack Wittenberg as Second Assistant Resident in Radiology, beginning July 1, 1963;

Dr. Livingston M. F. Wong as Second Assistant Resident in Surgery, beginning July 1;

Dr. Robert R. Young as Assistant Resident in Neurology for one year, beginning July 1;

Dr. George F. Zinninger as Second Assistant Resident in Radiology, beginning July 1, 1963.

The Trustees also voted unanimously:

To elect Mr. Edwin W. Hiam as an Associate Trustee, to serve a two-year term;

To appoint Dr. Paul S. Russell as Chief of Surgical Services, to succeed Dr. Churchill on his retirement;

To appoint Dr. Nathan B. Talbot as Chief of the Children's Service.

At their meetings on May 16, 23, and 29, during June and July, and on August 1, the General Executive Committee voted:

To extend the appointment of Dr. Sheldon Cooperman as Clinical Fellow and Acting Resident in Pathology, for the period July 1 through October 31;

To rescind the reappointment of Dr. Richard L. Jacobs as Research Fellow in Orthopedic Surgery, beginning July 1;

To assign Dr. R. Lewis Wright to the V.A. Hospital as Senior Resident in Neurosurgery, for a period of eight months beginning September 1.

To promote:

Dr. William M. Abbott to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Arthur K. Asbury to the position of Resident in Neurology for one year, beginning July 1;

Dr. John F. Barlow to the position of Resident in Pathology for one year, beginning July 1;

Dr. Joseph R. Barrie to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. John D. Burrington to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. William B. DeLong to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Louis H. Edmunds, Jr. to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Josef E. Fischer to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. F. Daniel Foley to the position of First Assistant Resident in Pathology for one year, beginning July 1;

Dr. Elwin E. Fraley to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. James M. Gibson to the position of Third Assistant Resident in Pathology for one year, beginning July 1;

Dr. Jack J. Greenberg to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Nathan T. Griscom to the position of Resident in Radiology, beginning July 1;

Dr. Thomas R. Hakala to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Richard C. Hirschhorn to the position of Senior Assistant Resident in Urology for one year, beginning July 1;

Dr. Lewis P. James, Jr. to the position of Resident in Pathology for one year, beginning July 1;

Dr. Herbert I. Krickstein to the position of Resident in Pathology for one year, beginning July 1;

Dr. Burnham E. Lamkins to the position of Resident in Dermatology, beginning July 1;

Dr. Edward Lowenstein to the position of Chief Resident in Anesthesia, beginning July 1;

Dr. Donald M. McKee to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Abbott R. Miller to the position of First Assistant Resident in Radiology for one year, beginning July 1;

Dr. Gerald S. Moss to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Leslie W. Ottinger to the position of Second Assistant Resident in Surgery, beginning July 1;

Dr. Anthony S. Patton to the position of First Assistant Resident in Surgery, beginning July 1;

Dr. Don C. Pearl, Jr. to the position of Second Assistant Resident in Surgery, beginning

July 1;

Dr. William L. Strickler to the position of Resident in Urology for one year, beginning July 1;

Dr. Dale E. Wenlund to the position of Third Assistant Resident in Surgery, beginning July 1;

Dr. Bruce E. Zawacki to the position of Third Assistant Resident in Surgery, beginning July 1.

To continue the appointments of:

Dr. Edward P. Baker, Jr. as Assistant Resident in Neurosurgery, assigned to the private service, for eight months, beginning September 1;

Dr. Earl F. Jordan as Assistant Resident in Neurosurgery, assigned to the Neurology Service, for eight months, beginning September 1.

To reappoint:

Dr. David W. Allen as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Edward F. Balius as Assistant Resident in Anesthesia for one year, beginning August 1;

Dr. Károly Balogh as Clinical and Research Fellow in Pathology, retroactive to May 1, 1961, through June 30, 1962;

Dr. William H. Batchelor as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Peter L. Bergquist, Ph.D. as Research Fellow in Medicine for one year, beginning September 12;

Dr. John A. Bolzan as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Philip R. Boyd as Clinical and Research Fellow in Psychiatry, retroactive to January 9;

Dr. Bob Bullwinkel as Assistant Resident in Anesthesia for one year, beginning May 15;

Dr. James R. Callison as Third Assistant Resident in Surgery, beginning June 1, and to promote him to the position of Second Assistant Resident in Surgery, beginning July 1,

Dr. Robert W. Carey as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Ock S. Choi as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. George H. Collins as Clinical and Research Fellow in Neurology, retroactive to July 1, 1961, through June 30, 1962;

Dr. Paul A. Crabbé as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Albert Damon as Clinical Fellow in Medicine for one year, beginning September 1;

Dr. Peter A. Del Giudice as Assistant Resident in Anesthesia for one year, beginning July 1;

Dr. Gerhart A. Duda as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. John T. Dunn as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Eric Engel as Clinical and Research Fellow in Medicine for one year, beginning October 1;

Dr. T. Corwin Fleming, with a change of title to that of Clinical Fellow and Acting Resident in Neurology, for one year, beginning July 1;

Harold M. Flowers, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning October 1;

Dr. Nicoll F. Galbraith, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Dr. Herbert A. Haessler as Research Fellow in Medicine for one year, beginning July 1;

Anund A. Hallen, M. K. as Research Fellow in Biochemistry (Medicine) for one year, beginning October 15;

Dr. Jónas Hallgrímsson as Clinical Fellow in Pathology for one year, beginning July 1;

Dr. Robert E. Hayes, III, with a change of title from Clinical Fellow in Neurology to that of Clinical Fellow in Neuropathology, for one year, beginning July 1;

Dr. John Hedley-Whyte as Clinical Fellow in Anesthesia for one year, beginning July 1;

Dr. Peter R. Huttenlocher, with a change of title to that of Clinical Fellow in Neurology, to act as Resident in Pediatric Neurology, for one year, beginning July 1;

Dr. Andrew Huvos as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Murray L. Janower as First Assistant Resident in Radiology for one year, beginning September 1;

Dr. Martin Kantor as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Shelby Kashket, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Bruce W. Konigsmark as Research and Clinical Fellow in Neuropathology for one year, beginning July 1;

Dr. George Küry, with a change of title to that of Clinical and Research Fellow in Pathology, for one year, beginning July 1;

Dr. Nelson R. Lampert as Second Assistant Resident in Surgery, beginning July 1;

Dr. Charles M. Lapiere as Research Fellow in Medicine for one year, beginning October 1;

Dr. Austra Likais as Clinical Fellow in Medicine, beginning June 1;

Dr. S. Bert Litwin as Third Assistant Resident in Surgery, for a period of six months, beginning July 1;

Dr. Tecla O. Lovina as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Donald McCaughan as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. William F. McCourt as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Guy M. McKhann, with a change of title to that of Clinical Fellow in Neuropathology, for one year, beginning July 1;

Dr. Rita A. Manzi as Assistant Resident in Anesthesia for one year, beginning August 1;

Dr. West T. Moore as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Leonard A. Moroz as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Roger H. Morris as Assistant Resident in Anesthesia for one year, beginning July 8;

Dr. Gustave C. E. Mueller as Second Assistant Resident in Surgery, beginning July 1;

Dr. John D. Murphy as Assistant Resident in Anesthesia for one year, beginning July 1;

Yutaka Nagai, Ph.D. as Research Fellow in Medicine for one year, beginning October 23;

Dr. Charles A. Nagant de Deuxchaisnes as Clinical and Research Fellow in Medicine for one year, beginning September 1;

Dr. Hans B. Nevinny-Stickel as Clinical Fellow in Medicine for one year, beginning July 1;

Dr. Richard A. Norton as Clinical Fellow in Medicine for one year, beginning November 1;

Dr. Harry S. Olin as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert S. Pinals as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Gerald R. Plotkin as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Arthur L. Prensky, with a change of title to that of Clinical Fellow and Acting Resident in Neurology, for one year, beginning July 1;

Dr. M. Ramakrishna Raju as Research Fellow in Physics (Medicine) for one year, beginning September 1;

Dr. John P. Remensnyder, Jr. as Second Assistant Resident in Surgery, beginning July 1;

Dr. George W. Rever as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Jack O. Rice as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Victor J. Rosen, Jr., with a change of title to that of Clinical Fellow in Pathology, for one year, beginning July 1;

Dr. Hugues Ryser as Clinical Fellow in Medicine for one year, beginning September 15;

Dr. Harilaos T. Sakellarides as Clinical and Research Fellow in Orthopedic Surgery for one year, beginning July 1;

Dr. John E. Salvaggio as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. Lawrence C. Salvesen as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Mei Satake as Research Fellow in Medicine for one year, beginning September 1;

Dr. David G. Satin as Clinical and Research Fellow in Psychiatry, for the period July 1 through September 30;

Dr. Robert H. Schapiro as Clinical and Research Fellow in Medicine, for the period July 1 through December 31;

Dr. Jeremiah E. Silbert as Clinical and Research Fellow in Medicine for one year, beginning July 1;

Dr. David B. Skinner as Second Assistant Resident in Surgery, beginning July 1;

Dr. Charles Sorbie as Clinical Fellow in Orthopedic Surgery for one year, beginning July 1, with the privilege of assisting Dr. Edwin F. Cave in the care of his private patients;

Mary J. Spiro, Ph.D. as Research Fellow in Medicine for one year, beginning July 1;

Dr. Danuta M. Stachiewicz as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Judith A. Tassie as Clinical Fellow in Anesthesia for one year, beginning July 1;

Dr. Captane P. Thomson as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Katuhiko Tokita as Research Fellow in Medicine for one year, beginning September 1;

Dr. Howard A. Trachtenberg as Assistant Resident in Anesthesia for one year, beginning July 1;

Dr. Alfred D. Weiss as Clinical Fellow in Neuropathology, retroactively for one year, beginning July 1, 1961; it was further voted that he be reappointed, with a change of title to that of Clinical and Research Fellow in Neurology, for one year, beginning July 1;

Dr. G. Melville Williams as Second Assistant Resident in Surgery, beginning June 1;

Dr. Gerald F. Winkler as Clinical and Research Fellow in Neurology for one year, beginning July 1;

Dr. Richard H. Wohl as Second Assistant Resident in Surgery, beginning July 1;

Dr. Hubert J. Wolfe as Clinical and Research Fellow and Acting Assistant Resident in Pathology for one year, beginning July 1;

Dr. Jacob C. Wolterbeek as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Gilbert F. Young, with a change of title to that of Clinical Fellow in Neuropathology, for one year, beginning July 1.

To appoint:

Dr. Ram M. Behki as Research Fellow in Pathology for one year, beginning July 15;

Dr. Joseph H. Brenner as Clinical Assistant in Psychiatry, beginning July 1;

Robert A. Darrow, Ph.D. as Research Fellow in Biological Chemistry, retroactive to November 15, 1961. It is understood that this appointment will terminate on October 31;

Dr. Donald J. Fern as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Murray H. Helfant as Assistant Resident in Neurosurgery, assigned to Neuroradiology, for eight months, beginning September 1;

Lee V. Leak, Ph.D. as Research Fellow in Surgery for one year, beginning September 1;

Dr. Kilmer S. McCully as Research Fellow in Medicine for one year, beginning July 1;

Dr. Gordon K. MacLeod as Clinical Fellow in Medicine for one year, beginning July 1;

Mr. David A. MacSweeney as Research Fellow in Anesthesia, for the period July 15 through October 15;

George D. Maier, Ph.D. as Research Fellow in Pathology for one year, beginning July 1;

Hubert L. Mayer, Ph.D as Research Fellow in Biological Chemistry for one year, beginning September 1;

Mr. John A. Myhill as Research Fellow in Medicine for one year, beginning October 1;

Dr. Hiroshi Nikaido as Research Fellow in Biological Chemistry for one year, beginning

January 1;

Dr. Patrick F. Noone as Assistant Resident in Anesthesia for one year, beginning May 1;

Dr. Suraj Prakash as Research Fellow in Pathology for one year, beginning July 1;

Dr. Eric L. Radin as Research Fellow in Orthopedic Surgery, for a period of three months, beginning July 1;

Nathan Sharon, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning September 1;

Dr. Geoffrey W. G. Sharp as Research Fellow in Medicine for one year, beginning September 1;

Dr. Haruo Sugano as Research Fellow in Pathology for one year, beginning September 1;

Dr. Julius W. Taylor as Graduate Student Assistant in Surgery, for the period June 23 to July 23;

Dr. Edward D. Williams as Research Fellow in Pathology for one year, beginning November 1;

Dr. Harold W. Williams, Jr. as Clinical and Research Fellow in Psychiatry for one year, beginning July 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Bergmann, F. H., Levine, L., and Spiro, R. G.
Fetuin: Immunochemistry and quantitative estimation in serum.
Biochim. et biophys. acta 58:41.

Drabikowski, W., Maruyama, K., Kuehl, W. M., and Gergely, J.
Studies on the depolymerization of F-actin.
J. Gen. Physiol. 45:595A.

Kamiyama, S., and Schmid, K.
Studies on the structure of α_1-acid glycoprotein: II. Preparation and characterization of a glycopeptide fraction.
Biochim. et biophys. acta 58:80.

Martonosi, A.
Intermediate polymers of actin.
J. Gen. Physiol. 45:610A.

Martonosi, A.
The specificity of the interaction of adenosine triphosphate with G-actin.
Biochim. et biophys. acta 57:163.

Maruyama, K., and Gergely, J.
Interaction of actomyosin with adenosine triphosphate at low ionic strength: I. Dissociation of actomyosin during the clear phase.
J. Biol. Chem. 237: 1095.

Maruyama, K., and Gergely, J.
Interaction of actomyosin with adenosine triphosphate at low ionic strength: II. Factors influencing clearing and superprecipitation: Adenosine triphosphatase and birefringence of flow studies.
J. Biol. Chem. 237:1100.

Noda, H., Maruyama, K., and Gergely, J.
End-to-end aggregation of myosin.
Biochim. et biophys. acta 58:598.

Schmid, K., Kamiyama, S., Binette, J. P., and Pfister, V.
Resolution and characterization of the α_1-acid glycoprotein variants.
Fed. Proc. 21: 407E.

Spiro, M. J., and Spiro, R. G.
Composition of the peptide portion of fetuin.
J. Biol. Chem. 237:1507.

Endocrinology

Benedict, P. H.
Use of small doses of the newer oral progestogens.
J. Am. M. Women's A. 17:332.

Endoscopy

Benedict, E. B.
Benign stenoses of the esophagus.
In Current gastroenterology, G. McHardy, Editor, New York, Hoeber-Harper, chap. 2.

Benedict, E. B.
Review of recent literature on bronchoscopy.
Current Med. Practice 6:51.

General Surgery

Herbst, A. L., Skinner, D. B., Anderson, L., Raker, J. W., and Austen, W. G.
Factors influencing the disappearance of nitrogen mustard from blood.
Ann. Surg. 156:307.

Skinner, D. B., Herbst, A. L., Austen, W. G., and Raker, J. W.
A simplified technique of intra-arterial infusion for regional chemotherapy.
Surg. Gynec. & Obst. 115:242.

Laboratory Science

Arnason, B. G., Jankovic, B. D., and Waksman, B. H.
Effect of thymectomy on 'delayed' hypersensitive reactions.
Nature 194:99.

Dvorak, H. F., and Waksman, B. H.
Primary immunization of lymph node cells in millipore chambers by exposure to homograft antigen.
J. Exper. Med. 116:1.

Morgan, W. S., Perlmann, P., and Hultin, T.
Characterization of the pattern of amino acid incorporation in cell-free liver systems by autoradiography of precipitin reactions.
J. Cell Biol. 12:628.

Senior, J. R., and Isselbacher, K. J.
Direct esterification of monoglycerides with palmityl coenzyme A by intestinal epithelial subcellular fraction.
J. Biol. Chem. 237:1454.

Waksman, B. H.
Auto-immunization and the lesions of autoimmunity.
Medicine 41:93.

Waksman, B. H., and Adams, R. D.
A histologic study of the early lesion in experimental allergic encephalomyelitis in the guinea pig and rabbit.
Am. J. Path. 41:135.

Medical Research

Lotz, M., and Smith, L. H., Jr.
The effect of reticulocytosis in the rabbit on the activities of enzymes in pyrimidine biosynthesis.
Blood 19:593.

Rabkin, M. T., Frederick, E. W., Lotz, M., and Smith, L. H., Jr.
Pyrimidine metabolism in man. V. The measurement *in vivo* of the biochemical effect of antineoplastic agents in animal and human subjects.
J. Clin. Invest. 41:871.

Neurology

Aström, K.-E., and Waksman, B. H.
The passive transfer of experimental allergic encephalomyelitis and neuritis with living lymphoid cells.
J. Path. & Bact. 83:89.

Orthopedic Surgery

Little, J. B.
Destructive bone lesion following injury.
J.A.M.A. 181:248.

MacAusland, W. R., Jr.
Fracture of the medial epicondylar epiphysis of the humerus.
Am. J. Surg. 104:77.

Millard, D. G., and Lee, T. H.
"The-twist" fracture dislocation of the patella.
New England J. Med. 267: 246.

Otolaryngology

Kelemen, G.
Histology of the nasal and paranasal cavities of germfree-reared and ex-germfree rats.
Acta Anat. 48:108.

Kelemen, G.
Osso temporale e tumori: Rapporti reciproci.
Arch. ital. di otol. 73:1.

Physical Medicine

Watkins, A. L.
Ability not disability—The key to rehabilitation.
J.A.M.A. 180:495.

Physiology

Downing, S. E., Remensnyder, J. P., and Mitchell, J. H.
Cardiovascular responses to hypoxic stimulation of the carotid bodies.
Circulation Res. 10:676.

Psychiatry

Chafetz, M. E., Demone, H. W., Jr., and Solomon, H. C.
Alcoholism: Its cause and prevention.
New York J. M. 62:1614.

Sifneos, P. E.
Tutorial: A useful way to teach psychiatry to senior medical students.
Am. J. Psychiat. 118:832.

Stoeckle, J. D., and Davidson, G. E.
The use of "crisis" as an orientation for the study of patients in a medical clinic.
J. M. Educ. 37:604.

Radiology

Griscom, N. T., and Wang, C. C.
Radiation therapy of inoperable breast carcinoma.
Radiology 79:18.

Little, J. B.
Large solitary pulmonary nodule.
J.A.M.A. 180:234.

Little, J. B.
Pain and abdominal mass following appendectomy.
J.A.M.A. 180:544.

Pendergrass, H. P., Tristan, T. A., Blakemore, W. S., Sellers, A. M., Jannetta, P. J., and Murphy, J. J.
Roentgen technics in the diagnosis and localization of pheochromocytoma.
Radiology 78:725.

Skinner, D. B., Dreyfuss, J. R., and Nardi, G. L.
Azygography in the evaluation of operability of pulmonary carcinoma.
New England J. Med. 267:232.

Wang, C. C., and Schulz, M. D.
The role of radiation therapy in the management of carcinoma of the sigmoid, rectosigmoid, and rectum.
Radiology 79:1.

Webster, E. W., and Wipfelder, R.
Limitations of combined image amplifier-television systems for medical fluoroscopy.
IRE Tr. Bio-Med. Electron. BME-9:150.

Books

Watkins, A. L.
Manual of electrotherapy, ed. 2.
Philadelphia, Lea & Febiger.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Abramson, D. I. (Editor)
Blood vessels and lymphatics.
New York, Academic Press, Inc., 1962.
(15B)

Academy of Sciences of the USSR. Institute of Cytology.
Problems of cytology and protistology.
Moskova-Leningrad, Izdatel'stovo Akademii Nauk SSSR, 1960.
(2Am)

Academy of Sciences of the USSR. Institute of Higher Nervous Activity.
Works. Physiological series, vol. 3, 1962.
Washington, D.C., National Science Foundation, 1962.
(19A)

Adams, R. (Editor)
Organic reactions, vol. 12.
New York, John Wiley & Sons, Inc., 1962.
(5P)

Adams, W. R., and Veith, I. (Editors)
Pulmonary circulation.
New York, Grune & Stratton, 1959.
(15C)

Aronson, S. M., and Volk, B. W. (Editors)
Symposium on the cerebral sphingolipidoses.
New York, Academic Press, Inc., 1962.
(19R)

Artz, C. P. (Editor)
International Congress on research in burns.
Washington, D.C., American Institute of Biological Sciences, 1962.
(23Z)

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Alcoholism and society.
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New Haven, Yale University Press, 1961.
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Muscle as a tissue, edited by K. Rodahl and S. Horvath.
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Chromatographic reviews, vol. 4.
Amsterdam, Elsevier Publishing Company, 1962.
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Palo Alto, Annual Reviews, Inc., 1962.
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Advances in biology of skin, vol. 2.
New York, Pergamon Press, 1961.
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New York, Pergamon Press, 1961.
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U. S. Air Force symposium on inhibition in the nervous system and gamma-aminobutyric acid.
New York, Pergamon Press, 1960.
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New York, The Blakiston Company, 1962.
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Rytand, D. A. (Editor)
Annual review of medicine, vol. 18.
Palo Alto, Annual Reviews, Inc., 1962.
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TeLinde, R. W.
Operative gynecology, ed. 3.
Philadelphia, J. B. Lippincott Company, 1962.
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The ovary, 2 vols.
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* * *

MASSACHUSETTS GENERAL STAFF ASSOCIATES

The Executive Board of the Massachusetts General Staff Associates has received a number of communications in recent months, with comments about its activities. Fortunately, most have been favorable and thus, naturally, welcome; but more important have been the evidences of staff interest and the constructive suggestions which have been helpful in directing the deliberations and plans of the Executive Board. We would urge that you continue to needle us with suggestions and comments about the manner in which we are fulfilling our duties, since we represent a large body of the staff.

Earlier in the summer, each member of the active staff received a letter from the Director indicating a continued concern by the administration regarding future planning in the Hospital. The renovation of Bulfinch 3 and the addition of an X-ray unit in the Emergency Ward were cited as examples of plans already under way or contemplated. Others are in the planning stage or are merely part of the contemplated program for improving the facilities of the Hospital.

A joint meeting called by the Director and the Executive Board of the Staff Associates was held on October 2, at which time there was an up-to-date report by the Director on present and future plans for the Hospital. These plans, of vital concern to the active staff, have been discussed by the Executive Board on several occasions. It is felt desirable and appropriate that this information should be transmitted to the active staff, after which there will be opportunities for free discussion and questions.

Any further comments or suggestions from staff members concerning the several topics indicated in earlier communications to the Associates will be welcomed.

Bradford Cannon, M.D.,
Chairman

* * *

HARVARD MEDICAL CHORUS

The Harvard Medical Chorus began its fifth season on October 2, but it will be open to new members for the next two rehearsals—October 9 and 16.

Rehearsals are held weekly from 6 to 7:15 P.M. in the Boston Lying-in Auditorium. Concerts are given in December and early May.

The chorus is composed of students, doctors, nurses, technicians, secretaries, dietitians, and wives from the Harvard Medical School and its affiliated hospitals. We welcome new members who would enjoy the opportunity to sing good music under an experienced conductor.

VOLUNTEER GROUPS

A new course for Directors of Hospital Volunteers is being given here at the Hospital from October 1 through 26, under the supervision of Miss Mary Ruth Wolf, Director of our Volunteer Unit. The course includes lectures from hospital administrators and community leaders. Information, including a detailed description of the course, entrance requirements, and expenses involved may be procured from Miss Wolf's office in the Moseley Building here at the Hospital.

DISTAFF CLUB

A delightful party was given by Dr. and Mrs. John H. Knowles and the Distaff Club on the afternoon of July 12. The purpose of the party was to make it possible for all the invited guests to meet the members of the House Staff and their wives—particularly our new members from other countries.

An accordion player furnished the background music, and delicious refreshments were served.

Judge Jenny Loitman Barron spoke at the first meeting of our 1962-63 season, held in the Walcott House on September 25. Judge Barron is the first woman judge to be selected for the Superior Court of Massachusetts.

On October 23, the Club and Don Leake (a dental resident) and his musical group will entertain the visitors to M.G.H. from other countries.

The Distaff Club will give a Halloween party for some of the M.G.H. patients toward the end of October.

* * *

Dr. Alfred L. Frechette, President of the Medical Foundation, has announced the award of a grant of $22,695 for a two-year research project to Dr. Francis L. A. de Marneffe, Associate Psychiatrist at McLean Hospital, and Dr. Helen J. Kenney, Consultant in Education at McLean. The title of the project is "Adapting instruction to the learning needs of emotionally disturbed adolescents". The Medical Foundation is a United Fund Agency.

According to Dr. de Marneffe, "The problem is to now provide the necessary number of adequately trained teachers to handle the situation." McLean Hospital has already gained some experience. Its school for emotionally disturbed adolescents, ages 13-21, has just completed its first year. Seven teachers (4 full time) have taught 16 students such subjects as English, History, Algebra, Latin, French, German, and Physiology.

During the next two years Drs. de Marneffe and Kenney, through various tests, observations, and discussions with the teachers involved, hope to learn "what teacher attitudes, techniques of instruction and control, and what classroom, social, and emotional climates promote the most effective learning in a group of emotionally disturbed adolescents".

When completed, the findings of the study will be published.

Dr. Frechette has also announced the award of a one-year project grant to Dr. Thomas B. Fitzpatrick, Chief of our Dermatology Service, and Dr. Hitoshi Takahashi, a Research Fellow in Dermatology at the Hospital.

Their project will concern itself with the study of the formulation of red and yellow pigments in man and other mammals—the formation of brown and black pigments being well understood already, according to Dr. Fitzpatrick.

New addresses:

Dr. Homer L. Ash (*Dn.* 1960), 29 Lincoln St., Framingham, Mass.
Dr. James B. Ayer (hon. p.), 1350 Canton Ave., Milton, Mass.
Dr. Daniel M. Bachman (clin. & res. fel. *M.* 1956), Dept. of Medicine, University of Oregon Medical School, Portland 1, Oreg.
Dr. Dudley M. Baker (sr. r.s. *Or.* 1962), U.S. Naval Hospital, San Diego, Calif.
Dr. Peter Van D. Barrett (*M.* 1961), National Cancer Institute, National Institutes of Health, Bethesda 14, Md.
Dr. Arthur E. Baue (*S.* 1955), University of Missouri Medical Center, Columbia, Mo.
Dr. Richard F. Bedell (*C.M.* 1958), 3300 Eastman Ave., Boulder, Colo.
Dr. Edward B. Benedict (*W.S.* 1926), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Arthur E. Brown (clin. a. *M.*), 501 Boylston St., Boston 17, Mass.
Dr. Robert N. Buchanan, Jr. (r.p. *D.* 1941), 1905 Hayes St., Nashville 3, Tenn.
Dr. Charles E. Burden (a.r.p. *C.* 1961), 1 North St., Bath, Maine
Dr. Charles R. Campbell (r.p. *Path.* 1955), 100 S. San Mateo Drive, San Mateo, Calif.
Dr. Fernando A. Cardenal (a.r.s. *Or.* 1959), Organisation mondiale de la Santé, W.H.O., B.P. 1899, Leopoldville, République du Congo
Dr. David L. Collins (*S.* 1955), Cabarrus Medical Bldg., Ardsley Rd., Concord, N.C.
Dr. Eubert J. Daniel (res. fel. *Or.* 1961), Dept. of Pathology, Duke University School of Medicine, Durham, N.C.
Dr. Jack Ellenberg (r.p. *Psychiat.* (*McL.*) 1962), Albert Einstein College of Medicine, Bronx, N.Y.
Dr. Francis F. Foldes (r.p. *An.* 1943), Montefiore Hospital, New York 67, N.Y.
Dr. Stanford B. Friedman (*C.M.* 1958), University of Rochester School of Medicine and Dentistry, Rochester, N.Y.
Dr. Robert G. Frost (a.r.p. *An.* 1961), 56 Cuesta Vista Drive, Monterey, Calif.
Dr. Stephen E. Goldfinger (*M.* 1961), National Institutes of Health NIAMD, Bethesda 14, Md.
Dr. John W. Grover (*S.* 1957), Free Hospital for Women, Brookline, Mass.
Dr. Trygve Gundersen (S. *Oph.*), 520 Commonwealth Ave., Boston, Mass.
Dr. E. Parker Hayden (h.s. *E.S.* 1923), 249 Commonwealth Ave., Boston 16, Mass.
Dr. Gilbert Hermann (*S.* 1955), 1245 E. Colfax Ave., Denver 18, Colo.
Dr. John B. Herrmann (*S.* 1958), Div. of Basic Surgical Research, Walter Reed Army Institute of Research, Washington 12, D.C.
Dr. Myron A. Hofer (*M.* 1959), National Institutes of Health, Bethesda, Md.
Dr. George A. Jacoby, Jr. (*M.* 1959), 36 Fortismere Ave., Muswell Hill, London N. 10, England
Dr. Samuel Kaplan (a. psychiat.), 38 Hyde St., Newton Highlands, Mass.
Dr Hanna Klaus (a.r.p. *Path.* 1953), Holy Family Hospital, Rawalpindi, West Pakistan
Dr. Howard M. Kravetz (clin. & res. fel. *M.* 1962), Phoenix Medical Bldg., 909 E. Brill St., Phoenix 6, Ariz.
Dr. Robert S. Lees (*S.* 1960), Institute of

Cardiology, 35 Wimpole St., London W. 1, England (through June 30, 1963)

Dr. Carl M. Leventhal (a.r.p. *N.* 1962), Massachusetts General Hospital, Boston 14, Mass.

Dr. Gordon K. MacLeod (a.r.p. 1962), Dept. of Pharmacology, Harvard Medical School, 25 Shattuck St., Boston, Mass.

Dr. Alexander M. McPhedran (r.p. *N.* 1962), Dept. of Neurology, Massachusetts General Hospital, Boston 14, Mass.

Dr. Frank A. Mantz (res. fel. *Path.* 1950), Kansas University Medical Center, Kansas City, Kan.

Dr. Harold I. Meyer (r.s. *W.S.* 1925), 104 S. Michigan Ave., Chicago 3, Ill.

Dr. D. Glyn Millard (r.p. *R.* 1960), Box 503, Jaffrey Center, N. H.

Dr. Frances D. Milligan (clin. & res. fel. *M.* 1962), Virginia Mason Clinic, 1118 9th Ave., Seattle 1, Wash.

Dr. Walid A. Mnaymneh (sr. r.s. *Or.* 1962), American University Hospital, Beirut, Lebanon

Dr. Robert K. Osborne (*M.* 1957), Dedham Medical Associates, 743 High St., Dedham, Mass.

Dr. E. William Rosenberg (r.p. *D.* 1959), 899 Madison Ave., Memphis, Tenn.

Dr. Paul M. G. St. Aubin (*M.* 1948), 300 Palos Verdes Blvd., Redondo Beach, Calif.

Dr. Nobuaki Sasano (res. fel. *Path.* 1962), Dept. of Pathology, Tohoku University School of Medicine, Kitayobancho, Sendai, Japan

Dr. David G. Satin (r.p. *Psychiat.* (McL.) 1961), Ellsworth Air Force Base, S. Dak.

Dr. Ronald A. Seltzer (a.r.p. *R.* 1962), Radioisotope Laboratory, Cincinnati General Hospital, Cincinnati, Ohio

Dr. John R. Senior (clin. & res. fel. *M.* 1962), Medical Bldg., Philadelphia General Hospital, Philadelphia, Pa.

Dr. Claire M. Stiles (a.r.p. *An.* 1962), 11523 Adco St., Downey, Calif.

Dr. Samuel J. Sunnenblick (gr. stud. a. *S.* 1956), 19 Pleasant St., Portsmouth, N. H.

Dr. Richard C. Talamo (*C.* 1962), National Institute of Arthritic and Metabolic Diseases, Pediatric Metab. Group, 8N - 250 Clinical Center, National Institutes of Health, Bethesda 14, Md.

Dr. Richard A. Weinberg (a.r.p. *D.* 1962), 18 - 7 Valley Rd., Drexel Hill, Pa.

Dr. C. Gene Wheeler (*S.* 1956), Swiss Ave., Dallas 4, Tex.

Brief bits:

Dr. Daniel M. Bachman was a Clinical and Research Fellow in Dr. Bauer's Arthritis Group from 1954 to 1956. Since he left the Hospital, Dr. Bachman has been on the full-time faculty of the University of Oregon Medical School, in Portland, Oregon, where he has worked to develop a Division of Rheumatology. There had been no such Division in the University of Oregon Medical School in the past. On July 1, Dr. Bachman assumed the duties of Head of the Division of Rheumatology and was promoted from Assistant Professor to Associate Professor of Medicine at the University.

Dr. Henry H. Brewster (*W.M.* 1940) left the University of Colorado Medical School in July and returned to join our Psychiatry Staff. Dr. Brewster's office is in the Charles River Park Office Building, 1 Emerson Place.

Dr. Earle M. Chapman was moderator at a Panel on Thyroid Disease at Mercy Hospital, Long Island, N.Y., on March 21. On March 29, he gave a talk on "Physiologic consideration in therapy of disease of the thyroid" at Emerson Hospital in Concord, Mass.

Dr. Cope was elected president of the American Surgical Association at the meeting of the Association held in Washington, D.C., on May 11.

Dr. Oscar S. DePriest, III (*S.* 1955) has assumed the duties of Chief of the General Surgical Services at Kimbrough Army Hospital at Fort George G. Meade, Md.

Dr. Ernesto R. Lima has recently been appointed the Minister of Health in El Salvador. Dr. Lima was a Graduate Student Assistant in Cardiology at M.G.H. in 1953-1954 and again in 1959-1960.

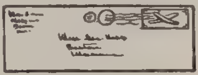
In addition to his office at 18 Moore Street in Belmont, Dr. Edward A. Nalebuff maintains a second office at 1180 Beacon Street in Brookline, Mass.

Dr. Joseph L. Shugar (a.r.s. *Or.* 1950) has been appointed Chief of the Orthopedic Service of the Jewish General Hospital in Montreal, Canada.

Dr. Arthur S. Spangler gave a lecture on "Papular dermatitis of pregnancy" at the Hospital of San Juan de los Dios in Madrid, Spain, last March. While there, he also conducted clinics at the hospital and at the Research Institute. Dr. Spangler made this comment in connection with his visit to Spain: "We hear so much about socialized medicine, that it was very interesting to study the practice of medicine under a dictator. I am more than ever grateful for the American way of life."

Rev. Paul R. Swanson, Administrative Protestant Chaplain and Director of the Institute of Pastoral Care at M.G.H., resigned as of August 31 to become Professor of Pastoral Care at the Lutheran School of Theology in Rock Island, Ill.

With the recent appointment of Dr. Renato Tagiuri (clin. fel. *An.* 1951) as Professor of Social Science at Harvard University, he becomes the 40th member of the Anesthesia Laboratory to have achieved a professorship or its equivalent. Twenty-two are in the field of anesthesia, and 18 are in other fields: 2 in anatomy, 2 in pharmacology, 1 in physiology, 3 in neurophysiology, 1 in biophysics, 2 in chemistry, 1 in mathematics, 1 in medicine, 4 in surgery, and 1 in sociology.



We were very glad to receive this letter from Dr. Dean A. Clark, our General Director from 1949 to 1961:

Thank you for your letter of July 4 and for your good wishes.

I am now Visiting Professor of Medical and Hospital Administration at the University of Pittsburgh, where I am an associate of Dr. Cecil G. Sheps, who was formerly Executive Director of Beth Israel Hospital in Boston.

My principal work at present is assisting in the conduct of a study of the nature of the affiliation between the medical schools of this country and their associated teaching hospitals. This is a nation-wide study and many interesting and complicated findings are already apparent. It is the hope of the study that it may provide some assistance to medical schools and hospitals in perfecting their arrangements for affiliation.

There may be other studies later which might interest the readers of The News. If so, I will let you know.

Best wishes.

This letter has come to us from Dr. Rodney F. Atsatt (*Or.* 1926), our "singleton" in Ojai, California:

After two years in Boston, I began practice in the Santa Barbara Clinic as the orthopedic surgeon (1927). I remained in this capacity for fifteen years.

On December 22, 1941, I was ordered to active military service and was assigned to the Naval Hospital at San Diego. While there I was retired on account of a mild Parkinson's stemming from an encephalitis which I had in WW1 at Yale Army Laboratory School.

Immediately after a token retirement, I was ordered to Section Base, Santa Barbara. My next duty was as Senior Medical Officer at Midway Islands (my rank had always been Comdr., MC, USNR). After nine months there, I was sent to USNBH 18 at Guam, where I was Chief of a very active Orthopedic Service.

With nine months out there and with accumulated leave, I was separated from the Naval Service in January 1946, having served more than four years. The little WAVE at San Francisco asked me if I didn't want to take a Refresher Course in Orthopedics!

I resumed practice in my own office and, after a few years, I brought in Dr. Leonard Burgess as a partner. I retired in 1959 on account of my Parkinson's, moved to Ojai, California, and am enjoying life here.

Dr. Robert H. Vaughan (*E.S.* 1944), our "singleton" in Columbus, Georgia, has sent us this nice letter:

I finished at the M.G.H. in 1944 and subsequently finished general and thoracic surgical training in Boston and New York, as well as serving for two years in the Service. I began private practice here in 1953. I have been certified by both specialty boards—general and thoracic.

I married the former Mary Percy of Chestnut Hill, Massachusetts, and have four children—two daughters (ages 16 and 15) and two sons (ages 12 and 7). We still have several mortgages to pay off besides getting additional ones, but private practice is challenging and most enjoyable. We like it here in Georgia, and particularly enjoy the golfing all year round, with the fishing sandwiched in between.

I well remember my year at the M.G.H., and some of the most enjoyable times I spent were on Sunday evenings with Mrs. Cushing playing the organ in the Baker Memorial Chapel while a group of us sang the old hymns that I love—some of which I still sing now in the choir at the St. Paul Methodist Church.

My regards to all those who remember me.

Dr. Frank B. Norbury (*M.* 1949), another MGH "singleton", has sent us this letter:

Thank you for your letter asking for something about me and Jacksonville, Illinois.

It seems a long time since I visited Boston and the M.G.H. I regretted that I was unable to be there for the 150th Anniversary in 1961.

For the past eight years I have been practising internal medicine and neurology here in Jacksonville—a city of 25,000 located near Springfield, Illinois. This is a college town. Illinois College and MacMurray College have been located here for over a hundred years. There is also a State Hospital and a State School for the Blind and a School for the Deaf. Practice in this community is interesting, and professionally and personally rewarding.

My chief outside interests are gardening, community activities, and, of course, my family which now numbers four children.

I was temporarily out of duty last winter and spring due to illness but have fully recovered, and am now busier than ever before.

This exciting letter has come from Dr. Harvey F. Zartman (*C.M.* 1954), our "singleton" in the entire State of Alaska:

I am indeed flattered that someone noticed there is an MGH-er this far up in the north woods.

Mine is an extremely busy practice of pediatrics in this town which has the distinction of having the highest birth rate per capita of any city in the country, and that is easy to believe every time one walks down any one of the main streets. The town swarms with children, most of them healthy and happy in this rather cold climate. I am associated with two other pediatricians and, together with one other man in solo practice in this town, we compose the entire supply of pediatricians for the entire State of Alaska, except for the government services. As a result, we do get a fair number of referrals from the outlying districts. In addition, my colleagues and I serve as consultants in pediatrics to the very large Native Health Service Hospital here in

Dr. Robert S. Shaw, Associate Visiting Surgeon

Anchorage, which cares for the Eskimo and Indian children (as well as adults) for the State of Alaska.

We currently are about to enter a lovely new general hospital which has just been completed for the city of Anchorage by the Sisters of Providence and can ultimately be enlarged to almost a 600-bed capacity. It is built along the lines of the White Building, and most of us have fond aspirations that in the far distant future it will be the center of a medical school in the State of Alaska. Currently, the University of Alaska is located several hundred miles to the north, in Fairbanks, but the Methodist Church has opened a lovely new university adjacent to our new hospital—the Alaska Methodist University, and it may become the focus for professional medical activities at some time in the future.

I have found my practice of pediatrics to be so time-consuming that I have had very little time for outside activities other than occasional picnics and hiking trips with my wife and my own children into some of our beautiful countryside. However, a large number of the doctors here own their own light planes, and flying is a major interest. Our winter season is long and our hills are high, and several of them are now equipped with lovely ski tows and other services to attract the best skiers in this and other areas. We hope to be the seat of Olympic skiing in the not too distant future.

Anchorage is not, as may sometimes be supposed, a small town far in the north land. We are now a sizable city of upwards of 60,000 people within the corporate city limits and several large suburbs immediately adjacent; and we extend from the edge of Cook Inlet all the way back to the Chugach Range (which may limit the ultimate expansion of this metropolis). We have recently completed a seaport which is now used by barges and by a number of the Japanese trading vessels, as well as by the military in transporting men and equipment to and from Alaska. We are the location for the large Elmendorf Air Force Base and for the very large Army installation at Fort Richardson, and are currently becoming the center for the gas and oil activities by the large oil companies as they move their branch offices up north in order to tap the apparently extensive resources of the Kenai Peninsula.

One visiting this town is not very likely to run into Eskimos and Indians any more, or even really true "old sourdoughs" of the gold mining era. The town has taken on quite an international flavor because of the large airport which services the jets of SAS, KLM, Northwest, PNA, and Alaska Airlines, to name but a few; and it is a poor day in any week when one or more dignitaries of world renown do not stop at least for a cup of coffee in the International Airport.

Any MGH-ers who are in this area should feel free to give me a ring and I will be happy to show them as much of the town as they have time for. I don't happen to own a light plane myself, which is a moderate handicap in this part of the world, but many doctors here do, and they delight in taking "outsiders" round to show them the gorgeous glaciers and the mountains.

Dr. William M. Shedden (*E.S.* 1920 and *W.S.* 1922) has sent us a letter, written in his usual delightful style. His new address—290 John Anderson Drive, Ormond Beach, Florida—means that he still retains his "singletonship" in his new location. He writes:

In response to your letter requesting "local color", I am at a loss as to what material you would like—material which would interest your readers.

After resigning as Chief Surgeon of the V.A. Hospital in Lake City, Florida, I fully intended to retire, but little did I know the penalties of such an attempt. It is assumed that one must, in such a situation, have plenty of time, so: (a) after running the American Cancer Society campaign for Florida, (b) I was tackled to run the Orthopedic Centre here as Medical Director "till someone could be found". That was two years ago!

I'm flying several times a week in a Cessna 140. I love it!

My daughter, a Ph.D. psychologist, lives in Daytona with her family. My oldest son has successfully weathered the Eastern Airlines strike and went back as a senior pilot in New Orleans on September 13. He flies N.O. to New York.

The *New England Journal of Medicine* is avidly read in this area. My copy finds eager hands.

I had a good visit with Dr. Parker Hayden (h.s. *E.S.* 1923) at the American Proctological in Miami.

I've done a bit of oil painting. A recent one-man show here exhibited 24 of my meager efforts—landscapes and portraits and seascapes.

Finally, *how does one retire?* I haven't been able to yet.

For six years we have tried unsuccessfully to locate Dr. Haukur Kristjansson (a.r.s. *Or.* 1946). We traced him to Iceland, but even a letter to a director of a hospital in Reykjavik received no reply. Recently, when Dr. Snorri P. Snorrason (gr. stud. a. *M.* 1955) renewed his subscription to The News and gave his address as Iceland, we appealed to him for help and, thankfully, received the information we needed. Dr. Snorrason says:

As I have been away from home for a while I have just received your letter dated July 12. I feel sorry for my countrymen who are known for replying to letters late or not at all!

The address of Dr. Haukur Kristjansson is Grettisgata 94, Reykjavik, Iceland. This is his home address. He works at the City Hospital, Baronsstig 47, Reykjavik, where he is in charge of the Emergency Service. I might add that a few years ago he became seriously ill and paralyzed from polio, but is now working efficiently, although much handicapped.

I would like to use this opportunity to express my thanks for The News, which I appreciate greatly and which keeps me in constant touch with the great M.G.H. and the fine people there.

I hope that I can later send you some Icelandic postage stamps for your collection.

⁂

Contributions to The News in the amount of $640.50, over and above the subscription fees, were received during the fiscal year 1961-1962.

A note of appreciation is always sent to each contributor, but The News takes this opportunity to express publicly its thanks for such generosity from so many of its readers.

The News

1811

No. 216 Boston, Mass. November 1962

HEPATIC REGENERATION

A PROBLEM OF GROWTH REGULATION

In the early 1930's the absorbing problem of how growth is regulated in normal tissues began to engage the attention of members of the J. Collins Warren Laboratories of the Collis P. Huntington Memorial Hospital, now located at the Massachusetts General Hospital. Since their inception these laboratories have been dedicated to the study of cancer. Dr. Joseph C. Aub, writing some years later in the MGH NEWS, remarked that during this early period the investigation of normal growth was severely criticized on the grounds that it was not a study of the cancer problem. (Readers of this paper need hardly be reminded that Dr. Aub's association with the Huntington Hospital began in 1928 and that he was director of its medical laboratories from 1943-1956.) The thinking at the Huntington was in advance of the times; within a decade it was generally agreed that this approach was essential to an understanding of malignant disease. Now, thirty years later, it continues to engross the attention of cancer investigators here and throughout the world. Within the Huntington Laboratories—to cite a few examples—Dr. Paul C. M. Zamecnik, the present director, and his group are studying how cells build proteins; Dr. Lewis L. Engel and associates are exploring the intricacies of action of steroid hormones, which are potent regulators of growth in specific tissues; Dr. Jesse F. Scott and co-workers are investigating the nucleic acids—the substances that transmit genetic information; Dr. John W. Littlefield is examining the production of these latter substances by cells in rapid phases of growth in tissue culture; other members of the department are engaged with other substances and other biological materials. All are working on aspects of the same broad problem, although the approaches are varied.

That a diversified approach is inherent in the programs and personnel of the Huntington Laboratories is explained by Dr. Zamecnik in the MGH *World* of December 1953. "This is not 'programatic' research where everyone works on one small part of a master plan. We share equipment and ideas among ourselves and with other groups in the Hospital, but the research workers here, coming from different scientific disciplines, rely on their own inspiration in devising approaches to the problem of growth regulation."

The remainder of this article will describe the approach used in the author's laboratory within the framework of the Huntington. Since about 1947 we have been attracted by the mechanism that controls the restorative growth (usually called regeneration) that rat liver undergoes after part of it has been removed surgically. Classical studies in this area were carried out here by Dr. Austin M. Brues in the middle 30's and early 40's, setting a standard of performance that continues to challenge us. (Dr. Brues is now Director of the Biology Division at the Argonne National Laboratory.)

Under normal conditions, adult rat liver is relatively static and its cells rarely divide. When the two main lobes are excised (about two-thirds of the total), the remnant begins to enlarge within a few hours and extremely rapid growth ensues. It gradually tapers off as the original number of cells is restored (within about two weeks), after which growth ceases. Dr. Brues studied these changes in detail, and pointed out that during the first three days, when the growth rate is very rapid, it far exceeds that of the most malignant neoplasms, yet remains perfectly controlled. The core of the problem is the means by which this control is effected.

Round 1949, in collaboration with Drs. Scott and Aub, we began to study rats surgically joined in parabiotic union so that cross-circulation of blood occurred between them. Partial removal of the liver in one partner increased the rate of cell division in the liver of the other. This finding, also obtained in laboratories elsewhere, suggested that the regenerative response was initiated by changes in the chemical composition of the blood. When 80% of the liver was excised from two of the partners of parabiotic triplets, the effect on the liver of the remaining intact partner was greatly augmented. This promising beginning led to the optimistic notion that we had only to inject or infuse blood or plasma from partially hepatectomized rats into normal animals to demonstrate a stimulatory type of control mechanism; or, conversely, we could inject normal plasma into animals with regenerating livers to show that a circulating inhibitor might be the primary regulator of liver growth. Unfortunately, neither here nor elsewhere have such experiments been consistently successful, and the main result of a great deal of work is an impressive accumulation of contradictory observations, more negative than positive.

This discouraging state of affairs called for new tactics. One such effort led us into an unpremeditated but productive bypath, through an interest, stimulated by Dr. Aub, in changes that might occur in the surface of cells when they divide. Liver cells had previously been isolated in our laboratory for morphological studies by Dr. Paul M. G. St. Aubin (who subsequently joined the Radiology Department). They looked beautiful under the microscope, but were functionally deficient. During the course of seemingly endless attempts to restore their viability, we investigated their capacity to synthesize cholesterol. This had been proposed to us as a useful indication that the cells might be intact. Surprisingly, we found that cell parts could synthesize cholesterol as effectively as whole cells if the conditions for breaking up the cells were carefully controlled. This fortuitous discovery provided exciting opportunities to probe into the capabilities of these various cell parts to synthesize important compounds, and to explore possible regulatory mechanisms. Thus, from this time on we discarded the formerly treasured whole cells and salvaged the previously ignored debris which could now be separated by centrifugation into structural entities such as nuclei, mitochondrial and microsomal fractions, capable by themselves of functioning to form new molecules. We are indebted to Dr. Ivan D. Frantz, Jr. (at that time in charge of the Cardiovascular Research Laboratory and now Clark Research Professor at the College of Medicine of the University of Minnesota) for valuable technical advice and collaboration in a study to show that the substance formed by the cell fractions we were studying really was cholesterol. In addition to launching us upon an interesting study, the technique for gentle disruption of liver cells gave a boost to our colleagues in Dr. Zamecnik's group who were studying protein synthesis in cellular particles by greatly enhancing the activity of their preparations. Further, it opened the way for investigators here and elsewhere to piece together the chemistry of how cholesterol is formed step by step in living cells—a puzzle that was then quickly solved once the barrier of the cell membrane could be dispensed with.

Cholesterol is an essential constituent of cells of all higher animals. It contains twenty-seven carbon atoms formed by joining together two carbon units (acetate) in a complicated process involving at least twenty-four steps. We found that all of these could be carried out by the soluble components in combination with the small granule (microsomal) fraction of disrupted cells.

The arrival of Dr. Alden V. Loud, who stayed with us for several years before becoming an Assistant Professor of Biophysics at Wayne State University College of Medicine, provided an impetus to study squalene, a long thirty-carbon molecule that coils up (cyclizes) to yield the steroid configuration ultimately leading to cholesterol. Dr. Loud had been studying the rate of turnover of this substance in Dr. Frantz's laboratory, and with us went on to measure the size of its metabolic pool. Working together, we later showed that in the absence of molecular oxygen, liver preparations did not convert acetate into cholesterol because squalene could not cyclize without oxygen; instead, the acetate got only as far as squalene, which accumulated because the reaction could go no further. Using this mode of blockage as a tool to bisect the biosynthetic pathway between acetate and cholesterol, coupled with techniques developed elsewhere for measuring earlier segments of the reaction sequence, we obtained evidence for a major rate-limiting step—roughly analogous to a bottleneck in an assembly line—at an early stage in the pathway. Later on, while the author was on leave of absence to work in Professor Feodor Lynen's laboratory in Munich, it became possible to localize the bottleneck more precisely at the point where a six-carbon compound (β-hydroxy-β-methyl glutaryl CoA) is importantly altered (reduced) by a microsomal enzyme. It is probable that at this point most physiological controls operate on the production of cholesterol by the liver. An end product inhibition involving the level of cholesterol itself is probably one of the mechanisms concerned (higher concentrations of cholesterol are reported to prevent the reduction of the above CoA compound).

Our initial hope was that a system such as the above would guide us in seeking ways that the mechanism for physiological control might operate in regenerating liver. However, it is obvious that far more precise knowledge of the systems in regenerating liver would be required before any such mode of operation could be investigated, and we are now working in this direction.

Taking a different tack, in other kinds of experiments we began exploring at the biochemical level the early events leading to cell division. While visiting Dr. Daniel Mazia's laboratory in Berkeley, the author, in collaboration with Dr. Mazia, examined the first and second known events leading to mitosis and cleavage in fertilized sea urchin eggs—the duplication of the cell centers and the synthesis of DNA. These two major reproductive events, although normally occurring in sequence, could be dissociated experimentally and shown to occur independently. This finding is in agreement with the idea of some biologists that mitosis is not triggered by a single event, but rather that a number of separate preliminary steps have to take place before the final co-ordinated mitotic division can occur.

An interest in X-irradiation as a possible tool in the study of liver regeneration was stimulated by Dr. Mary D. Albert, who spent several years with us in the late 1950's before leaving to teach at Northeastern University. Moderate doses of X-irradiation have little apparent effect upon normal adult liver unless it is induced to regenerate. The latent damage then manifests itself as a delay in starting DNA synthesis and mitosis. As longer times (weeks) elapse between irradiation and partial hepatectomy, the delay becomes less and gradually disappears. However, other forms of damage, involving the distribution of the genetic material between the daughter cells, seems to persist indefinitely. It seems that certain functions relating to early steps in the process of cell reproduction are impaired by X-irradiation, even when the cells are in a non-dividing state. The fact that steps at the beginning of the process are affected makes this kind of study worthy of continued effort, since it may provide another way of looking into what starts regeneration.

The rate of incorporation of radioactively-labeled precursors into DNA has provided a useful index of regenerative activity. Twenty years ago Dr. Brues showed that DNA synthesis is very low in normal liver and rises to high levels during regeneration, as the cells duplicate their genetic material before dividing. The subject is still being intensively studied in many laboratories. Recently we have shown that the response is rapid in baby rats, but becomes slower with increasing age. It also varies, as one might expect, with the size of the stimulus, but only down to a point. If 30% of the liver is removed instead of the usual 68%, the response is small; but if 40% is excised, the rise in DNA synthesis is much larger. There seems to be a relatively sharp threshold that must be exceeded before a really active growth response is achieved. Having established a number of points such as these, in order to have a firm base line from which to operate, we are now beginning to study events that occur before the start of DNA synthesis, seeking sources of prior activities that hopefully may some day disclose what sets the whole process in motion. The mainstay of these studies is Miss Miriam Swaffield who joined us several years ago and has developed a flair for rat surgery, in addition to her skill in biochemical manipulations.

The above paragraphs represent a selected sampling of our activities, intended to convey the general directions in which we are proceeding. We have benefited from and enjoyed the transitory participation of a succession of students, premedical or medical—many now advanced to higher status, including Mitchell T. Rabkin, Ellen Cary, John W. Grover, Robert W. Colman, Julian Wallace, James P. Keating, Joseph F. Di Troia, and Martha Webb. We are grateful to a long list of interested and hard-working research assistants from whose labors and words of wit and wisdom we have greatly profited. Miss Gladys Friedler has recently joined us in this category, cheerfully exerting her capabilities on problems relating to cholesterol and regeneration sequentially. In addition to the professional collaborators mentioned above, Dr. Andre D. Glinos (now at the Walter Reed Army Institute of Research) was here for two years in the late 1940's, during our early acquaintance with regenerating liver; and Dr. Michael C. Schotz was here briefly in the early 1950's while awaiting a tour of duty in the Armed Forces.

During all of this time we have had the very real pleasure of exchanging assistance and advice with friends and associates at the M.G.H. Its congenial atmosphere is a continuing joy. Although our contact with the main stream of the Hospital's functioning is tenuous in the extreme, we like to think that we provide a reservoir for certain kinds of information and skills, available for service whenever the need arises.

Nancy L. R. Bucher, M.D.,
Associate Biologist (Medicine)

The Board of Trustees, at their meetings on August 17 and September 14, voted:

That Dr. Walter Bauer be granted a medical leave of absence with pay, effective as of June 25;

To accept the resignation of Dr. Edward Los, Assistant in Anesthesia, effective August 5;

That the appointment of Dr. Shyam S. Pant as Clinical Fellow in Neurology be changed to Assistant Resident in Neurology, as of September 1;

To change the title of Miss Willa F. Pasho from Executive Assistant to Administrative Assistant at McLean Hospital, as of August 1;

That the appointment of Dr. Richard W. Sagebiel be changed from that of Third Assistant Resident in Pathology to that of Clinical and Research Fellow and Acting Third Assistant Resident in Pathology, effective as of August 13;

To accept the resignation of Irving Weliky, Ph.D., Assistant Biochemist (Medicine), effective August 31.

To appoint:

Dr. Gerald Adler as Clinical and Research Fellow in Psychiatry, effective as of July 1;

Dr. Lynn L. Ault as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Dr. W. Gerald Austen as Assistant in Surgery, beginning January 1, 1963;

Dr. Howard P. Baden as Clinical Associate in Dermatology, effective as of August 1;

Dr. Michael H. Bell as Assistant Resident in Orthopedic Surgery for one year, beginning January 1, 1963;

Dr. Ernest W. Bergel as Clinical and Research Fellow in Psychiatry, effective as of July 1;

Dr. Samuel J. Braun as Clinical and Research Fellow in Psychiatry, effective as of July 1;

Dr. Henry H. Brewster as Associate Psychiatrist, effective as of August 1;

Dr. Richard E. Conway as Assistant Resident in Orthopedic Surgery for one year, beginning October 1;

Dr. Lyall S. Crary, Jr. as Third Assistant Resident in Surgery, beginning September 1;

Dr. Frederick M. Ehrlich as Clinical and Research Fellow in Psychiatry, effective as of July 1;

Dr. Brendan M. Fox as Assistant Resident in Urology, effective as of September 10;

Dr. Antonio Gomez as Graduate Assistant and Clinical Fellow in Pathology, effective as of July 1;

Mr. Henry H. Harvey as Assistant Administrator at McLean Hospital, effective as of

August 1;
Dr. Sprague W. Hazard as Associate Pediatrician, effective as of September 14;
Dr. Gerald M. Kolodny as Second Assistant Resident in Radiology, beginning July 1, 1963;
Dr. Alfred Kranes as Acting Chief of Medical Services, effective as of June 25;
Dr. Ian F. Macrae as Clinical and Research Fellow in Medicine for one year, beginning August 1;
Dr. Spyros G. Macris as Visiting Anesthetist, for a period of six months, beginning January 1, 1963;
Dr. William A. Miller as Assistant Resident in Anesthesia, beginning July 15, 1963;
Dr. Arnold H. Modell as Associate Attending Psychiatrist at McLean Hospital, effective as of July 20;
Dr. Harry H. Shawdon as Clinical Fellow in Radiology for one year, beginning March 1, 1963;
Dr. C. Norman Shealy as Clinical Assistant in Neurosurgery, for a period of eight months, beginning September 1;
Marvin Snider, Ph.D. as Assistant Psychologist on the Children's Service, effective as of July 1;
Lawrence T. Stoddard, Ph.D. as Assistant Psychologist on the Neurology Service, beginning September 1;
Dr. Glenda R. E. Wacker as Clinical and Research Fellow and Acting Second Assistant Resident in Pathology for one year, beginning January 1, 1963;
Dr. William J. Yount as Clinical Fellow in Medicine, effective as of August 1.

At their meetings during September and on October 3, the General Executive Committee voted:

To rescind the reappointment of Dr. Richard A. Norton as Clinical Fellow in Medicine as of November 1; Dr. Norton has accepted a position at the Lahey Clinic;
That Dr. Harold C. Urschel's term of service as First Assistant Resident in Surgery be considered to have been from January 1, 1961 (rather than July 1, 1961) through December 31, 1961;
That the appointment of Dr. Martin J. Wohl as Resident in Medicine be extended for the period January 1, 1963 through June 30, 1963.

To promote:

Dr. Hibbard E. Williams to the position of Chief Resident in Medicine for one year, beginning January 1, 1963.

To promote the following Interns to the position of Assistant Resident in Medicine for one year, beginning July 1, 1963:

Dr. J. Michael Bishop
Dr. Verne S. Caviness, Jr.
Dr. Edward D. Harris, Jr.
Dr. Brian E. Henderson
Dr. James R. Lehrich
Dr. Robert C. Moellering, Jr.
Dr. William A. Robinson
Dr. George N. Rogentine, Jr.
Dr. John N. Sheagren
Dr. Philip F. Sparling
Dr. Herbert S. Waxman

To reappoint:

Anthony L. Andrikides, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning November 1;
Dr. Joseph W. Burnett as Clinical Fellow in Dermatology for one year, retroactive to July 1;
Hilda Dickoff, Ph.D. as Research Fellow in Psychology, in the Department of Psychiatry, beginning September 21;
Kaney Ebisuzaki, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;
Dr. Joan W. Flacke as Assistant Resident in Anesthesia for one year, beginning October 1;
Dr. M. Judah Folkman as Second Assistant Resident in Surgery, beginning August 1;
Dr. Ulf A. Friberg as Research Fellow in Orthopedic Surgery for one year, beginning November 1;
Samuel R. Kamhi, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning October 1;
Dr. Richard Masters as Clinical and Research Fellow in Dermatology, beginning September 1;
Annette M. C. Rapin, Ph.D. as Research Fellow in Biochemistry for one year, beginning September 1;
Dr. Alberto Salama as Clinical and Research Fellow in Neurology for one year, retroactive to July 24;
Dr. Vincent W. Steward, with a change of title from Clinical Fellow to Clinical and Research Fellow in Neurology, for an additional period of six months, beginning July 1;
Dr. Shizuko Takahashi as Research Fellow in Medicine for one year, beginning September 15;
Dorothy F. Travis, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning October 1.

To appoint:

Cyrus R. Creveling, Ph.D. as Research Fellow in Biological Chemistry, effective as of September 1;
Dr. Camille J. Francois as Research Fellow in Orthopedic Surgery for one year, beginning August 30;
Dr. Alistair G. C. Renwick as Research Fellow in Medicine for one year, beginning September 26.

* * *

Mr. Ralph Lowell, Chairman of the McLean Hospital Committee, officiated on October 15 at the cornerstone laying ceremony for McLean's new Rehabilitation Center.

Several items were deposited in the cornerstone, including the McLean Hospital's Annual Report, a list of the names of the members of the Architectural and Building Committees, and other documents dealing with various aspects of patient care and research.

A detailed description of the proposed Rehabilitation Center appeared in the November 1961 issue of THE NEWS.

* * *

VOLUNTEER GROUPS

THE M.G.H. SERVICE LEAGUE

The Service League gave a tea in Bartlett Hall on October 2, in honor of our professional visitors from other countries. More of these doctors and their wives than ever before attended the tea—many of the ladies appearing in their attractive native costumes.

Mrs. Glenn E. Behringer was chairman of the tea. She was assisted by twelve hostesses, five ladies in the receiving line, and eight others who poured.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Jeanloz, R. W., and Flowers, H. M.
The isolation and synthesis of the methyl ester-methyl α-glycoside of 3-*O*-*β*-D-glucuronosyl-*N*-acetyl-D-glucosamine (hyalobiuronic acid).
J. Am. Chem. Soc. 84:3030.

Biology

Gross, J., and Lapiere, C. M.
Collagenolytic activity in amphibian tissues: A tissue culture assay.
Proc. Nat. Acad. Sc. 48:1014.

Dermatology

Spangler, A. S., Reddy, W., Bardawil, W. A., Roby, C. C., and Emerson, K.
Papular dermatitis of pregnancy.
J.A.M.A. 181:577.

Endocrinology

Benedict, P. H., Cohen, R. B., Cope, O., and Scully, R. E.
Ovarian and adrenal morphology in cases of hirsutism or virilism and Stein-Leventhal syndrome.
Fertil. & Steril. 13:380.

Orthopedic Surgery

Cave, E. F.
Causes and management of delayed union and nonunion of fractures of long bones.
Manitoba Med. Rev. 42:419.

Psychiatry

de Marneffe, F., and Prekup, J. T.
The McLean Hospital Rehabilitation Center.
Ment. Hosp., Aug. 1962:410.

Radiology

Little, J. B.
Partial obstructions of small and large bowel.
J.A.M.A. 181:627.

Millard, D. G.
Renal siderosis.
Radiology 79:290.

* * *

ADVANCES IN THE STUDY OF CERTAIN HEMORRHAGIC DISORDERS

Since my last report in THE NEWS of September 1954, I, in collaboration with Drs. Edward S. Rendall, Joseph J. McGovern, Louis Kunian, John R. Graham, and Harold S. Anstall, have pursued the study of a bleeding disorder that I had previously termed Idiopathic Bleeding Time Defect (IBTD). As the years have gone on, the records of more patients studied have been added to the series and more time has elapsed for long-term follow-up. In September 1961, I had the opportunity to present a summary of these studies at the 8th Congress of the European Society of Haematology, held in Vienna. The following brief notice summarizes our findings to date:

Since my previous publications (1, 2), observations of a large number of individuals have been continued and during the last decade there have been studied a total of 135 patients. As will be elaborated below, these patients appear to possess a hemostatic defect involving only the bleeding time. Inasmuch as the etiology of this condition is unknown and inasmuch as this syndrome appears to differ from other hemorrhagic syndromes, we prefer the term Idiopathic Bleeding Time Defect (IBTD). This term is quite analogous to the term "Idiopathic Thrombocytopenic Purpura", embodying the fact that the etiology is unknown and stating the major defect in hemostasis.

At the outset it should be emphasized that IBTD is not synonymous with "pseudohemophilia" or with "von Willebrand's disease" or with "von Willebrand's syndrome" or with the "inherited autosomal hemorrhagic diathesis with antihemophilic globulin deficiency and prolonged bleeding time" of Nilsson, et al.

Clinical material

One hundred thirty-five cases were studied; 23 percent were males and 77 percent were females. Seventeen patients were studied over a period of one to three weeks, 46 patients from one to ten months, and 72 patients from one to ten years. The ages of patients at the time of establishment of the diagnosis ranged from the first through the eighth decade, but the bulk of the patients fell between the second and fifth decades. In the majority of individuals the disorder had been manifest approximately one decade before the diagnosis was established. None of the patients had any organic disease that might include symptoms of an hemorrhagic disorder.

A completely negative family history was obtained in 70 percent of the patients, both males and females. In the families of only 3 patients was there definite evidence of IBTD.

Functional disease was strikingly prominent in these patients. Twenty-one percent of all the females suffered from migraine. Thirty-five percent of all the males and 71 percent of all the females manifested symptoms of a severe emotional disturbance and in a few instances of a frank psychosis.

Clinical manifestations of abnormal bleeding

Eighty percent of all the individuals furnished a history of ease of bruising: 42 percent of all the males and 88 percent of all the females. Abnormal bleeding from cuts was noted in 30 percent of all the patients: 29 percent of all the males and 31 percent of all the females. Epistaxis was prominent in the history of 42 percent of all the patients: 49 percent of all the males and 40 percent of all the females. Eighteen percent of all the patients complained of bleeding gums: all were females. Menometrorrhagia was a prominent symptom in 76 percent of all the menstruating women; among 32 postmenopausal women a past history of menometrorrhagia was obtained in 50 percent of the cases; but in 28 percent of these postmenopausal women the previous menstrual history was uncertain. In conclusion, menometrorrhagia was prominent in the history of 72 percent of all the women.

Spontaneous bleeding from other sources was very infrequent. In 3 patients retinal hemorrhage and in 1 patient vitreous hemorrhage led to serious defects. Only 1 patient manifested gastrointestinal bleeding, and in this individual the diagnosis of a small gastric or duodenal ulcer was not entirely eliminated. Non-lacerating trauma was followed in one boy by a subgaleal hematoma, in another boy by a retroperitoneal hemorrhage, and in 1 man by a subdural hematoma. There were no instances whatever of hemarthroses or of bleeding into the muscles after trauma.

Abnormal bleeding following a variety of surgical procedures was very prominent in the past history of these patients. The commonest operations included tonsillectomy among 70 patients; 40 instances of abnormal bleeding were related by these patients, 30 probably had no abnormal bleeding. Among 42 patients who had undergone appendectomy, 32 operations were uneventful and 10 were followed by probable abnormal bleeding. Dilatation and curettage in 32 women was uneventful in 26 cases, and was followed by abnormal bleeding in 6 cases. Among 22 women who had undergone hysterectomy, abnormal bleeding was certain in 15 cases. Other surgical procedures carried out in far fewer patients resulted in varying degrees of bleeding. The largest incidence of abnormal bleeding followed extraction of cataract, submucous resection, rhinoplasty, radical sinus surgery, breast biopsy, all types of bone surgery, muscle and tendon surgery, and excision of skin lesions. On the other hand, circumcision in 7 infants was uneventful in all cases.

Multiple dental extractions, with or without alveolarplasty, were accompanied by a very high incidence of abnormal bleeding. Among 96 individuals, 60 bled abnormally and many of these hemorrhages were observed by us. It is of interest that females bled more frequently than males: among 36 males, 26 bled; and among 60 females, 52 bled.

Pregnancy in women with IBTD was accompanied by no apparent greater incidence of bleeding than in women without IBTD.

Methods

The bleeding time in these individuals was carried out by the previously described method. This method is simple, involves an area of skin surface large enough for multiple serial determinations, and enables mechanical hemostasis by means of a "Band-Aid" type of dressing. A large number of determinations in normal individuals have established 6½ minutes as the upper border of normal. This method is far more sensitive than the conventional needle puncture of an ear lobe.

Other determinations mentioned below were carried out by conventional methods.

Laboratory findings

In every case platelets were normal or increased in number in relation to bleeding episodes. Clot retraction, prothrombin time, and coagulation time were normal. In 115 individuals tested, prothrombin consumption was normal. In 32 individuals studied, the thromboplastin generation test yielded normal results. Platelet function in the thromboplastin generation test was normal in 5 individuals studied.

Among 135 individuals not under the influence of corticosteroids, the bleeding time was determined on 454 occasions. It is evident that with the exception of periods of pregnancy, values of less than 7½ minutes are very few in number, and these low values were found in patients who at other times manifested very high values. Analysis of these data by means of the Chi square test demonstrated no significant difference in the bleeding time levels between males and non-menstruating females, a longer bleeding time in the 7-11 day group during the menstrual cycle, and a shorter bleeding time during pregnancy.

Treatment

Among the 135 cases were 25 individuals with postoperative bleeding prior to evaluation of the disorder. These patients had been treated with multiple transfusions of bank blood and fresh blood, vitamin K, Premarin intravenously, Adrenosem both orally and intramuscularly, and ascorbic acid. Neither the clinical bleeding manifestations nor the bleeding time were influenced by these forms of treatment. The use of corticosteroids in the treatment of IBTD originated in previous observations first reported in 1953 (1). Since that time, treatment with corticosteroids has been used in 103 individuals on 141 occasions. The indications for treatment included preoperative preparation, postoperative bleeding, and in the presence of various types of spontaneous bleeding. On 96 occasions in 82 patients the bleeding time was measured the day of beginning treatment and during the following seven successive days. These observations demonstrate that within twenty-four hours after beginning treatment, the average bleeding time reached 8 minutes, remained close to 7 minutes through the fourth day, and then fell further during the remaining three days of observation. In most preoperative instances, treatment was begun forty-eight to seventy-two hours prior to surgery. Gradual daily reduction in dosage of the medication was instituted most commonly two to four days postoperatively, and in most instances the medication was omitted by the tenth postoperative day. Among the large variety of surgical procedures, preoperative and postoperative treatment was very effective in reduction of the degree of postoperative bleeding.

The vast majority of the treated individuals were given Cortisone Acetate orally or intramuscularly, or Prednisone or Prednisolone orally or intramuscularly. For the most part, the dosage used in adults of Cortisone Acetate has been 300 to 400 mg. daily, and of Prednisone or Prednisolone 60 to 120 mg. daily. Proportionately smaller doses were used in children. Other corticosteroids were used in a smaller number of individuals. All of the corticosteroids appeared equally effective in controlling the bleeding manifestations and the bleeding time. In no instance was any attempt made to maintain a patient on continuous daily dosage of corticosteroids.

Discussion

IBTD appears to be largely an acquired defect and is seen predominantly in females. In these respects and in the clinical bleeding manifestations, IBTD appears distinct from other hemorrhagic disorders previously reported. The pathogenesis of IBTD is obscure. Abnormal capillary permeability appears likely. The possible role of the autonomic nervous system is a problem for further study. It is to be noted that there are certain similarities between IBTD and idiopathic thrombocytepenic purpura. In both conditions heredity appears to play no significant role, both disorders appear predominantly in females, both are characterized by a chronic course with occasional remissions, and, in both disorders, the respective defects are sensitive to corticosteroids.

Bernard M. Jacobson, M.D.,
Physician

REFERENCES

(1) Jacobson, B. M.: Effects of cortisone and corticotropin on prolonged bleeding time. Treatment in certain hemorrhagic states (pseudohemophilia), Arch. Int. Med. 92:471-477, 1953.

(2) Jacobson, B. M.: Menometrorrhagia due to generalized hemorrhagic disorders, *in* Meigs' and Sturgis' Progress in Gynecology, New York, Grune & Stratton, Inc., vol. III, 50-66, 1957.

REFLECTIONS

On the eve, so to speak, of finishing a surgical residency, one quite naturally begins to contemplate the future with a serious air. There is a certain vague question which remains in the background, but which warrants some speculation. The question is: What is the formula for success in work such as ours? What makes the difference between being busy and improving, and just making a living? Some of the answer lies in the effectiveness of the training which has gone before and the skill which has developed, for a poor surgeon will never be successful. Some of the answer is yet to be learned, though, because resident training can go only so far in preparing one for his solo flight. This facet yet to be learned is not the *science* of surgery; it is more accurately the *business* of surgery. It might well be covered in a business school course, and even if not, every good executive seems to have this talent instinctively. It seems to me that the skill one achieves in this respect may very well determine the complete success of his surgical venture.

We have had the opportunity to look at some of these principles in action, even if with but a passing glance. Who could see a well-conducted Grand Rounds, a Medical Society Meeting, or a Clinical Symposium, and not recognize this to be an excellent way for the medical community to see one's work, to evaluate one's professional acumen, and thereby to promote the appreciation of one's skill? Who has heard a smooth, clear presentation of a subject, complete with colored slides, at one of these meetings and has not recognized what good public relations this is? This type of activity could well separate two men of equal surgical ability, one of whom would inevitably increase his following. When the element of time is so great a problem, one might need help in planning the approach. Those of us who have seen a good secretary in action know that here lies the most valuable help in organizing and carrying out this side of a professional life. Letters well typed on good stationery will do wonders toward keeping interested colleagues informed about one's activities and the care of one's patients.

In the effort to gain success, consistent community effort may be an integral part. To find time for this extra-surgical endeavor will be difficult, but time must be budgeted rather than forgotten. In this field, a wife who is interested and active may take on some of the responsibility and be a tremendous help.

As for the innumerable fine points and remaining general principles which I am as yet ignorant of, experience will be an effective, though perhaps a harsh, teacher. If one can learn these lessons well in the beginning and coordinate them into definite action, the road to success must certainly lie ahead.

A. Erik Gundersen, M.D.,
First Assistant Resident in Surgery

New addresses:

Dr. Neil Baggett (res. fel. *Biochem.* (*M.*) 1962), Chemistry Dept., University of Birmingham, Edgbaston, Birmingham, England

Dr. Mervyn F. Burke (a.r.s. 1961), 712 D St., San Rafael, Calif.

Dr. Carl N Brownsberger (a.r.p. 1957), 4535 46th St., N.E., Seattle 5, Wash.

Dr. Walter C. Cotter (r.s. *N.S.* 1957), 110 Lockwood St., Providence 2, R. I.

Dr. Richard F. Gibbs (a.r.p. *An.* 1962), Union Hospital, Lynn, Mass.

Dr. Arnold H. Modell (assoc. psychiat. (*McL.*)), 1419 Beacon St., Brookline 46, Mass.

Dr. Stuart Ragland, Jr. (*M.* 1951), Aviation Medical Acceleration Laboratory, Naval Air Development Center, Johnsville, Pa.

Capt. R. Wyman Sanders, MC, USA (*C.M.* 1959), U.S. Army Hospital, U.S. Forces, Augsberg, APO New York, N. Y.

Dr. C. Gene Wheeler (*S.* 1956), 1008 N. Washington St., Dallas 4, Tex.

Brief bits:

Dr. John Gillies of Edinburgh, Scotland, father of Dr. Alastair J. Gillies (a.r.p. *An.* 1952) of Strong Memorial Hospital, Rochester, N. Y., assumed his duties as Visiting Anesthetist on October 1, for a period of two months.

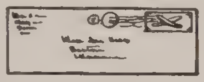
Dr. Roger W. Jeanloz delivered eight lectures in seven countries of Europe during June and July. A list of the titles of these lectures and papers has been filed in the Archives Department.

Dr. George Kelemen (res. cons. *Otolar.*) has been elected a correspondent member of the Hellenic Oto-neuro-ophtalmologic Society.

Dr. Edward Los (a.r.p. *An.* 1961), who resigned from his position as Assistant in Anesthesia last August, has gone to the Monmouth Hospital, Monmouth, N. J.

Dr. Arthur S. Spangler delivered a paper entitled "Papular dermatitis of pregnancy—a systemic disease" before the International Congress of Dermatology, held in Washington, D.C. on September 11. The following scientific exhibit, prepared by Drs. Spangler and Charles S. Keuper, was also presented: "Fibrin foam treatment of depressed scars, plus dermabrasion: 8 years' experience". Dr. Spangler says there were over 40 countries represented, but that relatively few of the papers were from the United States.

Dr. Samuel B. Thompson (a.r.s. *Or.* 1947), in addition to his many other professional activities, has served for twelve years as Medical Advisor to the Claims Department of Liberty Mutual Insurance Company in Little Rock, Ark.



Dr. Donald B. Steenburg (*E.S.* 1915), our "singleton" in Aurora, Nebraska, has sent us this interesting account of his busy life, together with a new address —1018 12th Street:

> In 1958, my brother Dr. Edmund K. Steenburg (*E.S.* 1919), a member of our group since 1920, moved to Washington, D.C., to be on a part-time basis with Moore-McCormick Steamship line.
>
> My two sons, Dr. E. A. and Dr. H. G. Steenburg are now carrying the greater part of the load here in our office.
>
> Our present 30-bed hospital was given by my brother and me to the foundation, which is presently building a 50-bed hospital well located across the street from Cole Park. Our group has purchased on the same tract a large lot and are now planning to erect a clinic building at this site, to be completed in the fall of 1963.
>
> Since 1947 I have been active on the Board of the Nebraska Blue Shield as their vice president. I have also been on the Executive Faculty of the University School of Medicine and have been a member of the Medical Education Committee of the Nebraska State Medical Society.
>
> We still own and operate a number of dairy farms, but my interest will soon be reduced to one farm with the transfer of title to my three children and fourteen grandchildren.
>
> Mrs. Steenburg and I are leaving for our annual trip to the Colorado Rockies soon.

Dr. Nancy L. R. Bucher, Associate Biologist (Medicine)

This brief but welcome letter has come from Dr. Rafe Banks, Jr. (*E.S.* 1943), our MGH "singleton" in Gainesville, Georgia.

I have practised the specialty of urology here in Gainesville for eleven years.

I married Jane Wood of Decatur, Georgia, in 1949 and we now have four children—three boys and a girl.

I am fortunate in having a very good associate, Dr. J. R. Johnson, whose presence gives me the opportunity of enjoying not only my family but also the excellent fishing in these North Georgia mountains.

Dr. H. Irving Bixby (*W.S.* 1924), our "singleton" in Falmouth, Massachusetts, has sent us this interesting letter:

I know I should have been more "vocal" all these years, but I have been very busy. It is only recently that I gave up my office in Attleboro, where I am still Consulting Surgeon at the Sturdy Memorial Hospital and where I was Chief of Surgery for fifteen years.

I look back on my Navy duty at Pearl Harbor in 1942 with fond memories of visiting with Dr. Paul E. Spangler [*W.S.* 1925] and another classmate, Dr. Mon-Fah Chung. The latter had the most beautiful collection of orchids that I have ever seen, and he was doing a splendid job of carrying on the fine traditions of the Harvard Medical School in that area.

This interesting and very informative letter has come from Dr. Harold F. Bosco (*Dn.* 1946), our "singleton" in New Britain, Connecticut:

Thank you for your letter which reminded me that I am an MGH singleton in this area. It has been 16 years since I physically left the grounds of the M.G.H. and the able instructions of Dr. Kurt Thoma. However, the "magic" of the letters M.G.H. will never leave me. I feel that I will never be able to repay the M.G.H. for the opportunity afforded me to learn and train under Dr. Thoma. I will be forever grateful for this experience.

I was married in 1946 to Natalie De Blois, a medical technician. We have 6 children with ages running from 14 years to 4 months (5 boys and 1 girl). Fortunately, I bought a home with enough room for expansion. My home address is 23 Ledyard Road, New Britain.

I will list my professional activities:

1) My practice is limited to Oral Surgery
2) Attending Oral Surgeon, New Britain General Hospital; Lecturer to Medical Staff and School of Nursing
3) Consultant Oral Surgeon, New Britain Memorial Hospital
4) Consultant Oral Surgeon, Bradley Memorial Hospital, Southington, Connecticut
5) Immediate past president, Medical Staff, New Britain Memorial Hospital (1st Dentist ever to hold this position)
6) Member of the Connecticut Society of Oral Surgeons
7) Member of the New England Society of Oral Surgeons
8) Member of the American Society of Oral Surgeons
9) Connecticut Society—Dental Association
10) American Dental Association
11) New Britain Dental Society—past president

My civic activities:

1) Past president of P.T.A.
2) Past president of Lions Club
3) Past president of Council of Social Agencies
4) Commissioner of Health, New Britain—since 1958
5) Member of Farmington Country Club
6) Member of the New Britain Club
7) Member of the Y.M.C.A. Health Club
8) Member of the Mountain Grove Swimming Club, Southington, Connecticut

Hobbies:

1) Golf
2) Music—play trombone
3) Chess
4) Bridge—cards
5) Reading
6) Swimming
7) Children—should be 1st on the list

I wish to thank you for your interest in me.

ARCHIVES DEPARTMENT

The Archives Department is the recipient of two very special gifts, contributed by Miss Hope A. Wheelock (*R.N.* 1916). The first is one of the old brass trays that were used in the Hospital in its early years, and which are prized so highly by those few individuals who were fortunate enough to come into possession of one. The second is a pewter whale oil lamp—an example of the kind which were in common use by our nurses and doctors from the first days of the Hospital up to about 1860. This lamp belonged to Mrs. Florence McLennan Laighton (*R.N.* 1902), who gave it to Miss Wheelock, who has given it to us.

Mr. LeRoy L. Thwing of Cambridge, author of *Flickering flames,* a book on lighting, says the two round wicks and the small size of the lamp unmistakably identify it as a whale oil lamp. Mr. Thwing says that these lamps were actually used as portable lamps after kerosene and even illuminating gas came into use in the mid-1800's, and he thinks this lamp could have been used as late as 1875. Rumor has it—whether true or not—that further use of whale oil lamps at M.G.H. was forbidden when one of the doctors at the Hospital set a bed on fire with one of them.

The initials "W.D.", scratched on the base of this lamp, have elicited the belief that it may have belonged to Walter Dodd at one time. Perhaps a more acceptable interpretation of the initials is that it was the property of Ward D, which was built in 1875. Whatever the facts may be, these initials, "W.D.", make this particular little whale oil lamp in every sense unique and we are most grateful to Miss Wheeler for contributing the lamp and the tray to our Archives Department.

The News

No. 217 Boston, Mass. December 1962

THE HISTOCHEMISTRY LABORATORY

Histochemistry and cytochemistry are two major areas of research in which histologists, cytologists, and histopathologists are engaged at the present time. As these names imply, histochemical and cytochemical methods apply chemical, and sometimes physical, techniques to cells and tissues in order to determine the location of a specific chemical substance, a related group of substances, or a specific chemical (e.g., enzymatic) reaction. These methods differ in an important way from the usual biochemical procedures which require homogenization, centrifugation, or extraction procedures that in turn destroy the architecture of the tissues and cells. It is the object of the histochemical approach to relate as closely as possible the *in situ* location of chemical substances and reactions to known histological and cellular structures. A histochemical reaction enables the morphologist to draw a step closer to his research objective of correlating structure and function, and at the same time supplements information obtained by routine biochemical procedures which disorganize cell and tissue structure.

Histochemistry is not a new discipline, and, in a general sense, dates back to the earliest staining of tissue for microscopic examination. Its burgeoning as a research tool with the incorporation of numerous reactions for the localization of enzyme activity, carbohydrates, nucleic acids, and proteins, as well as lipids and inorganic ions, has occurred in the past fifteen years.

The Histochemistry Laboratory at the Massachusetts General Hospital has existed within the Pathology Department since 1952—at first located as a neighbor of Bacteriology in the Domestic Building, and since 1956 in a group of laboratories located within the Pathology Department on the first floor of the Warren Building. While these laboratories are now equipped to utilize almost all accepted histochemical methods and many microbiochemical methods which may be applied to the study of disease, we have tended in our investigations to emphasize the localization and, in some instances, accurate quantitation of enzyme activity in tissues. In earlier studies hydrolytic enzyme systems occupied much of our time, while more recently we have been particularly interested in information which could be derived from the use of tetrazolium reduction techniques for the demonstration of the sites of activity of oxidative enzyme systems. This activity often reflects the importance of specific metabolic pathways within components of a tissue. The fact that variation in intensity or location of activity may develop in disease or in response to experimental manipulation of animals, points to the practical and theoretical potential of methods which allow for their demonstration *in situ*. Particularly interesting is the fact that those visual qualitative methods may often be quantitated by the application of microbiochemical and analytical techniques that enable us to correlate in a rather direct manner the chemical content or enzyme activity of a tissue section with the histological structure of an adjacent section.

Research in these laboratories has been under the direction of Dr. Richard B. Cohen and Dr. Edgar B. Taft, and has been conducted along three major related lines. Established histochemical methods are applied to normal and diseased human tissue as well as to experimental animals in order to obtain background information on enzyme activity and distribution. New methods for the demonstration of enzyme systems are developed which are useful in our investigations. In collaboration with Dr. Jesse F. Scott of the Huntington Laboratories, we have developed special techniques that permit accurate microquantitation of chemical constituents or of enzyme activity to correlate with distributional studies.

Perhaps because a number of the members of the Pathology Department have a particular interest in the endocrine organs, much of our work has centered on these tissues. We have been particularly interested in the pentose phosphate pathway of carbohydrate metabolism in the adrenal cortex. This alternative pathway of carbohydrate metabolism is particularly active in the fascicular zone. This observation may be integrated into certain hypotheses of ACTH action based on investigations utilizing biochemical techniques. We have been studying the effect of a variety of stimuli on the adrenal cortex, including sodium depletion and thalamic injury. These investigations are in collaboration with Dr. John D. Crawford of the Children's Service. The enzyme activity patterns of the pituitary, parathyroid, pancreas, and testes have been mapped. The basophil cells of the pituitary appear to be strikingly active in the enzymes mediating the pentose phosphate pathway, while chromophobes tend to be generally inactive. An interesting observation in the parathyroid is that the oxyphil—a cell not considered to be an active hormone producer—is the site of the most oxidative enzyme activity and is, incidentally, the cell richest in mitochondria. A technique for the demonstration of oxidative enzymes in smear specimens of sperm has been devised which may prove useful in the study of sperm metabolism and fertility problems.

A method for the study of enzyme activity in smears of white blood cells has been devised, combining histochemistry and phase microscopy. The accuracy and facility of the histochemical study of enzyme systems in bone has been vastly improved by a new technique of decalcification which preserves to a considerable extent oxidative enzyme activity. Studies have been undertaken on the effect of murine hepatitis on liver enzyme patterns, with marked changes noted at various stages of the infection. Enzyme activity characteristics of normal and neoplastic growth are being traced in regenerating limbs of amphibia and in a variety of human neoplasms.

We have been particularly interested in studying pathways of glycogen synthesis, with emphasis on the enzymes phosphorylase, uridine diphosphate glucose-glycogen transglucosylase, and amylo (1-4)-(1-6) transglycosidase. Recently we have observed that the nucleotide sugar thymidine diphosphate glucose, although a less efficient substrate, may be substituted for the uridine sugar in glycogen synthesis in human and animal striated muscle.

New histochemical techniques have been devised for a number of enzyme systems, including the following: a polyhydric alcohol dehydrogenase, of interest in certain phases of carbohydrate metabolism; L-gulonolactone oxidase which mediates an important step in the synthesis of vitamin C, and is the enzyme lacking in humans which permits that species to get scurvy; uridine diphosphate glucose dehydrogenase, an enzyme important in the synthesis of glucuronic acid; dihydroorotate dehydrogenase in the pathway of synthesis of pyrimidines from amino acids; a pyridine nucleotide transhydrogenase, a system which may be demonstrated under certain circumstances in tissues.

The study of nucleic acid content of human tumors and the relationship of these to phosphorus metabolism and to protein synthesis in these neoplasms has been a subject of collaborative investigation with the Huntington Laboratories.

Histochemical techniques must for the present be considered largely research tools, and a great deal of the time of the worker in this field is spent in expanding and improving his methods. Much, however, has already been learned from the application of these methods, and, from a large body of isolated observations, patterns are beginning to appear. An observation which has particularly interested us concerns the special metabolic organization of tissues which appear by usual methods of study to be structurally homogeneous. If one observes, for instance, a liver lobule under the light microscope, one is not impressed by any great difference in the appearance of the cells derived from the central as compared with those from the peripheral zone. Hints that metabolic differences may exist are provided by special propensities of a particular zone to respond to a specific injury. If one, however, observes enzyme patterns in the liver lobule, a striking specialization of activity for certain enzyme systems in a particular zone may be found. This characteristic is lost when liver tissue is homogenized for analysis. It is quite impressive, also, to observe that an element like smooth muscle will differ quite markedly in enzyme activity, depending on where it is located within an organ, and from organ to organ, so that while it may be fairly consistent in its anatomical characteristics, its metabolism may vary appreciably. Examples of these types are given to point out that the morphologist, provided with an additional dimension, will have to consider metabolic as well as structural organization of tissues, and this metabolic organization may provide as distinctive a stamp as does anatomic structure. In some cases it may emphasize subdivisions of a tissue already evident on structural grounds (e.g., adrenal cortex, kidney), while in others it may point up metabolic subdivisions in what appear to be homogeneous structural entities when studied by conventional methods (e.g., liver, parenchyma, smooth muscle, etc.).

Histochemical techniques of varying types have been applied extensively to the study of human disease. In our laboratory we have been able to detect rapidly in biopsy material the absence of glucose-6-phosphatase in the liver of patients with von Gierke's disease, and the absence of phosphorylase activity in the striated muscle of a patient with McArdle syndrome. Both these diseases are examples of defects in the metabolism of glycogen. Acid phosphatase activity of a tumor may be used on rare occasions to identify prostatic origin. Enzyme distribution patterns have been studied in a number of diseases, including an investigation of the small intestine in sprue and other deficiency states, in collaboration with Dr. Peter R. Holt, formerly of the Gastrointestinal Group. Histochemical methods have been used to identify characteristic inclusions in certain diseases, e.g., PAS positive inclusion in the histiocytes of Whipple's disease and the mononuclear cells of Waldenström's syndrome. The property of metachromasia, characteristic of an abnormal substance found in the brain and certain viscera, has provided the name for the entity of metachromatic leucoencephalopathy and influenced the chemical investigations into its origins. These are a few of many possible examples where histochemical techniques may be used to advantage in the study of and characterization of disease processes.

We have collaborated with a number of other groups in the Hospital on projects of mutual interest. Since ours has been until recently one of the few well-equipped histochemical laboratories in the vicinity, we have cooperated whenever feasible with investigators from other institutions who required specialized knowledge and techniques.

This review would not be complete without mention of those individuals who have contributed greatly to the accomplishments of the laboratory: Drs. Károly Balogh, Flaviu C. A. Romanul, Wallace A. Jones, Latifeh Ghandur, J. Michael Bishop, Tinrat Stitnimankarn, and, at present, Hubert J. Wolfe. Special recognition must be given to our technicians, Miss Doris Parthum and Miss Anne Jones, who have kept the laboratory functioning since its beginning.

Richard B. Cohen, M.D.,
Associate Pathologist

* * *

The American Academy of Pediatrics conferred its Borden Award upon Dr. Nathan B. Talbot at the meeting of the Academy held in Chicago on October 31. In his acceptance speech Dr. Talbot posed the question: "Has psychologic malnutrition taken the place of rickets and scurvy in modern pediatric practice?"

Dr. Paul D. White was inducted as a Fellow of the Royal College of Physicians in London on May 31.

The Board of Trustees, at their meetings on September 28, October 11 and 26, and November 2, voted:

That Dr. Edward P. Richardson be granted leave of absence for the months of October and November 1962, with pay, to serve as Neuropathologist at the University of Lausanne, Switzerland.

To accept the resignations of:

Dr. Ock Soon Choi from the position of Clinical Fellow in Medicine, effective as of October 15;
Dr. Ellis Dresner from the position of Clinical Assistant in Medicine, effective as of September 30;
Dr. Lee Jackson from the position of Clinical Assistant in Psychiatry at McLean Hospital, effective as of October 1;
Dr. Michael P. Tristan from the position of Assistant in Pediatrics.

To appoint:

Dr. E. Ramagopal Acharyulu as Clinical and Research Fellow in Medicine, beginning January 1, 1963;
Dr. H. Powell Baker as Exchange Assistant Resident on the Children's Service, for the period October 26 through December 4;
Dr. Michael H. M. Dykes as Assistant in Anesthesia, beginning January 1, 1963;
Dr. Joseph W. Fowler, III, as Clinical Fellow in Medicine for one year, beginning October 8;
Dr. Celso-Ramon Garcia as Assistant Surgeon, beginning October 11;
Dr. Gary R. Gerson as Clinical Fellow in Anesthesia, beginning June 1, 1963;
Dr. John Gillies as Visiting Anesthetist pro tempore, beginning October 1;
Dr. Thomas M. Glushien as Assistant Resident in Anesthesia, beginning July 1, 1963;
Dr. Robert S. Harper as Clinical Assistant in Pathology, beginning October 1;
Dr. Gerald W. Hazard as Assistant Resident on the Children's Service for one year, beginning July 1, 1963;
Dr. John Hedley-Whyte as Assistant in Anesthesia, beginning October 1;
Mr. John P. Hill as Assistant Psychologist, beginning November 1;
James G. Holland, Ph.D. as Associate Psychologist on the Neurology Service, effective as of September 1;
Douglas F. Hooper, Ph.D. as Assistant Psychologist in the Department of Psychiatry, beginning October 15;
Dr. Paul A. Kantrowitz as Assistant Resident in Medicine for one year, beginning July 1, 1963;
Shelby Kashket, Ph.D. as Assistant Biochemist (Medicine), beginning September 28;
Dr. M. Robert Knapp as Visiting Fellow in Anesthesia, for the period October 10 through October 24;
Dr. Hugh H. Kopald as Resident in Medicine for one year, beginning October 1, 1963;
Dr. Michael A. Kornfield as Junior Assistant Resident on the Children's Service, beginning July 1, 1963;
Dr. Pentti J. Leikkonen as Clinical Fellow in Anesthesia (Staff), beginning January 1, 1963;
Dr. Edward Lowenstein as Clinical Fellow and Acting Chief Resident in Anesthesia, beginning November 17;
Mr. James J. Muller as Clinical Fellow in Psychology, retroactive to August 1;
Dr. Charlotte G. Neumann as Assistant Pediatrician, beginning October 26;
Dr. Robert K. Osborne as Clinical Assistant in Medicine, beginning October 1;
Dr. Barry I. Pless as Clinical and Research Fellow on the Children's Service for one year, beginning January 1, 1963;
Dr. Pasko Rakic as Clinical and Research Fellow in Neurosurgery for one year, beginning November 1;
Dr. George L. Robb as Exchange Assistant Resident on the Children's Service, for the period September 19 to October 25;
Dr. John C. Robinson as Junior Assistant Resident on the Children's Service, beginning July 1, 1963;
Ralph Schwitzgebel, Ed.D. as Assistant Psychologist, beginning October 1;
Dr. Seymour M. Sabesin as Clinical and Research Fellow in Medicine for one year, beginning July 1, 1963;
Dr. David E. Tolhurst as Clinical Fellow in Anesthesia (acting Resident), beginning July 1, 1963;
Dr. Chiu-an Wang as Assistant in Surgery, effective as of September 12;
Dr. Sigurd G. Wende as Clinical Fellow in Radiology, beginning November 15;
Chuan-Tao Yu, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning November 1;
Irving K. Zola, Ph.D. as Assistant Sociologist in the Department of Psychiatry, beginning November 1.

The Trustees also voted to promote the following Assistant Residents to the position of Residents in Medicine:

Dr. James R. Carter, Jr., beginning July 1, 1963;
Dr. Karl Engelman, beginning January 1, 1964;
Dr. Paul F. Griner, beginning July 1, 1963;
Dr. George A. Jacoby, Jr., beginning January 1, 1964;
Dr. Peter M. Yurchak, beginning July 1, 1963.

The following Trustees' votes of November 22 and December 22, 1961, and March 30, 1962, failed to reach the Office of THE NEWS until this past month. In order that our NEWS reporting of Trustees' votes may be complete, even though inadvertently tardy in this instance, we give them to you now:

Dr. Harvey E. Cantor appointed Intern on the Children's Service for one year, beginning July 1;

Dr. Rosemary C. Dobson appointed Intern on the Children's Service for one year, beginning July 1;

Dr. Eugene L. Klenk appointed Intern on the Children's Service for one year, beginning July 1;

Dr. Eileen M. Ouellette appointed Intern on the Children's Service for one year, beginning July 1;

Dr. Richmond Prescott promoted to the position of Resident in Medicine for one year, beginning July 1;

Dr. Donald L. Stone appointed Clinical Fellow in Radiology for one year, beginning July 1;

Dr. Michael A. Zwerdling appointed Intern on the Children's Service for one year, beginning July 1.

At their meetings on October 17, 24, and 31, the General Executive Committee voted:

To promote:

Dr. Rosemary C. Dobson to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1963;

Dr. Christopher R. Eliot to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1963;

Dr. Eileen M. Ouellette to the position of Assistant Resident on the Children's Service for one year, beginning July 1, 1963;

Dr. Michael A. Zwerdling to the position of Assistant Resident on the Children's Service, beginning July 1, 1963.

To reappoint:

Colin H. Bolton, Ph.D. as Research Fellow in Biochemistry (Medicine), for the period September 1 through November 30;

Dr. Robert E. Kahn as Clinical Fellow in Medicine for one year, beginning November 1;

Dr. Philip C. Kelleher as Clinical Fellow in Medicine for one year, beginning November 1.

To extend the appointment of:

Dr. Edward Lowenstein as Chief Resident in Anesthesia from November 6 through November 16.

To appoint:

Dr. Antero Coelho Neto as Research Fellow in Surgery, effective as of September 10;

Dr. Eugene E. Drago as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Harold J. Dvorak as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Sabri H. Ergenekon as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Clemente C. Gatmaitan as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

R. Colin Hughes, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning January 1, 1963;

Dr. Kazuhiko Murata as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Ahmad M. Nassar as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Rubén J. Pellanda as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Theodosius M. W. Poon-King as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963;

Dr. Junichi Tanabe as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period October 1, 1962 through May 31, 1963.

In addition to his other duties, Dr. Francis de Marneffe has been appointed Director of Hospital Affairs and Mr. Henry Langevin has been promoted to Administrator at McLean Hospital.

Mr. Ferdinand Strauss, II, Administrative Assistant in charge of our Emergency Ward since 1959 has been promoted to Assistant Director at the Hospital, effective October 1. Dr. Knowles, in making the announcement, said that Mr. Strauss would "continue to work with the Emergency Ward and will add other areas of responsibility".

* * *

THE GOLD-HEADED CANE CEREMONY

Dr. Paul D. White has sent us a copy of his introductory remarks given at the Gold-Headed Cane ceremony of the graduating exercises of the Medical School of the University of California, in San Francisco, on June 1, 1962:

Before beginning my address to you on the subject selected for this occasion, I shall take the liberty of telling you in a very few minutes of my adventures during the last 24 hours.

Yesterday afternoon and evening I was privileged to attend a meeting of the Royal College of Physicians in London at which new Fellows were received, followed by a banquet and then an exhibition in the Harveian Library where many noted manuscripts, early printed medical books, portraits, and other memorabilia were on display. Among them we were allowed to handle the silver caduceus, a wand carried by the President of the College on formal occasions such as that of yesterday evening, and presented by Caius himself to the College in 1553. Another relic of great interest, and to see which was one of the reasons for my going to London just before coming here, was the original Gold-Headed Cane carried by the Royal Physicians for about 150 years, from the late 1600s to the early 1800s, ~~and~~ finally turned over to the Library of the Royal College of Medicine by the widow of its last bearer, Matthew Baillie. The College itself was established by King Henry the Eighth in 1518, and you may be interested to hear the first few sentences of the Royal Charter.

Quote: Henry, by the Grace of God, King of England and France, and Lord of Ireland, to All to whom these present letters shall come, Greeting. WHEREAS, we consider it the duty of our Royal Office by all means to consult the happiness of the people under our rule, we have thought it to be chiefly and before all things necessary to withstand in good time the attempts of the wicked, and to curb the audacity of those wicked men who shall profess medicine more for the sake of their avarice than from the assurance of any good conscience, whereby very many inconveniences may ensue to the rude and credulous populace: Therefore, partly imitating the example of well governed cities in Italy and many other nations, and partly inclining to the petition of the grave men, Doctors John Chambers, Thomas Linacre, Fernandez de Victoria, our physicians, Nicholas Halsewell, Giovanni Franceschi, and Robert Yaxley, physicians, and especially of the most Reverend Father in Christ and Lord, the Lord Thomas, Cardinal priest of the Holy Roman Church of the title of Santa Cecilia beyond the Tiber, Archbishop of York, and our very dear Chancellor of England, We will and command to be instituted a perpetual College of learned and grave men who shall publicly exercise medicine in our City of London and the suburbs, and within seven miles from that City on every side: Whose care it will be, as we hope, both for their own honour and in the name of the public benefit, as well to discourage the unskilfulness and temerity of the knavish men whom we have mentioned, by their own example and gravity, as to punish the same by our laws lately enacted, and by the constitutions to be ordained by the same College. *End quote.*

To complete these introductory remarks may I add that this morning, which was unusually clear in London, but very cold, I walked from the heart of the City to Regents Park to see the construction of the new building of the College for which the Queen laid the Cornerstone on Crown land a few months ago. I then took the noon polar flight for California and arrived here a few minutes ago at eleven minutes before eight o'clock.

Dr. White, in a note to us, reminds us that his predecessors as lecturers at the Gold-Headed Cane ceremonies have included Dr. Roger I. Lee, 1951 (MGH 1907), Dr. Chester M. Jones, 1961 (MGH 1919), and William Kerr himself (MGH 1916) who was the originator of the ceremony when he was Professor of Medicine at the Medical School of the University of California.

Dr. White also sent us a picture of the Gold-Headed Cane, which we give you here.

GOLD HEAD OF THE ORIGINAL GOLD-HEADED CANE, IN THE LIBRARY OF THE ROYAL COLLEGE OF PHYSICIANS IN LONDON

* * *

HARVARD MEDICAL CHORUS

Through the courtesy of the Trustees of the Isabella Stewart Gardner Museum, the one-hundred-twenty-voice Harvard Medical Chorus will present a Christmas concert on Friday, December 21, at 8:30 P.M., in the Tapestry Room of the Museum. Music of Praetorius, Purcell, Clement, Bach, Schubert, and others will be presented. There is no admission charge, and a cordial invitation to attend is extended to all.

MUSIC AT M.G.H.

The October issue of THE NEWS carried a brief statement to the effect that a group of musicians, of which Dr. Donald L. Leake (*Dn. M.*) is a member, would "entertain the visitors to M.G.H. from other countries". It was not until we received a copy of the program for the concert and read the names and identifications of the musicians making up this chamber music group that we realized how fortunate the Hospital was to have the group give a concert here. We think that you, too, would be interested in knowing just who these musicians are:

Richard Jerome, Flute—Solo flute, Vermont Symphony Orchestra for 15 years; Chairman of the Board, Verne Q. Powell Flutes, Inc.

Donald Leake, Oboe—Oboist with the Robert Shaw Chorale, Columbia Records, 20th Century Fox; Graduate of Brussels Conservatory; member of our House Staff in Dental Medicine.

Henry Duckham, Clarinet—Solo clarinet with the North Carolina Symphony; Graduate of the New England Conservatory; has successfully combined a career in the business world with one in chamber music.

William Lipscomb, Clarinet—Clarinetist with the Pasadena Symphony Orchestra; chamber music performances in Minneapolis, here in New England, and in Great Britain. Professor of Chemistry and Chairman of the Department, Harvard University.

Jean Paella, Horn—French hornist with the Boston Symphony Orchestra and numerous other professional groups. Graduate of the New England Conservatory.

Roe Goodman, Bassoon—Bassoonist in many performances here in New England and in Florida. Instructor in Mathematics at M.I.T.

Their program included:

Divertimento, K. 229, No. 1, for two clarinets and bassoon, by Mozart.

Trois Pièces Brèves, for flute, oboe, clarinet, horn, and bassoon, by Ibert.

Kleine Kammermusik, for flute, oboe, clarinet, horn, and bassoon, by Hindemith.

⁂

VOLUNTEER GROUPS
MGH SERVICE LEAGUE

During the months of October and November, the ten Community Chairmen of the MGH Service League entertained at morning coffees in their individual homes for those members of the League who reside in their particular areas. Mrs. H. Dunster Howe, President of the Service League, addressed each meeting, and a discussion followed pertinent to the current activities of the organization and the plans for the ensuing year of 1962-63.

In addition to the area meetings, the fall calendar included the tea held in Bartlett Hall in October in honor of the ever-enlarging group of professional visitors to the Hospital from all parts of the world, the concerts for our patients which are given fortnightly in the Chapel, and the activities of the Reception Center and Information booth which are staffed daily by members of the League.

The 116th anniversary of Ether Day was observed in the Moseley Rotunda on October 16. Mr. Francis C. Gray, Chairman of our Board of Trustees, brought greetings from the Board to assembled guests. Dr. John H. Knowles, our General Director, gave a most interesting talk on the "Values of tradition", Dr. Ellsworth T. Neumann, Administrator of the Hospital, presented the candidates for Service Pins to Dr. Knowles, who then made the awards.

Nearly 250 members of the staff and personnel of the M.G.H. were recipients of the pins—148 for 5 years of continuous service at the Hospital, 54 for 10 years, 14 for 20 years, 11 to members of the professional staff for 25 years of unbroken service, 7 for 30 years (including 4 doctors), and 2—Mr. John Hague and Miss Mathilda Wagner—for 40 years.

Refreshments were served after the ceremony.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION.

The following new titles have been received:

Anesthesia

Beecher, H. K.
An inspection of our working hypotheses in the study of pain and other subjective responses in man.
Meth. Information Med. 1:33.

Beecher, H. K.
Pain, placebos and physicians.
Practitioner 189:141.

General Surgery

Benedict, E. B., and Grillo, H. C.
Spontaneous rupture of megaesophagus in achalasia.
J. Thoracic & Cardiovas. Surg. 44:272.

Internal Medicine

Graham, J. R.
New concepts of the nature and treatment of migraine.
Tr. Am. Clin. & Climat. A. 73:199.

Laboratory Science

Arnason, B. G., Jankovic, B. D., Waksman, B.H., and Wennersten, C.
Role of the thymus in immune reactions in rats. II. Suppressive effect of thymectomy at birth on reactions of delayed (cellular) hypersensitivity and the circulating small lymphocyte.
J. Exper. Med. 116:177.

Jankovic, B. D., Waksman, B. H., and Arnason, B. G.
Role of the thymus in immune reactions in rats. I. The immunologic response to bovine serum albumin (antibody formation, arthus reactivity, and delayed hypersensitivity) in rats thymectomized or splenectomized at various times after birth.
J. Exper. Med. 116:159.

Kallós, P., and Waksman, B. H.
Introduction.
Prog. in Allergy 6:1.

Waksman, B. H., Arnason, B. G., and Jankovic, B. D.
Role of the thymus in immune reactions in rats. III. Changes in the lymphoid organs of thymectomized rats.
J. Exper. Med. 116:187.

Neurosurgery

Mark, V. H., White, J. C., Zervas, N. T., Ervin, F. R., and Richardson, E. P.
Intrathecal use of phenol for the relief of chronic severe pain.
New England J. Med. 267:589.

White, J. C.
Modifications of frontal leukotomy for relief of pain and suffering in terminal malignant disease.
Ann. Surg. 156:394.

Psychiatry

Benda, C. E.
Language, intelligence, and creativity.
J. Existential Psychiatry 3:27.

Radiology

Little, J. B.
Congenital urinary-tract disease.
J.A.M.A. 181:1067.

Books

Lee, R. I.
Letters from Roger I. Lee, Lt. Colonel, U.S. Army Medical Corps, 1917-1918.
Brookline, Mass., privately printed, 1962.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

American men of science, ed. 10.
The social and behavioral sciences.
Tempe, Ariz., The Jaques Cattell Press, Inc., 1962.
(1E)

Breese, S. S. (Editor)
Proceedings of the 5th International Congress for Electron Microscopy, held in Philadelphia, Pa., August 29—September 5, 1962.
New York, Academic Press, Inc., 1962.
(3J)

British Postgraduate Medical Federation.
The scientific basis of medicine; annual reviews 1961, 1962.
London, The Athlone Press, 1961, 1962.
(6A)

Busch, H.
An introduction to the biochemistry of the cancer cell.
New York, Academic Press, Inc., 1962.
(13V)

Clark, R. E., and Cumley, R. W. (Editors)
Year book of cancer, 1961-62.
Chicago, Year Book Medical Publishers, Inc., 1962.
(13V)

Czechoslovak Academy of Sciences.
Proceedings of a symposium on membrane transport and metabolism held at Prague, August 22-27, 1960.
New York, Academic Press, Inc., 1961.
(5M)

Deane, H. W. (Sub-editor)

Handbuch der experimentellen Pharmakologie, vol. 14, pt. 1. Adrenocortical hormones.
New York, Walter J. Johnson, Inc., 1962.
(14T)

De Reuck, A. V. S. (Editor)
Ciba Foundation Study Group No. 12. Curare and curare-like agents.
Boston, Little, Brown and Company, 1962.
(22Eh)

De Reuck, A. V. S., and Cameron, M. P. (Editors)
Ciba Foundation symposium on the exocrine pancreas; normal and abnormal functions.
Boston, Little, Brown and Company, 1962.
(16L)

De Reuck, A. V. S., and Cameron, M. P. (Editors)
Ciba Foundation symposium on pulmonary structure and function.
Boston, Little, Brown and Company, 1962.
(20M)

Dioguardi, N. (Editor)
1st European symposium on medical enzymology.
New York, Academic Press, Inc., 1962.
(22Em)

Ellis, G. P. (Editor)
Progress in medicinal chemistry, vol. 1.
Washington, D.C., Butterworth & Company, Ltd., 1961.
(7H)

Eyring, H. (Editor)
Annual review of physical chemistry, vol. 13.
Palo Alto, Annual Reviews, Inc., 1962.
(5A)

Fuchs, F.
Die Helferin des Chirurgen, ed. 8.
Stuttgart, George Thieme, 1962.
(23A)

Gunsalus, I. C. (Editor)
The bacteria, vol. 3.
New York, Academic Press, Inc., 1962.
(11A)

Harris, R. J. C. (Editor)
The initial effects of ionizing radiations on cells.
New York, Academic Press, Inc., 1962.
(36Jn)

Heath, D. F.
Organophosphorus poisons.
New York, Pergamon Press, 1961.
(34S)

Innes, J. R. M., and Saunders, L. Z.
Comparative neuropathology.
New York, Academic Press, Inc., 1962.
(19D)

Kasha, M. (Editor)
Horizons in biochemistry. Albert Szent-György dedicatory volume.
New York, Academic Press, Inc., 1962.
(5A)

Lippman, H. S.
Treatment of the child in emotional conflict, ed. 2.
New York, McGraw-Hill Book Company, Inc., 1962.
(19S)

Lowenstein, O. E. (Editor)
Advances in comparative physiology and biochemistry, vol. 1.
New York, Academic Press, Inc., 1962.
(4C)

McIlwain, H., and Rodnight, R.
Practical neurochemistry.
Boston, Little, Brown and Company, 1962.
(19C)

McKusick, V. A.
Medical genetics, 1958-1960; an annotated review.
St. Louis, The C. V. Mosby Company, 1961.
(2Am)

Maramorosch, K. (Editor)
Symposium on biological transmission of disease agents, Atlantic City, 1960.
New York, Academic Press, Inc., 1962.
(10A)

Miller, M.
Pfizer handbook of microbial metabolites.
New York, McGraw-Hill Book Company, Inc., 1961.
(5M)

New York Hospital-Cornell Medical Center.
Surgery in the aged.
New York, McGraw-Hill Book Company, Inc., 1960.
(13Po)

Nord, F. F. (Editor)
Advances in enzymology, vol. 24.
New York, Interscience Publishers, Inc., 1962.
(5C)

Oparin, A. I.
Life: its nature, origin and development.
New York, Academic Press, Inc., 1962.
(2Am)

Pettit, M. D.
Gynecologic diagnosis and treatment.
New York, McGraw-Hill Book Company, Inc., 1962.
(24D)

Rivera, J. A.
Cilia, ciliated epithelium and ciliary activity.
New York, Pergamon Press, 1962.
(2Am)

Ruch, T. C.
Diseases of laboratory primates.
Philadelphia, W. B. Saunders Company, 1959.
(2Bd)

Selye, H.
Calciphylaxis.
Chicago, University of Chicago Press, 1962.
(8K)

Smillie, I. S.
Injuries of the knee joint, ed. 3.
Baltimore, Williams & Wilkins Company, 1962.
(18E)

Smith, R. M. (Editor)
International anesthesiology clinics, vol. 1, no. 1. Pediatric anesthesia.
Boston, Little, Brown and Company, 1962.
(Periodical)

Spiegel, E. A. (Editor)
Progress in neurology and psychiatry, vol. 17.
New York, Grune & Stratton, 1962.
(19S)

Steckler, P. B. (Editor)
American scientific books 1960-62.
New York, R. R. Bowker, 1962.
(1Ba)

Tracy, J. E.
The doctor as a witness.
Philadelphia, W. B. Saunders Company, 1957.
(34A)

Umbreit, W. W. (Editor)
Advances in applied microbiology, vol. 4.
New York, Academic Press, Inc., 1962.
(9A)

Whistler, R. L., and Wolfrom, M. L. (Editors)
Methods in carbohydrate chemistry, vol. 1.
New York, Academic Press, Inc., 1962.
(5T)

Witton, C. J.
Microbiology revised by G. G. Young, ed. 3.
New York, McGraw-Hill Book Company, Inc., 1961.
(9A)

Wolstenholme, G. E. W., and Cameron, M. P. (Editors)
Ciba Foundation colloquia on endocrinology, vol. 14. Immunoassay of hormones.
Boston, Little, Brown and Company, 1962.
(14L)

Woodward, G. S.
The man who conquered pain; a biography of William T. G. Morton.
Boston, The Beacon Press, 1962.
(1Ea)

New addresses:

Dr. Francis L. Burnett (*S.S.* 1908), Proctor St., Manchester, Mass.

Dr. Allan M. Butler (past c. *C.M.*), Dept. of Public Health, Berkeley 14, Calif.

Annemarie Closse, Ph.D. (res. fel. *Biochem.* (*M.*)), Tegernsee/Bayern, Michael-Dengg-Weg 4, Germany

Dr. Daniel Deykin (*M.* 1958), Beth Israel Hospital, 330 Brookline Ave., Boston, Mass.

Dr. Edwin B. Dunphy (past c. *Oph.*), 75 Mount Auburn St., Cambridge, Mass.

Dr. David W. Florence (r.s. *Or.* 1960), 4959 Excelsior Blvd., Minneapolis 16, Minn.

Dr. Lamont W. Gaston (*M.* 1954), University Hospital, Seattle 5, Wash.

Dr. Alastair J. Gillies (a.r.p. *An.* 1952), Strong Memorial Hospital, Rochester, N.Y.

Dr. Joseph Hanelin (clin. assoc. *R.*), 27 W. Central St., Natick, Mass.

Dr. Robert S. Harper (a.r.p. *Path.* 1958), Memorial Hospital, 119 Belmont St., Worcester, Mass.

Dr. Sprague W. Hazard (assoc. pediat.), 1233 Highland Ave., Needham 92, Mass.

Dr. Edward Karian (a.r.p. *D.* 1955), 358 Commonwealth Ave., Boston 16, Mass.

Dr. Edward Los (a.r.p. *An.* 1961), Monmouth Hospital, Monmouth, N. J.

Dr. Arthur S. Lurie (a.r.p. *D.* 1959), 363 Lowell St., Peabody, Mass.

Mr. David MacSweeney (res. fel. *An.* 1962), 9 Oman Court, Oman Ave., London N.W. 2, England

Dr. William L. Morgan, Jr. (*M.* 1953), Dept. of Medicine, University of Rochester School of Medicine and Dentistry, 260 Crittenden Blvd., Rochester 20, N. Y.

Dr. Renée B. O'Sullivan (*C.M.* 1957), Medical Office, American Embassy, APO 156, San Francisco, Calif.

Dr. Murray K. Rosenthal (a.r.p. *C.* 1962), 1 Salem St., Wakefield, Mass.

Dr. Leonard B. Shulman (*Dn.M.* 1961), Georgetown University School of Dentistry, Reservoir Rd., Washington 7, D.C.

Dr. Augustus Thorndike (*W.S.* 1923), 509 Hammond St., Chestnut Hill 67, Mass.

Dr. Earle W. Wilkins, Jr. (*W.S.* 1945), Zero Emerson Place, Boston 14, Mass.

Dr. Benjamin S. Wood (*E.S.* 1933), Veterans Administration Hospital, Salem, Va.

Brief bits:

Dr. Joseph S. Barr spoke at the Georgia Orthopedic Society meeting, held at Sea Island, Georgia, September 26-30. His subjects were "Arthroplasty of the hip" and "Treatment of low-back and sciatic pain".

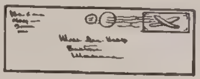
Dr. Henry K. Beecher was recently Visiting Professor of Medicine at Emory University.

Dr. Kurt J. Isselbacher has been appointed Consulting Editor to the journal *Medicine*, and has been elected to the Editorial Board of the *Journal of clinical investigation*.

Dr. Carter R. Rowe presented a paper at the American Medical Association Meeting in Chicago on June 25, entitled "A follow-up study of fractures of the os calcis". Co-authors of the paper were Drs. Harilaos T. Sakellarides, Peter A. Freeman, and Charles Sorbie. Dr. Rowe also gave a talk on "The operative treatment of fractures of the cervical spine" during a panel discussion at the American College of Surgeons Meeting in Atlantic City on October 18.

Last January 27, at the American Academy of Orthopaedic Surgeons Meeting in Chicago, Dr. Harilaos T. Sakellarides read a paper on "Delayed healing and non-union of tibial shaft fractures". Drs. Peter A. Freeman and David B. Grant were co-authors of the paper.

Dr. Kathleen Stratton and Mr. William Ellett presented papers at the Second International Congress of Radiation Research, held in Harrogate, England, August 5-10.



Dr. Robert P. Kennedy (*Thd. S.* 1924) is our "singleton" in Richmond, Indiana. In response to a request from us, Dr. Kennedy has this to say about himself:

> I am very glad to have the opportunity of writing to our memorable institution, but I am sorry that I have nothing of interest to print. My last contact with the M.G.H. was in Casablanca on my return to the "zone of interior" after a tour of duty with the Army in Africa.
>
> Not long after the war, I retired to the old homestead here. Naturally, at my age, the main interest centers about the children. None are M.D.'s and perhaps it's just as well, for I couldn't keep up with them in all the ramifications of modern medicine. I have enough trouble with a daughter who is involved in modern art. I'd let her know if a stained glass window was needed in the operating room.
>
> Best wishes to all.

Since our Archives records showed that Dr. John H. Kennedy (*S.* 1950) was our only alumnus living in La Jolla, California, we sent him a letter asking him to tell us something about his activities out there. The letter was forwarded to him at his present address—Cleveland Metropolitan General Hospital—where he is

Dr. Richard B. Cohen, Associate Pathologist

now Surgeon-in-charge of the Thoracic Surgical Service and Assistant Professor of Surgery at Western Reserve University School of Medicine. His reply reads:

On July 1, I had the good fortune to succeed Dr. George Clowes (a.r.s. 1948) in the Thoracic Unit of the Cleveland Metropolitan General Hospital, joining several MGH alumni, including Drs. Simeone, Rhinelander, and Robert W. Hopkins.

On July 20, my wife and I flew to Moscow with the Boston Charter Group to attend the VIII International Cancer Congress, where I gave a paper entitled "Pituitary Crooke cell hyperplasia in pulmonary oat cell carcinoma" in co-authorship with Drs. Sommers and Williams.

Since my return on August 14, I have been dividing my time between the laboratory, the clinical wards, the operating room, and the students, in a pattern familiar to all. I am looking forward very much to my wife's and children's return from Maine this week, as we have located a farmhouse with 25 acres in Chagrin Falls, Ohio, as our new home.

We were very pleased to receive this letter from Dr. Arturo L. Aranas (r.p. *Psychiat.* (*McL.*) 1961), written from Queen Mary Veterans Hospital, 4565 Queen Mary Road, Montreal, Canada:

This is in reply to your most welcomed letter of August 9. I must apologize for the delay in answering.

Since I left McLean Hospital in June 1961, I never had the chance to read The News, but I was hoping to get in touch with my friends at the Hospital.

I am now working as a research fellow in psychiatry at Queen Mary Veterans Hospital. Last year my work was at Ste. Anne de Bellevue, also a Veterans Hospital. My work is part of the Diploma Course in Psychiatry of McGill University. Besides my research work, I am doing undergraduate teaching.

I am very sure that through The News I shall be able to communicate with all my friends in Boston.

Many thanks again, and a wish that I might hear from everybody through The News.

Letters from our "singletons" continue to arrive—this one from Dr. Roy L. Byrnes (a.r.p. *Path.* 1954), with a new address but still a "singleton". From 31870 Coast Highway, South Laguna, California, he writes:

My wife and I have been living in the seacoast community of Laguna Beach for three years. Ilse used to work in the Huntington, under Drs. Aub and Baker, and will be remembered by many of MGH vintage 1952-55. I came to this area to organize the Pathology Department in a small new community hospital. Since that time, I have opened a private clinical pathology office and have served as consultant to several other facilities. Recently, Dr. Frank Kendrick, from the Veterans Hospital and UCLA, joined me in practice.

Ilse and I have two children—a boy and a girl. Our house is located within sound of the breakers. We are always happy to hear of the M.G.H., and we hope that any MGH-er traveling between Los Angeles and San Diego will call upon us.

This account of many and varied activities, together with a new office address, has come from our "singleton" in Norwalk, Connecticut—Dr. John Paul Gens (r.s. *U.* 1943), who felt he had nothing of importance to tell the readers of The News:

I am sorry I have not communicated with you sooner than this, but have felt that there has really been nothing of importance or of interest to others regarding me or my activities. However, since I can no longer ignore your request, I submit the following information:

I am the Chief of Staff of the Norwalk General Hospital and, in addition, am the Director of its Department of Genito-Urinary Surgery and the Director of the Renal Unit which has been performing extracorporeal hemodialysis for five years or more in this small community and has also implanted teflon cannulas for long-term dialyses according to the technique of Scribner of Seattle. I am also a Trustee of the Norwalk General Hospital and, until approximately two years ago, had been the Counselor for Fairfield County of the Connecticut Medical Society. What spare time I have is used in my capacity as a member of the Board of Education of New Canaan and for boating and sport fishing.

I am ashamed to admit that I have not attended as many professional meetings as I should have nor have I maintained contact with those from the Massachusetts General Hospital as I have wished. I sincerely miss the stimulating influence of the Hospital and the associations I had with Howard Suby, Sylvester Kelley, Wyland Leadbetter, and others. I have been interested in receiving The News and learning what is happening at M.G.H. Many times I wish I were "home".

* * *

EMERGENCY WARD

Our Emergency Ward broke an all-time 12-hour record on November 12 (a holiday this year in Massachusetts). From 12:01 Monday morning to 11:59 Monday night, 171 patients were brought or came to the Emergency Ward. While it is true that there was an E.W. census of 170 on a Saturday last February, that unusually large figure was principally due to the fact that our streets and roads were covered with a solid hard glare of ice which resulted in the influx of people with broken bones and other injuries caused by falls and by skidding automobiles.

The extraordinary thing about this large number of people who passed through the Emergency Ward on November 12 is that no particular cause was evident and no particular pattern prevailed. All ages were represented from a very young baby to a man in his 80's, and an assortment of injuries and illnesses ranged from a toothache to pneumonia.

Thirty-seven out of the 171 needed to be admitted to the Hospital as in-patients.

The News

No. 218 Boston, Mass. January 1963

LOWELL LECTURES AT M.G.H.

For the second time, a series of free public lectures under the auspices of the Lowell Institute and the Massachusetts General Hospital will be given in our Moseley Rotunda on Wednesday afternoons, beginning at 5 o'clock, from February 6 through May 15. The topic to be discussed this year is "The hospital's responsibility to the community", and seventeen men, outstanding in their various fields, will deliver the lectures.

As the plan for the series approached completion, Dr. Knowles's cogitations on the subject of a hospital's responsibility took this form:

The Lowell Institute was founded by John Lowell, Jr. in 1836 and under his will maintains annually various courses of free public lectures in the City of Boston. During the 150th Anniversary Convocation of the Massachusetts General Hospital (1961), a series of twenty lectures in the public interest were sponsored by the Lowell Institute, concerned with the stimulus provided by disease states to the advancement of basic science. Delivered by distinguished American physician-scientists, the lectures centered on the advances in scientific thought and knowledge which had their origin in the clinical observation of disease. An example was Carl F. Cori's lecture entitled "Important advances in knowledge of carbohydrate metabolism which had their origin in disease", in which the author traced the stimulus of clinical observation of diabetes and glycogen storage disease to the development of the present-day concepts and knowledge of carbohydrate biochemistry and the action of insulin. The lectures were subsequently edited by Dr. Henry K. Beecher and published by the Harvard University Press in 1960.

The last lecture of the series, delivered by Rene Dubos, was entitled "Medical utopias". The last sentence reads: "Medicine is an aspect of social technology; its ethics and its goals are the products of the interplay between scientific understanding and human aspirations." Never have human aspirations for health and the demands for fulfillment of health wants and needs been higher in this country. This has resulted largely from the massive and constantly accelerating scientific and technological advance in medicine. While its benefits are well recognized, it has also created the social problem of rising expectations in an expanding, longer-lived population, progressively less able to afford the steadily rising cost of medical care and health services.

The social technology of medicine has had considerable stimulus for its development from the consumers of health services, but organized medicine and the university hospitals have at times been slow to bring about desirable innovation. Recently I was asked to write an article for the *Boston Globe,* explaining how the M.G.H. had attained its position of pre-eminence amongst American hospitals—part of which is quoted below:

> At the time of the decision to construct the Research Building, the Trustees of the M.G.H. said:
>
> "Why have we given first priority to a Research Building when there are so many other jobs to be done and so many that we want to do? The position of science in medicine is established beyond question. There is no reason to believe that this position will not be maintained indefinitely. We want to consolidate our gains and developments and to make certain that they are established as a fundamental part of our medical and surgical structure for the next half century.
>
> "Once we are firmly anchored in what has proved sound and essential through the test of experience, then we shall be ready to undertake experimentation and pilot studies in the socio-economic aspects of medicine, the extension of medical services to the community, the maintenance of health, and the other pathways that are opening ahead. Some may be determined by society and not by us, but we are ready to play our role wherever the future may lead. Already, thinking and planning for these undertakings are under way."

What of the future? The key is contained in the last paragraph of the above quotation. The survival of the voluntary, non-profit hospital depends on its ability to relate to the wants and needs of the community on which it depends for its moral and financial support. Pre-eminence of the institution depends on its ability to *anticipate* needs and to innovate successfully in the broad field of health services, thereby leading the way and actively shaping the course of medicine, rather than following passively and responding sub-optimally to crisis induced by external *or* internal forces, where considered judgment is lacking. The present problems revolve around the steadily rising cost of medical care, an expanding population with increasing medical wants and needs, and the difficulties inherent in humanizing the many scientific and technological advances in medicine of the past several decades. Research and teaching will flourish and continue to embellish the atmosphere conducive to the best of patient care activities. The M.G.H. will maintain and strengthen its traditionally strong roots in the community in its attempt to solve the above problems.

How will the M.G.H. maintain its pre-eminence amongst the hospitals of this country? First by anticipating and viewing in proper perspective the future problems of medical science and medical care. Secondly by contributing to the solution of these problems which, in contradistinction to the past, are becoming increasingly more social, economic, and political issues.

It was with these thoughts in mind that the Lowell Institute was asked once again to sponsor a series of 17 lectures to be given at the M.G.H. and to be concerned with the social and economic problems of American medicine and the unique and central position of the hospital as a social instrument in solving these problems. It is hoped that the theme can be developed so that continuity of areas of interest will exist and, if it seems desirable, a book of these Lowell Lectures be edited and published. The format might be arranged as follows:

I. MEDICAL EDUCATION IN A CHANGING SOCIAL ORDER

Increasing wants and needs of a rapidly expanding population—all in the face of steadily rising costs of health services and increasing difficulty in supplying health personnel (including doctors) to keep pace with the needs—demand that the system of medical education and the traditional role of the hospital as an acute, curative institution be re-examined. In the case of current medical curricula, formal training stresses a scientific launching pad in the first two years, followed by emphasis on the acute curative function of the physician in both undergraduate and graduate (House Staff) activity—producing a man who, on the day he steps into practice, finds it difficult initially to provide continuity of care and to administer the necessary preventive and chronic care health services. Having been trained to take immediate action and expect immediate rewards (particularly emotional), he is poorly prepared to coordinate and administer all the necessary parts of health services and finds it difficult to work as a member of a well-coordinated group or team. More and more the physician finds himself *dependent* on other individuals, groups, and institutions where a knowledge of sociology is mandatory for effective action for himself, his patient, and his community. As Titmuss has said, ". . . progress in medical science in psychological theories and in the specialized division of medical skill has converted medicine from an individual intuitive enterprise into a social service." Yet our educational system teaches individual action and individual rewards and very little social science. The patient wants technical competence, personal care, and continuity of health services. This necessitates group activity on the part of the doctor and he must perforce become a medical administrator, interrelating with other individuals and groups to achieve the best possible care for his patient.

The *medical school curriculum* should be continuously re-examined and revised so that it will provide ongoing study during the four years of:

a) the contribution of the behavioral sciences to medicine—the sociology and psychology of the various groups involved in the provision and maintenance of health services (nurse, doctor, social worker, etc.), as well as the sociology and psychology of the various sub-cultures in the consumer groups (race, class of worker, etc.); the organizational structure of the hospital—the resultant stresses and inefficiencies; the assessment of community (and cultural) wants and needs; the administration of health services;

b) the contribution of public health and preventive medicine to the ultimate activities of the practising physician in his attempt to provide personal care, continuity of care, and technical competence—the three most pressing wants of the public.

The *function of the hospital* must be re-examined and its traditional role questioned.

a) Should the traditional division of curative and preventive medicine be removed? Professor McKeown has stated that "deficiencies of care . . . attributable to medical education . . . are due largely to traditional restrictions of the responsibilities of teaching hospitals." He has suggested that the hospital accept total responsibility for all the health services of a given area. Such a change in the traditional role of the hospital would be reflected in a more enlightened medical student and house officer as regards the total community responsibility of the physician.

b) The educational and teaching responsibility of the hospital as an institution in undergraduate and particularly graduate education should be closely scrutinized. Should the university assume major responsibility for graduate training as Russell Nelson has advocated? Certainly there has been a notable lack of ongoing scrutiny and study of this crucial phase of medical education. Recently the General Executive Committee of the M.G.H. established a Committee on Teaching and Education, to provide ongoing study of this vital Hospital function.

c) In this present era of scientific and technological advance, research in areas related to medical care (e.g., the evaluation of quality, the administration of health services, the assessment of needs) has received scant attention. Currently, only 4 to 5 million dollars (or 2/100 of 1 percent of all health expenditures) is being used to study and improve a 25 billion dollar industry (USPH).

d) The Montefiore Hospital has pioneered in certain new areas of hospital function, namely, the establishment of medical sociology in the setting of the hospital, a demonstration unit for the evaluation of newer methods in making patient care better and more efficient (electronic devices, human engineering, etc.), cooperative study with consumer groups concerning medical care and the provision of health services, medical group practices, and, recently, the plans to build an 80-bed nursing home as a demonstration unit on the grounds of the hospital. By active demonstration this hospital is contributing heavily to the solution of some of the problems besetting medicine today, and is teaching its students and staff by example rather than by lip service.

II. Rising expectations (medical wants), an expanding elderly population (medical needs), versus rising costs

Health needs demand medical care. Health wants demand medical service. The scientific and technological explosion in medicine has improved medical *care* immeasurably and an already excessively health-conscious nation looks ever more hopefully to science to conquer cancer and the degenerative diseases. In 1961, the Government spent 496 million dollars on medical research (3 million dollars in 1940), and by 1970 the figure is estimated at 1.6 billion—roughly 70% of all medical research support. We have already noted that only 5 million dollars is being spent presently to study and improve the organization, coordination, and administration of health services. While science and technology have contributed much to medicine, it has been achieved only at considerable emotional cost and financial expense. Increasing specialization has segmented the medical staff and disjointed continuity of care, necessarily and inevitably diluting the personal care element of medicine. While technical competence has increased, it has made medical care a somewhat disconnected, discontinuous, and increasingly expensive and impersonal encounter between patient and physician, and both are uneasy and concerned about it.

Important social action has occurred in the ongoing attempt to humanize scientific and technological advance, and to make health and the provision of medical care what American society now looks upon as a birthright. Attempts to provide medical care for illness and medical services for chronic care and for the prevention of illness have been hindered by three main problems:

1) the steadily rising cost of medical care and health services
2) the lack of organization and coordination of these services
3) lack of public demonstration and faulty communication between medical institutions and their communities.

All three problems are closely interrelated.

1) *The rising cost of medical care*: There have been two approaches to this phenomenon:

a) The improvement and expansion of existing hospital services and the diversion of diagnostic problems to low-cost areas of the hospital—e.g., more ambulatory care; progressive patient care and the use of ordinary business management techniques to increase efficiency and reduce cost have enjoyed a measure of success. It must be noted first, however, that acute specialized care will always be expensive and the cost will rise as the cost of living rises and as more people and more complicated and expensive apparatus are needed to combat life-threatening emergencies. Secondly, only 30% of the cost of medical care is controlled by administrative techniques and is subject to the economy and efficiency measures of business (i.e., hotel management technique), while 70% represents the direct costs of medical care—those things that the physician cannot obtain for his patient in a hotel.

b) Recognizing that the rising cost of medical care is a phenomenon and that prolonged medical illness can wreak financial disaster on most of the individuals in a now credit-minded "not saving for a rainy day" population, health insurance companies have stepped into the breach with a variety of programs based either on pre-payment for comprehensive medical care or for fixed indemnity in the event of disease, trauma, or elective surgery. While solving many problems, the plans have created many new ones, such as overutilization of hospital beds, underutilization of ambulatory services, double indemnity, and general inadequacy of plans as regards certain contingencies and exigencies.

2) *The organization of health services*: Here we can start with governmental action and take a leaf out of the book of the National Health Service in England—the factors and social pressures that led to the nationalization of the health services and the profession, and the success and failures and problems that have subsequently been encountered. One might also look closely at the organization of the health services in the Scandinavian countries, and finally review recently enacted (Kerr-Mills) and currently pending (King-Anderson) health legislation in this country, considering the field of social welfare in broad perspective.

We can then narrow the focus to consider the regionalization of health services and attempts to coordinate the efforts of regional health groups (Rochester, N.Y. and currently through Trussell's efforts in New York City). Further scrutiny of the organization, coordination, and expansion of service leads to a consideration of the group practice of medicine and the formation of comprehensive medical care plans on a pre-payment (contractual) basis.

Our vision narrows finally to a sociologic study of the organization of the hospital with its diverse groups and its paradoxical (and organizationally unsound) arrangements of responsibility and authority—all considered in the light of rising costs and increasing demands and needs and the ability of the hospital to meet them, its success depending in large measure on its organizational structure of people, energies, and resources to get the job done.

3) *Public demonstration and two-way communication*: Man will do almost anything to maintain or to regain his health. But what does *he* consider to be a healthy state of being—what are his health needs as contrasted with his health wants? Certainly the balance between physical and mental health problems has been tipped toward mental health (whatever that may be), and time, talk, and listening are what the consumer wants and is progressively less able to obtain as the consumers multiply, specialism increases, and the forces in medicine become centripetal toward the large, complex urban institution—the teaching hospital, while the demographers tell us the forces of society are centrifugal toward the small, simple suburban stronghold—the ranch house. Organized medicine—the A.M.A. and A.A.M.C.—is being subjected to increasing scrutiny by two main groups, neither of which has any formal representation within the councils of either organization: 1) the consumers, banded together by large sums of money (health insurance and Welfare funds), and 2) the experts of other disciplines—the social scientists, the economists, and the politicians. We look for a clear pattern of shots around the future target to guide the profession and the hospital, which, as the social instrument of medicine, should be shaped by social forces and respond optimally to the changing community. The hospital should also actively direct these forces by influencing the community through public demonstration.

The final format of the Lowell Institute Lectures, which will consider these problems, is as follows:

THE HOSPITAL'S RESPONSIBILITY TO THE COMMUNITY

Wed., Feb. 6 KNOWLES, JOHN H.: The Social Conscience and the Primary Function of the Hospital Viewed in Historical Perspective. (An Introduction to the Lectures.)

Wed., Feb. 13 READER, GEORGE G.: The Contribution of the Behavioural Sciences to Medicine: Some Studies in the Evaluation of Hospital Function.

Wed., Feb. 20 MCKEOWN, THOMAS: An Examination of the Traditional Concept of Medical Care.

Thurs., Feb. 21 MCKEOWN, THOMAS: Changes in Medical Education Appropriate to an Enlarged Concept of Medical Care.

Wed., Feb. 27 CHERKASKY, MARTIN: The Hospital as a Social Instrument—Recent Experiences at the Montefiore.

Wed., Mar. 6 LINDEMANN, ERICH: The Health Needs of Communities.

Wed., Mar. 13 MCKITTRICK, LELAND S.: Privileges and Responsibilities of the Physician in the Hospital.

Wed., Mar. 20 NELSON, RUSSELL A.: The Hospital in the Continuing Education of the Doctor.

Wed., Mar. 27 CHURCHILL, EDWARD D.: Pre- and Post-Doctoral Medical Education in the Hospital.

Wed., Apr. 3 PETERSON, OSLER L.: Research in Medical Care.

Wed., Apr. 10 MASUR, JACK: The Relationship of Government to Hospitals.

Wed., Apr. 17 SOMERS, HERMAN M.: Health Insurance: Programs, Pressures and Problems.

Thurs., Apr. 18 SOMERS, HERMAN M.: (Continuation of the same topic).

Wed., Apr. 24 SCHOTTLAND, CHARLES I.: The Past, Present and Future of the American Social Security System—Its Implications for Health and Medical Care Programs.

Wed., May 1 TRUSSELL, RAY E.: The Problems of Maintaining Quality in Hospitals.

Wed., May 8 POLLACK, JEROME: The Voice of the Consumer: Cost, Quality and Organization of Medical Services.

Wed., May 15 RUTSTEIN, DAVID D.: At the Turn of the Next Century.

John H. Knowles, M.D.,
General Director

The Board of Trustees, at their meeting on November 23, 1962, voted to appoint:

Stanley Bullivant, Ph.D. as Assistant Biophysicist in Neurosurgery for one year, retroactive to August 24, 1962;

Dr. Lloyd M. Caplan as Assistant Psychiatrist at McLean Hospital, beginning July 1;

Dr. Dora R. Empson as Junior Assistant Resident on the Children's Service, beginning July 1;

Dr. Delbert J. Heslin as Clinical Fellow in Radiology (Staff), beginning July 1;

Dr. Helmer W. S. Huseby as Clinical Fellow on the Orthopedic Service, for the period December 1, 1962 through January 31, 1963;

Dr. Donald D. Hutchings as Clinical Fellow in Anesthesia, beginning January 1;

Dr. Maurice E. Keenan as Assistant Resident on the Children's Service, beginning July 1.

At their meetings on October 31, and November 7, 21, and 28, 1962, the General Executive Committee voted:

That the appointment of Dr. Freddy H. Frankel as Clinical and Research Fellow in Psychiatry will become effective as of December 1, 1962, rather than December 1, 1961, as previously recorded;

That the appointment of Dr. Richard P. Harbord as Visiting Anesthetist be extended for a period of three months, from January 1 through March 31;

To promote Dr. S. Bert Litwin from the position of Third Assistant Resident to that of Second Assistant Resident in Surgery, for the period January 1 through June 30.

To reappoint:

Robert A. Darrow, Ph.D. for one year, beginning November 1, 1962, with a change of title from Research Fellow in Biological Chemistry to Research Associate in Biological Chemistry;

Lorna J. Langer Gilmore, Ph.D. as Research Fellow in Biochemistry, in the Department of Pathology, for one year, retroactive to October 1, 1962.

To change the titles of:

Dr. Joseph W. Fowler, III, to that of Clinical and Research Fellow in Medicine;

Dr. Eugen Schmid to that of Clinical and Research Fellow in Medicine.

To appoint:

Miss Erika Ehrhardt as Research Fellow in Medicine for one year, beginning January 28;

Dr. John J. Franks as Research Fellow in Medicine for one year, beginning July 1;

Mr. Nasir-ud-din as Research Fellow in Biochemistry (Medicine) for one year, beginning July 1;

Dr. Kurt Randerath as Research Fellow in Medicine for one year, beginning January 28.

* * *

THE JOSEPH P. KENNEDY, JR. MEMORIAL LABORATORIES

The dedication of the Joseph P. Kennedy, Jr. Memorial Laboratories for Research on Mental Retardation took place on November 29. The program included a luncheon at the Sheraton-Plaza, with talks by Senator Edward M. Kennedy, President of the Foundation, George W. Beadle, President of the University of Chicago, and R. Sargent Shriver, Director of the Peace Corps.

Many distinguished guests attended the luncheon, following which they, and others, were taken on a guided tour of the laboratories.

These laboratories have been made possible by a $1,133,000 donation from the Kennedy Foundation and an additional $400,000 from the National Institutes of Health. They are directed by Dr. Raymond D. Adams, Chief of the Neurology Service at the Massachusetts General Hospital and Bullard Professor of Neuropathology at Harvard Medical School. In commenting on the new laboratories, Dr. Adams said:

> This is a very happy moment for me, and I am sure that I express also the feelings of the Staff of the Massachusetts General Hospital on this pleasant occasion. Actually, our interest in the field of pediatric neurology has been slow in developing. For many years we have cherished the hope that it would be possible some day to give as much attention to the nervous diseases of infants and children as had been given to those of adults, and that we would have adequate work space and instruments by which to study these diseases. It would perhaps be more correct to say that we had been hampered not only by the lack of work space but also by the lack of trained individuals who were interested in these diseases. I regret to say that this state of neglect of pediatric neurology was almost universal some ten years ago when we began to make plans for training the necessary personnel for that type of worker. When the opportunity offered itself some years later, after Dr. [Philip R.] Dodge was already at the M.G.H. and developing a service for Children's Neurology, to obtain laboratory space, we were, of course, absolutely delighted. Today, in a way, marks the formal and public notification that the new laboratories, made possible by the generous gifts from the Kennedy Foundation, the United States Government, the Trustees of the Massachusetts General Hospital, and the Spaulding Foundation, are open and functioning. But it signifies something more—that our Staff at the Massachusetts General Hospital and a part of the Faculty at Harvard Medical School will hereafter be enabled to pursue problems relating to nervous disease in infants and children, and particularly those which result in mental and physical handicaps
>
> The Kennedy Foundation and the Neurology, Neurosurgery, and Psychiatry Staffs of the Massachusetts General Hospital appreciate that problems in this field have two sides—the one which we might speak of as the humanitarian and the other the scientific. In

> past years, I think, the entire world has been impressed by the great deeds of the Kennedy Foundation in making the frequency and gravity of mental retardation known to our citizens, in giving an air of medical legitimacy and respectability to the underlying diseases, and in making the plight of a few of their hapless victims somewhat easier. By giving this money to our Hospital they have also acknowledged the fact of their belief in the scientific approach to these problems. The Staff of the Hospital, while sensitive to the tragic state of the mentally retarded and the physically handicapped and of the necessity for providing compassionate care and educational facilities, believe that progress can be made only through the scientific study of the causes and mechanisms of the underlying diseases. These new laboratories are to be devoted to this purpose.
>
> For us this date marks the beginning of a new period, when diseases of the child's nervous system will be subjected to systematic study and all the relevant methods of medical science will be brought to bear upon them. We expect to focus the interest of scientists on these problems and to make the bright students who come to our Hospital and University for advanced study aware of this importance. Even the smallest advance in our understanding of these diseases may open the way for the prevention of their damaging effects on the nervous system.

There are approximately 5,500,000 Americans who are mentally retarded. By 1970, this figure will have been increased by 1,000,000, over half of whom will be children under nine years of age. Mental retardation is a serious personal matter to at least one out of every twelve people in this country. It disables ten times as many as does tuberculosis, and twenty-five times as many as does muscular dystrophy. Before the use of vaccines, it disabled six hundred times as many as did infantile paralysis.

The Joseph P. Kennedy, Jr. Foundation was established in 1946, in memory of Lt. Joseph P. Kennedy, Jr. who was killed while flying on a dangerous experimental mission against a German V-2 rocket base. Since that time, fourteen institutions for the care and treatment of mentally retarded children have been established by the Foundation in the East, the Middle West, and the Far West.

A portrait of Lt. Joseph P. Kennedy, Jr., on the 9th floor of the Vincent-Burnham Building at Massachusetts General Hospital, was unveiled during the dedication ceremonies.

* * *

VOLUNTEER GROUPS
MGH SERVICE LEAGUE

MRS. CHARLES B. BURBANK

In tribute to Mrs. Charles B. Burbank, a committee of the MGH Service League placed a beautiful bouquet of flowers on the desk of the White Building lobby, which remained there during a period of mourning following her death.

Mrs. Burbank was born Catherine McHugh on September 23, 1918, in Wisconsin. She was the daughter of Dr. and Mrs. Francis Thomas McHugh. She attended Mt. Mary College in Milwaukee, Wisconsin. In 1942 she joined the Chicago Chapter of the American Red Cross, and in 1944 served with the Red Cross Overseas Hospital Service in the Near East and in Italy. In 1946 Mrs. Burbank finished her research and obtained her Masters degree in 1947 from the Loyola University School of Social Work in Chicago, Illinois. On March 3, 1947, she came to the M.G.H. and served on the surgical wards as a Senior Case Worker. She left in January 1953, and was married to Dr. Charles B. Burbank on February 2, 1953.

Mrs. Burbank was Vice-President of the MGH Staff Wives Association from 1955 to 1956, and President from 1956 to 1958. She had previously served for several years as Chairman of the Volunteer Services for the Staff Wives Association (now the MGH Service League). She was also instrumental in setting up the Reception Center for Professional Visitors, and most recently had taken an active part in the early planning of a coffee shop to be opened in the future at the Hospital.

Mrs. Burbank died on October 17, 1962. Her life was largely dedicated to the service of others, and her contributions to the organizations with which she was associated will remain long in the memory and appreciation of all who knew her.

The annual tea in honor of our volunteers, sponsored by the Trustees and General Director of the Hospital, was given in Bartlett Hall on the afternoon of December 4. As always on these occasions, the affair was thoroughly enjoyed by all who attended.

But there was an added feature this year which made the party doubly appreciated. It was the presentation of the first Jessie Harding Award for Volunteer Service. Here is a bit of background information regarding this innovation:

> At the meeting of the Board of Trustees held on November 22, 1961, on recommendation of the Advisory Committee to the Volunteer Department, it was VOTED to establish an annual award to be known as the Jessie Harding Award for Volunteer Service, and the Advisory Committee was authorized to appoint such subcommittees as they deem advisable to determine the recipient of and the form of this Award.

At 4:30 on the afternoon of the tea, Dr. Chester M. Jones, Chairman of the Advisory Committee to the Volunteer Department, took the floor, greeted the assembled guests, and then proceeded to read this citation:

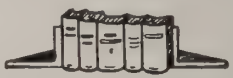
> To you, Doris Taylor Black, I have the privilege of presenting the Jessie Harding Award for Volunteer Service, in recognition of twenty years of continuous and devoted service to the many patients that you have helped at the Massachusetts General Hospital. Your work as a volunteer has been one of intense human interest in sick people, to whom you have given freely and unremittingly of your time and strength. You have made rough paths smoother; you have given hope and confidence to those who were fearful, and have provided kindly understanding to those who were doubtful. You have earned our respect and gratitude for your selfless but very tremendous contribution to the work of this Hospital.

At this point Mr. Francis C. Gray, Chairman of our Board of Trustees, presented the Award to Mrs. Black. It is a beautifully engraved, appropriately framed document, which reads, below the words "The Massachusetts General Hospital" and the Hospital seal:

> The Jessie Harding Award
> for
> Volunteer Service
> to
> Doris Taylor Black
>
> as a token of profound respect and appreciation for her many years of generous volunteer work for this hospital, and for the spirit of service that she personified.

Below are the signatures of Francis C. Gray, Chester M. Jones, and Mary Ruth Wolf (Director of our Volunteer Service Department), and the date—December 4, 1962.

Members of the Harding family who attended the tea and witnessed the presentation were her sons Mr. Edgar Harding and his son, Philip R., of Marblehead, Mr. and Mrs. Robert W. Harding of Marblehead, and Mr. Parkman D. Harding and his daughter, Inglee, of Needham.



STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Egbert, L. D., Laver, M. B., and Bendixen, H. H.
The effect of site of operation and type of anesthesia upon the ability to cough in the postoperative period.
Surg. Gynec. & Obst. 115:295.

Cardiology

Little, J. B.
Acute cardiovascular disease.
J.A.M.A. 182:289.

General Surgery

Cope, O., and Litwin, S. B.

Contribution of the lymphatic system to the replenishment of the plasma volume following a hemorrhage.
Ann. Surg. 156:655.

Miller, D., and Bjornson, D. R.
An investigation of cold injured soldiers in Alaska.
Mil. Med. 127:247.

Mundth, E. D.
Cholecystitis and diabetes mellitus.
New England J. Med. 267:642.

Internal Medicine

Hardy, H. L.
Beryllium Case Registry progress report: 1962.
Arch. Environmental Health 5:265.

Hardy, H. L.
Reaction to toxic beryllium compounds: Terminology.
J. Occupational Med. 4:532.

Laboratory Science

Isselbacher, K. J., Quinn, R. C., and Chrabas, M. F.
The solubilization and partial purification of a glucuronyl transferase from rabbit liver microsomes.
J. Biol. Chem. 237:3033.

Krane, S. M., and Glimcher, M. J.
Transphosphorylation from nucleoside di- and triphosphates by apatite crystals.
J. Biol. Chem. 237:2991.

Pinals, R. S., and Krane, S. M.
Medical aspects of renal carcinoma.
Postgrad. M. J. 38:507.

Silbert, J. E.
Incorporation of C^{14} from labeled glucuronic acid and N-acetyl glucosamine into polysaccharide by a cell free preparation from mouse mast-cell tumor.
Biochem. & Biophys. Res. Comm. 9:266.

Oral Surgery

Guralnick, W. C., and Shulman, L. B.
Tooth transplantation.
In Dental Clinics of North America, Philadelphia, W. B. Saunders Co., July, p. 499.

Orthopedic Surgery

Miller, D.
Development of a "walking cast" cover.
Mil. Med. 127:841.

Rowe, C. R.
Acute and recurrent dislocations.
J. Bone & Joint Surg. 44-A:998.

Physical Medicine

Watkins, A. L.
Rehabilitation after hemipelvectomy.
J.A.M.A. 181:793.

Watkins, A. L., and Ford, D. E.
Rehabilitation after amputation of an upper extremity: A ten year study.
Arch. Phys. Med. 43:293.

Physiology

Remensnyder, J. P., Mitchell, J. H., and Sarnoff, S. J.
Functional sympatholysis during muscular activity: Observations on influence of carotid sinus on oxygen uptake.
Circulation Res. 11:370.

Psychiatry

Blane, H. T.
Space perception among unilaterally paralyzed children and adolescents.
Exper. Psychol. 63:244.

Sifneos, P. E., and McCourt, W. F.
Wishes for life and death of some patients who attempted suicide.
Ment. Hyg. 46:543.

Radiology

Maruyama, Y., Wilkins, E. W., and Wyman, S. M.
An evaluation of angiocardiography in pulmonary carcinoma with particular emphasis on prognosis.
Radiology 79:617.

Robbins, L. L.
Problems in the education of residents in radiology. Hickey Lecture, 1962.
Am. J. Roentg. 88:393.

Wang, C. C., Little, J. B., and Schulz, M. D.
Cancer of the nasopharynx: Its clinical and radiotherapeutic considerations.
Cancer 15:921.

Miscellaneous

Cannon, B.
Editorial.
Plast. & Reconstruct. Surg. 30:103.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Ackerman, L. V.
Cancer, ed. 3.
St. Louis, The C. V. Mosby Company, 1962.
(13V)

Albertsson, P.
Partition of cell particles and macromolecules.
New York, John Wiley & Sons, Inc., 1960.
(2Am)

Allen, E. V.
Peripheral vascular diseases, ed. 3.
Philadelphia, W. B. Saunders Company, 1962.
(15F)

Allen, F. M. B.
Aids to the diagnosis and treatment of diseases of children. ed. 11.
Baltimore, The Williams & Wilkins Company, 1962.
(26D)

Allen, J. M. (Editor)
Molecular control of cellular activity.
New York, McGraw-Hill Book Company, Inc., 1962.
(2Am)

Bard, P. (Editor)
Medical physiology, ed. 11.
St. Louis, The C. V. Mosby Company, 1961.
(4A)

Berger, E., and Melnick, J. L. (Editors)
Progress in medical virology, vols. 2 & 4.
New York, Hafner Publishing Co., Inc., 1960, 1962.
(11A)

Boyer, P. D., and Myrbäck, K.
The enzymes, ed. 2, vol. 6.
New York, Academic Press, Inc., 1962.
(5C)

Brachet, J.
The biological role of ribonucleic acids.
Princeton, N. J., D. Van Nostrand Company, Inc., 1961.
(5B)

Brenner, N., Callen, J. E., and Weiss, M. D. (Editors)
Gas chromatography.
New York, Academic Press, Inc., 1962.
(5A)

Clifton, C. E. (Editor)
Annual review of microbiology, vol. 16.
Palo Alto, Annual Reviews, Inc., 1962.
(9A)

Comroe, J. H., Jr.
The lung, ed. 2.
Chicago, The Year Book Publishers, Inc., 1962.
(20C)

Cosslett, V. E., and Nixon, W. C.
X-ray microscopy.
New York, Cambridge University Press, 1960.
(3J)

Cutting, W. C. (Editor)
Annual review of pharmacology, vol. 2.
Palo Alto, Annual Reviews, Inc., 1962.
(22C)

Dacie, J. V.
The haemolytic anaemias, congenital and acquired, ed. 2.
New York, Grune & Stratton, 1960.
(14C)

Engel, S.
Lung structure.
Springfield, Ill., Charles C. Thomas, 1962.
(20A)

Florkin, M. (Editor)
Comparative biochemistry, vol. 4.
New York, Academic Press, Inc., 1962.
(5A)

Lindskog, G. E.
Thoracic and cardiovascular surgery.
New York, Appleton-Century-Crofts, Inc., 1962.
(23Q)

Maximow, A. A.
A textbook of histology, ed. 8.
Philadelphia, W. B. Saunders Company, 1962.
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Pfieffer, C. C. (Editor)
International review of neurobiology, vol. 4.
New York, Academic Press, Inc., 1962.
(19Ab)

Quimby, E. H. (Editor)
Radioactive isotopes in medicine and biology, ed. 2, vol. 2.
Philadelphia, Lea & Febiger, 1962.
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Robbins, A. L.
Textbook of pathology, ed. 2.
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Stetler, C. J., and Moritz, A. R.
Doctor and patient and the law, ed. 4
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Werner, S. (Editor)
The thyroid, ed. 2.
New York, Paul B. Hoeber, Inc., 1962.
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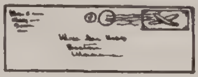


It has been a long time since we last heard from Dr. Arthur C. Guyton (*W.S.* 1943), our one and only "singleton" in the entire State of Mississippi, but now this most interesting letter has arrived from him:

Thank you very much for your letter.

As you perhaps recall, I had to give up my desires to be a surgeon when I contracted polio while in residency at the Massachusetts General in 1946. Almost ever since that time I have been with the University of Mississippi School of Medicine as Chairman of the Department of Physiology & Biophysics. During this time I have watched the school grow from a small two-year school to a rapidly expanding four-year school, which we believe now to be one of the outstanding medical schools of the South. Almost without exception the faculty and administration are young both in age and in energy; therefore, things move extremely rapidly here and the growth has been truly phenomenal. In research grants alone, the institution has grown over 4,000 percent in seven years, and we, like schools throughout the nation, are now finding that the research program is as important as the training program. On our faculty are many teachers who periodically bubble with excitement either from their contacts with students or with some new research finding. This is what one can find in a school that has a youthful faculty; and now, after seven years of growth in our four-year school, we are also beginning to level off into a state of stability which characterizes the older schools.

I think you can gather from my above comments that those of us at this school look forward to a very bright future. As evidence of this fact, the different departmental chairmen of the school have had an accumulative total number of offers to go elsewhere approaching the 100 mark, and yet, not a single departmental chairman has left.

Personally, I am now deeply engrained in physiology and biophysics, and I am sure that I have had as exciting a life in this field as I would have had in surgery, which, I am sure, would also have been a very rewarding life. Our school is small enough to enable me to do a few other things besides continual teaching. These include a fairly vigorous research program, some instrument design work, and the writing of a textbook of physiology for medical schools and a physiology text for colleges.

Thank you again for writing, and allowing me to respond in this way to many of my wonderful friends of the past.

Dr. Kenneth E. Liffmann (*Dn.* 1956) was our "singleton" at Loring Air Force Base when we wrote to him. Now, from

Dr. John H. Knowles, General Director

Rhode Island comes this letter:

Thank you for your kind letter.

After I left M.G.H. in 1956, I attended Tufts Medical School and obtained my M.D. degree in 1958. I spent the next two years as intern and then junior assistant resident in surgery at Rhode Island Hospital. From 1960 to 1962 I was in the Air Force, stationed at Loring Air Force Base, Maine, where I was assigned to the Surgical Service. My training in oral surgery and facial trauma, acquired at the M.G.H. under Dr.Weisberger, was a definite asset to me during my tour of duty.

Since last July I have been back at Rhode Island Hospital, Providence, as assistant resident in surgery.

The bank and I own a small home in Cranston, Rhode Island. We have stabilized at three children.

It is always good to hear from or about Dr. Donald Macomber (*S.S.* 1911), our "singleton" in Brunswick, Maine. This letter arrived from him recently:

Since it is now fifty-five years ago that I first worked at the M.G.H. as "striker", you can imagine that my professional activities have completely ceased.

I am afraid I have little of solid accomplishment to report, but I am enjoying life to the full. My time is almost equally divided between the Maine seacoast and Marathon on the Florida Keys. Sailing, fishing, and cruising are still my greatest interests. I have a twenty-six-foot auxiliary sloop on which my wife and "Teddy" Menzies (who formerly was a head nurse at Phillips House and who now makes her home with us) and I cruise and sail each summer. I have trailed this boat to Florida and lived on her winter before last and, in 1961, trailed her to the Bras d'Or Lakes, Cape Breton.

Since my last report I have travelled in South America, Europe, and round the world on a freighter. Other non-professional activities include weaving, bookbinding, and painting. The life of retirement can be both interesting and rewarding. There need never be a dull moment.

We were glad to hear from Dr. Willis H. Bower (r.p. *Psychiat.* (*McL.*) 1949), our "singleton" in Pueblo, Colorado. He writes:

Since March 15, 1961, I have been Superintendent of the Colorado State Hospital, a large mental hospital. I have had the job of presiding over the extensive reorganization of the hospital, both in its clinical services and in its administrative structure.

You might be interested to know that we called upon Mr. Larry Martin, your Comptroller, for help in the field of accounting, and we had a fine visit from him in August.

New addresses:

Dr. Irving P. Ackerman (*M.* 1951), Zero Emerson Place, Boston 14, Mass.
Dr. Allan M. Butler (past c. *C.M.*), Tashmoo Farm, Vineyard Haven, Mass.
Dr. Robert G. Frost (a.r.p. *An.* 1961), 1065 Cass St., Monterey, Calif.
Dr. John W. Josse (*M.* 1957), Dept. of Microbiology, Washington University School of Medicine, St. Louis, Mo.
Dr. Henry C. Marble (*W.S.* 1912), Warren Bldg., Massachusetts General Hospital, Boston 14, Mass.
Dr. Eldred D. Mundth (*S.* 1960), Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md. (through June 1964)
Dr. Herbert A. Newman (a.r.p. *C.M.* 1960), 10 Nosband Ave., White Plains, N. Y.
Dr. Murray E. Pendleton (assoc. pediat.), 18 Locust St., Falmouth, Mass.
Dr. Grant V. Rodkey (*W.S.* 1943), Zero Emerson Place, Boston 14, Mass.
Ralph Schwitzgebel, Ed.D. (a. psychol.), Massachusetts General Hospital, Boston 14, Mass.

Brief bits:

Dr. Edward B. Benedict gave a lecture at Salem Hospital, Salem, Massachusetts, on September 13, 1962. His subject was "Peroral endoscopy: Special considerations".

Dr. George L. Nardi was invited to Argentina last October as the guest of the municipality of Buenos Aires and the Argentine Surgical Society. During the course of the Argentine Surgical Congress he conveyed the formal greetings of the Massachusetts General Hospital to the Society and spoke on surgical residency training, coronary endarterectomy, and surgery for chronic pancreatitis. He was awarded honorary membership in the Society. On his return trip, he stopped at La Paz, Bolivia, where he made rounds and spoke on recent advances in surgery at the Medical School. He spoke to the Bolivian Surgical Society on pancreatitis, performed a demonstration esophageal operation, and was made a member of the Society. After his return to the United States, Dr. Nardi served as moderator of the Forum on Pancreatic Diseases at the American College of Surgeons Meeting in Atlantic City on October 16. On October 26, he was guest lecturer at the New Britain General Hospital, New Britain, Connecticut, and on November 27, he addressed the staff of the Tobey Hospital in Wareham, Massachusetts, on esophageal replacement. During the course of the year 1962, Dr. Nardi was elected to membership in the American Surgical Association, the New England Surgical Society, and the International Society of Surgery.

Dr. Harold F. Schuknecht, Professor of Otology and Laryngology at Harvard Medical School and Chief of the Department of Otolaryngology at the Massachusetts Eye and Ear Infirmary, has been elected to membership in the Collegium Oto-Rhino-Laryngologicum at its session in Athens last September.

Dr. Bartlett H. Stone spent a busy week recently at the Ryder Memorial Hospital on the island of Puerto Rico. This 85-bed hospital, supported by the Board of Home Missions of the Congregational Church, is located between the mountains and the forest, about 38 miles southeast of San Juan. On the first day, Dr. Stone examined patients, most of whom were in states of shocking neglect. The next four days, beginning at 7 A.M. and continuing until well into the afternoon, were spent in performing operations on these unfortunate, poverty-stricken patients. Emotionally, it was a moving experience for Dr. Stone.

The News

No. 219 Boston, Mass. February 1963

THE PHARMACY DEPARTMENT

The first rules of the Trustees (1811) provided for an Apothecary and House Surgeon, to be "elected from the class of students by the Trustees on the recommendation of the Physicians and Surgeons of the Hospital". The Apothecary was to be "ex-officio Secretary of the Corporation and of the Board of Trustees and Librarian and Cabinet Keeper of the Hospital". Then followed additional duties. He was "to care for all drugs and surgical instruments, administer the medicines, assist the Superintendent in his accounts, to care for emergencies in the absence of the Physician and Surgeon, and to keep the records". In the late 1800's he became the first Hospital Photographer and Radiologist. (Apothecaries Walter J. Dodd and Joseph Godsoe, in developing the use of X-rays at M.G.H., received extensive X-ray burns which ultimately caused their deaths.)

As each of the ancillary services matured into a new separate department, the energies of the Apothecary flowed in an amoeba-like fashion to some other area of service. During its history, the Pharmacy has been related to almost every department in the Hospital.

In 1943 John T. Murphy succeeded Joseph Godsoe as Pharmacist-in-Chief. Under his direction the department rapidly expanded, and in 1955 had a staff of forty-two (about the same number as today). In 1959 it was decided to establish two divisions of the Pharmacy. John T. Murphy became head of the Division of Pharmaceutical Research and Development, and his former assistant, John W. Webb, was appointed Director of Pharmacy. At this point of transition a number of sundry items were transferred to the Upper Store.

With the atmosphere of research permeating the Hospital, it is not surprising that various contributions to this trend have come from the Pharmacy. Among the pharmaceuticals prepared for evaluation might be mentioned injectable diphenylhydantoin sodium, parenteral glutamic acid, arginine, arginine glutamate, a highly concentrated form of intramuscular tetracycline, a stable solution of injectable phenobarbital sodium, a compatible parenteral solution of morphine and pentobarbital, and a syrup of neostigmine. Many of these formulations have become commercially available. One of the drugs currently under study is pitressin, prepared in the Pharmacy as a sublingual tablet. Should this formulation continue to prove effective, it will reduce the need for repeated injections.

Pharmacy interns and graduate students affiliated with the Hospital often select a thesis that is of direct benefit to the patient. Graduate student Vincent Bouchard is currently testing various formulations in an attempt to develop an improved cough syrup suitable for diabetics. Most of the "sugar free" syrups available contain ingredients that are neoglucogenic.

Many procedures that are practised routinely here are examples of why M.G.H. is often set apart from many other hospitals. Sterile collyria would be a long-standing illustration. For thirty years our Pharmacy has been supplying sterile collyria to the patients of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary, yet it has been only within the past few years that Industry has become interested enough to market these preparations. Even now a number of such commercial products leave a great deal to be desired. It would be impossible to determine how many eyes have been saved because John T. Murphy has insisted for three decades that collyria be sterile.

A constant stream of materials, including disposable and plastic units, not only from various departments within the Hospital but also from other hospitals and private offices throughout the city, pass through the Pharmacy's ethylene oxide gas sterilizers. This service has been supplied for the past eight years, and the Pharmacy is constantly being consulted by those who are planning to install their own gas sterilizers. It is obvious that a pharmacist's understanding of bacteriology benefits him in establishing and carrying out sterilization procedures.

In addition to the gas sterilizers, there are a number of autoclaves and various types of bacterial filters used in preparing ophthalmic and parenteral solutions. Manufacturing technique involving positive air flow through ultraviolet light is utilized in a specially designed cabinet for the aseptic filling of containers with drugs that are heat sensitive.

Injectables require special non-reactive glass containers. Ampuls demand close observation for proper sealing, while vials should be sealed with inert rubber plugs. Frequently the sulfur concentration in rubber stoppers is high and variable, requiring that special washing and rinsing be mandatory before use. Even if the medication itself were not directly affected, one must also consider the possible action on other ingredients in the formulation, such as antioxidants or preservatives.

Few people could get excited about a suppository mold unless a medication to be administered per rectum is not available. For example, suppositories containing 75 mg. of acetylsalicylic acid for pediatric use are not available commercially, but are manufactured routinely in our Pharmacy. For years all our aminophylline suppositories were made in the Pharmacy.

Physicians would be hard pressed to find such items as Congo red injection or carmine capsules available in some other hospitals, but know they may be procured routinely at M.G.H.

Mixing tanks and kettles are used for lotions, washes, and solutions. Many visitors are fascinated by the machine which fills tubes with various ointments and creams. Others enjoy watching the capsule-filling machine in action. These machines play a major role in keeping down the total cost of medication.

There are a number of other pieces of equipment that make individual contributions. The deep freezer obviously is necessary for proper storage of certain biologicals. On occasion, an injectable has to be vigorously agitated to be dissolved or properly suspended before being administered. Unless particular attention is given by the nurse or physician, part of the medication may adhere to the bottom of the vial and improper dosage will result. The Pharmacy has a machine that mechanically agitates vials in much the same way that cans of paint are shaken to assure uniform dispersion. This is appreciated by many physicians and nurses who remember the lumps of procaine penicillin in some of the early formulations and the difficulty in obtaining a homogeneous suspension.

An analytical control laboratory is maintained to assay the wide variety of items manufactured within the Pharmacy, to check selected commercial products, and to help develop new products under research. Here a chemist would recognize such things as gravimetric balances, a spectrophotometer, an automatic titrimeter, volumetric solutions, a Watkins extractor, Karl Fischer apparatus, and a polarimeter. No tableted medication is effective if it passes through the body intact, so the laboratory has an apparatus for testing the hardness of tablets and their disintegration time. A Hegman gauge allows the pharmacist to measure the particle size of ointments—another silent service to the patient.

The pharmaceutical chemist must be conversant with a wide range of incompatibilities, oxidation and reduction, pH, and all the assay techniques required for a myriad of products.

In addition to chemical or spectrophotometric assay, all sterile products manufactured in the Pharmacy must be quarantined until a bacteriological check is performed.

Packaging and labeling

The manufacturing and packaging procedures introduced during Godsoe's tenure were further developed when John T. Murphy became Pharmacist-in-Chief. Murphy introduced dark amber glass bottles so that the color of the contents could not be recognized through the deep amber glass, thereby making it necessary to read the label before using a drug. Errors obviously due to the dependence upon color and appearance of a drug, rather than a careful reading of the label, disappeared. The tightly-capped glass containers serve to protect the contents not only from dust but also from humidity which can cause hydrolytic deterioration of many drugs, including acetylsalicylic acid and the choline derivatives.

Strip packaging is now coming of age. The drug is protected from the time it is packaged by the manufacturer until it is administered to the patient. This individual protective packaging would be especially desirable for nitroglycerin and thyroid tablets, and capsules of chloral hydrate. Unit packaging of disposable syringes and needles has already been enthusiastically accepted.

The use of hypodermic tablets was discontinued at M.G.H. in 1949. Precise dilution and proper labeling of most injectables is done in the Pharmacy.

The use of the metric system exclusively was adopted in 1945.

Supplies

In 1821 the Apothecary was charged with the care of surgical instruments. This responsibility continues today. Prosthetic devices are also found in the department. A separate supply room is maintained for chemicals and laboratory supplies. The pharmaceutical needs of the Massachusetts Eye and Ear Infirmary have been supplied for years by the M.G.H. Pharmacy.

A rather extensive list of drugs is classified as floor stock for which no direct charge is made to the patient. Not all drugs, however, can be given to the patient at no cost, and it is these charge drugs that cause the greatest demands on Accounting, Nursing, and Pharmacy, since they represent individual transactions. Once a patient is admitted and a charge medication is prescribed, the nurse must requisition it from the Pharmacy. In addition to the time involved in requisitioning and obtaining the drug, practically every hospital has the problem of what to do when the Pharmacy is closed. This problem was largely solved in October 1961, when the Pharmacy hours were extended. Since most physicians have seen their patients by 8:30 P.M., the nurse has time to order and receive medications before the Pharmacy closes at 10 P.M.

A pilot study is currently being conducted on a limited number of nursing units to speed up and extend drug service by stocking both non-charge and charge drugs on the floors. Charges are recorded only *after* the drug is administered. This eliminates the need of supplying separate containers of medication for each patient and automatically eliminates the accounting procedure of issuing credit for unused medication. Drugs are *on the floor* twenty-four hours per day, readily available, irrespective of when a patient is admitted. With the logistics involved in a hospital the size of Massachusetts General, such availability is particularly desirable.

In the late 1950's, medicine stations were installed and standardized in the Baker Memorial Building. The concept gradually spread, until now only a few floors are without them. Once the medicine stations are standardized, the Pharmacy personnel assume responsibility for inventory and maintain a constant check for proper potency, packaging, and labeling.

There is a definite trend in hospitals to have Pharmacy service extend beyond the Pharmacy proper. The pharmacists' more frequent visits to the floors give a more personal service and offer greater accessibility to those who people the nursing units. Improved communications result. In this era of clinical specialization, the Pharmacy is expected to be conversant with each specialty. Information about new drugs is continually solicited from the pharmacist, but he is also expected to supply similar information about "old time" remedies to the younger generation of physicians and nurses.

In an effort to coordinate the service of items for direct patient care, the Director of Pharmacy, with his combined business and professional background, is administratively responsible for Pharmacy, Central Sterile Supply, and Upper Store. As accounting becomes more sophisticated and with computers now a reality, it is possible to establish a centralized organization of inventory control for these three major supply areas.

The pharmacist has an active interest in cotton, gauze, sutures, and adhesive plaster, since standards for these items are established by the U.S. Pharmacopeia.

Clinics Pharmacy

The Clinics Pharmacy fills prescriptions not only for Clinics patients but also dispenses reasonable quantities of drugs for inpatients who are being discharged. Prescriptions for both groups must meet the label specifications established by law.

A myriad of federal, state, and local laws, rules, and regulations govern pharmacy operations. Almost everyone is now aware of the rules and regulations recently promulgated by the Massachusetts Board of Pharmacy, whereby prescription-legend drugs may be sold to patients only. Prescriptions for employees may be filled if they originate from one of the Clinics. In instances where private patients cannot obtain medicines in the normal consumer outlets, the hospital may fill their prescriptions. State vaccines are not "sold" and are available to physicians, as in the past.

The majority of Clinics patients arrive at the Pharmacy between 10:30 A.M. and noon. Several improvements have been made in the past few years to streamline the processing of prescriptions without sacrificing accuracy. These measures have noticeably reduced the time each patient must wait for his prescription. Discharge prescriptions that are written twenty-four hours in advance are filled before the peak outpatient load occurs. This obviates the logistical time-squeeze which can develop when an ambulance or relative arrives for a patient who is being discharged.

The practice of having both the generic name and the strength of a drug on the label, which has been in effect since 1956, has dramatically reduced the number of telephone calls from physicians and pharmacists in surrounding communities.

The Clinics Pharmacy offers quality drugs at reasonable prices, price preference being given to items used for long-term illnesses, such as myasthenia, arthritis, and diabetes.

The future will undoubtedly see a change in prescription forms, since some physicians are already looking for a less time-consuming way to record the patients' needs. Third party agencies are also asking for more detailed information on each bill. This will gradually cause a paper work-load that can be broken only by some sort of standardized form suitable for machine handling. The ideal form should be satisfactory to both physician and Accounts Receivable.

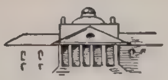
The Pharmacy maintains a library and literature file. Additional information is obtained from manufacturers' representatives or by direct communications with industrial concerns.

A *Pharmacy Newsletter* is prepared whenever there is a topic which would be of sufficient interest to the Staff. To make sure that it will be well read, the *Newsletter* is kept short and to the point. The many favorable comments received indicate that it fulfills a need.

M.G.H. pharmacists contribute to various seminars and institutes, and also serve on committees and as officers of state, regional, and national organizations. John W. Webb is currently Vice-President of the American Society of Hospital Pharmacists. In 1955 the Massachusetts College of Pharmacy recognized the many contributions of John T. Murphy by presenting him with an honorary Doctorate of Pharmacy degree—the fifth such degree to be conferred in its 125-year history.

No one can accurately prophesy, but it seems reasonable to assume that whatever the future demands, the Pharmacy at the Massachusetts General Hospital will continue to contribute its share toward superior patient care.

John W. Webb,
Director of Pharmacy



The Board of Trustees, at their meetings on December 7 and 21, 1962, voted:

To rescind the appointment of Dr. Thomas M. Glushein as Assistant Resident in Anesthesia, to have begun July 1;
To accept the resignation of Dr. Neva M. Johnson, Clinical Fellow in Radiotherapy, effective as of December 14, 1962;
That the resignation of Dr. Thomas E. Macnamara from the position of Assistant Anesthetist be accepted with regret and best wishes of the Hospital for his success at Georgetown University;
To increase the number of Interns on the Surgical Service from ten to twelve.

To appoint:

Dr. David W. Allen as Assistant in Medicine, beginning January 1;
Dr. Ernest Beroz as Clinical and Research Fellow in Psychiatry, beginning January 1;
Dr. Robert J. Boyd as Assistant Resident in Orthopedic Surgery for one year, beginning January 1;
Dr. Joan M. Brown as Clinical Fellow in Anesthesia for one year, beginning January 1;
Dr. Robert E. Burke as Assistant Resident in Neurology, beginning July 1;
Dr. John W. Cass, Jr. to the Board of Consultation, retroactive to July 1, 1962;
Dr. Thomas N. Chase as Assistant Resident in Neurology, beginning July 1;
Dr. George P. Contis as Exchange Assistant Resident on the Children's Service, for the term December 4, 1962, through January 15, 1963;
Dr. Larry J. Embree as Clinical Fellow in Neurology, to act as Resident in Neurology, for one year, beginning July 1;
Dr. John C. Fletcher as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. William H. Goodson, Jr. as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Edward J. Guiney as Clinical and Research Fellow in Surgery for one year, beginning January 1;
Dr. Sen-itiroh Hakomori as Assistant Biochemist in the Department of Medicine, beginning July 1;
Dr. Charles Janeway as Visiting Pediatrician pro tempore;
Dr. John B. Joseph as Assistant in Pediatrics and Acting Chief Resident on the Children's Service, beginning July 1;
Dr. Carl M. Leventhal as Resident in Neurology for one year, beginning July 1;
Dr. Donald B. Martin as Assistant in Medicine, beginning January 1;
Dr. Milton Mazer as Assistant Psychiatrist, beginning January 1;
Dr. Hiroshi Nikaido as Assistant Biochemist in the Department of Research Chemistry, beginning January 1;
Dr. Elinor D. U. Powell as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Donald L. Price as Assistant Resident in Neurology, beginning July 1;
Dr. Mitchell T. Rabkin as Assistant in Medicine, beginning January 1;
Dr. Norman P. Rosman as Clinical Fellow in Neurology, to act as Resident in Neurology, for one year, beginning July 1;
Dr. Jules R. Schwaber as Clinical Fellow in Medicine, effective as of November 1, 1962;
Dr. Stephen L. Wanger as Clinical Fellow in Neurology, to act as Assistant Resident in Neurology, for one year, beginning July 1.

At their meetings on December 5 and 12, 1962, the General Executive Committee voted:

To promote:

Dr. Frederick W. Ackroyd to the position of First Assistant Resident in Surgery, beginning January 1;
Dr Melvin E. Clouse to the position of First Assistant Resident in Radiology, beginning January 1;
Dr. Louis H. Edmunds, Jr. to the position of Resident in Surgery on the East Surgical Service, beginning January 1;
Dr. Robert A. Nebesar to the position of Resident in Radiology, beginning January 1;
Dr. James J. Pollard to the position of Resident in Radiology, beginning January 1;
Dr. Lawrence C. Sack to the position of First Assistant Resident in Radiology, beginning January 1.

To reappoint:

Terence P. Abbiss, Ph.D. as Research Fellow in Neurosurgery for one year, effective as of October 15, 1962;
James E. Anliker, Ph.D. as Research Fellow in Anesthesia, retroactive to July 15, 1962;
Kerstin G. C. Gezelius, Ph.D. as Research Fellow in Medicine for one year, beginning January 15;
Dr. Mehran Goulian as Clinical and Research Fellow in Medicine for one year, beginning January 1;
Sharad G. Joshi, Ph.D. as Research Fellow in Medicine for one year, beginning January 15;
Dr. Jan Koch-Weser as Clinical Fellow in Medicine for one year, beginning January 1;
Dr. Philip I. Salib as Assistant Resident in Orthopedic Surgery for one year, beginning January 1.

To appoint:

Dr. Dennis E. Hyams as Research Fellow in Medicine for one year, beginning July 1;
Dr. Erasmo Mercado-Contreras as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period November 13, 1962, through May 31, 1963;
James C. Orr, Ph.D. as Research Fellow in Medicine (Biochemistry) for one year, beginning March 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all recent articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material*, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Drabikowski, W., and Gergely, J.
The effect of deoxycholate on actin.
Biochim. et biophys. acta 63:225.
Drabikowski, W., and Gergely, J.
The effect of the temperature of extraction on the tropomyosin content in actin.
J. Biol. Chem. 237:3412.
Kamiyama, S., and Schmid, K.
Studies on the structure of α_1-acid glycoprotein. V. The linkage between the polypeptide and carbohydrate moiety.
Biochim. et biophys. acta 63:266.
Takahashi, S., and Schmid, K.
A low-molecular-weight γ_1-globulin derived from normal human plasma.
Biochim. et biophys. acta 63:343.

Clinical Endocrinology

Rosenberg, E. H., and Guralnick, W. C.
Hyperparathyroidism: A review of 220 proved cases, with special emphasis on findings in the jaws.
Oral Surg. 15, supp. 2:84.

General Medicine

Stoeckle, J. D., Hardy, H. L., King, W. B., Jr., and Nemiah, J. C.
Respiratory disease in U.S. soft-coal miners: Clinical and etiological considerations. A study of 30 cases.
J. Chronic Dis. 15:887.

General Surgery

Huggins, C. E.
Dimethylsulfoxide analysis to facilitate study of whole organ preservation by freezing.
Surg. Forum 13:51.
Phillips, A. W., and Cope, O.
Burn therapy: III. Beware the facial burn!
Ann. Surg. 156:759.

Laboratory Science

Arnason, B. G., Jankovic, B. D., and Waksman, B. H.
A survey of the thymus and its relation to lymphocytes and immune reactions.
Blood 20:617.
Flax, M. H., and Waksman, B. H.
Delayed cutaneous reactions in the rat.
J. Immunol. 89:496.
Jankovic, B. D., and Dvorak, H. F.
Enzymatic inactivation of immunologically competent lymph node cells in the "transfer reaction".
J. Immunol. 89:571.
Waksman, B. H.
Tissue damage in the "delayed" (cellular) type of hypersensitivity.
In Mechanism of cell and tissue damage produced by immune reactions. IInd International Symposium on Immunopathology, Brook Lodge (Mich., USA) 1961.
Basel, Switzerland Benno Schwabe & Co., 1962, pp. 146-160.
Waksman, B. H., and Adams, R. D.
Infectious leukoencephalitis: A critical comparison of certain experimental and naturally-occurring viral leukoencephalitides with experimental allergic encephalomyelitis.
J. Neuropath. & Exper. Neurol. 21:491.
Webster, H. DeF.
Schwann cell alterations in metachromatic leukodystrophy: Preliminary phase and electron microscopic observations.
J. Neuropath. & Exper. Neurol. 21:534.

Medical Research

Fallon, H. J., Lotz, M., and Smith, L. H., Jr.
Congenital orotic aciduria: Demonstration of an enzyme defect in leukocytes and comparison with drug-induced orotic aciduria.
Blood 20:700.

Otolaryngology

Kelemen, G.
The 4000-dip: Anatomic considerations.
Acta oto-laryng. 55:365.

Psychiatry

Lindemann, E.
Die Vorbeugung psychosomatischer Erkrankungen (mit Rücksicht auf den sozialen Raum).
Praxis der Psychotherapie 7:166.
Sifneos, P. E., and McCourt, W. F.
A study of mode and motive of some patients who attempted suicide.
In Proceedings of the Third World Congress of Psychiatry, Montreal, Canada, 1961.
Toronto and Montreal, Toronto Press and McGill University Press, 1962, vol. 2. pp. 1245-1249.

Talland, G. A.
Cognitive function in Parkinson's disease.
J. Nerv. Ment. Dis. 135:196.

Radiology

Lavender, J. P.
Retroperitoneal tumor.
J.A.M.A. 182:672.

Little, J. B.
Generalized collagen vascular disease.
J.A.M.A. 182:1110.

Schulz, M. D., and Wang, C. C.
A simple method of follow-up, disease indexing, and filing of radiation therapy records.
Radiology 79:842.

Next month's issue of THE NEWS will be the last in which 1962 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Beckerley, J. G. (Editor)
Annual review of nuclear science, vol. 12.
Palo Alto, Annual Reviews, Inc., 1962.
(36Jn)

Garattini, S., and Shore, P. A. (Editors)
Advances in pharmacology, vol. 1.
New York, Academic Press, Inc., 1962.
(22C)

Rodd, E. H. (Editor)
Chemistry of carbon compounds, vol. 5.
New York, Elsevier Publishing Company, 1962.
(5T)

Rudnick, D. (Editor)
Regeneration. Twentieth Symposium, Society for the study of development and growth.
New York, The Ronald Press Company, 1962.
(2Am)

BIOGLETS

Dr. Barry J. Agranat, Intern in Dental Medicine — born in Boston, Massachusetts, June 6, 1936; A.B., Brandeis University, 1958; D.M.D., Harvard School of Dental Medicine, 1962; married.

Dr. Kenneth A. Arndt, Assistant Resident in Dermatology — born in San Francisco, California, June 3, 1936; University of California, Berkeley, 1957; M.D., Yale University School of Medicine, 1961; Intern in Medicine, Grace-New Haven Community Hospital, New Haven, Connecticut, 1961-62; married; one son.

Dr. John B. Blennerhassett, Assistant Resident in Pathology — born in Auckland, New Zealand, April 15, 1933; M.B., Ch.B., University of New Zealand, 1956; House Surgeon (Intern), Medical Registrar (Resident), Pathology Registrar (Resident), and Assistant Pathologist, Wellington Hospital, 1956-61; M.R.A.C.P. (Member of the Royal Australian College of Physicians), 1961; married; four children.

Dr. William C. Bostic, III, Assistant Resident in Orthopedic Surgery — born in Forest City, North Carolina, July 2, 1930; B.A., Chemistry, University of North Carolina, 1952; military service: Lt. (jg), U.S. Navy, Mediterranean Area, 1952-55; M.D., Harvard Medical School, 1959; Intern and Assistant Resident in Surgery, Roosevelt Hospital, New York City, 1959-61; married; three children.

Dr. Ann R. Brace, Intern in Surgery, assigned to Gynecology — born in Boston, Massachusetts, 1936; MGH-Radcliffe Coordinated Nursing Program, 1954-56; A.B., Radcliffe College, 1958; M.D., Yale University School of Medicine, 1962.

Dr. Francisco Civantos, Resident in Pathology — born in Havana, Cuba, June 25, 1935; B.S. and B.A., Champagnat College, Havana, 1952; M.D., Tulane University of Louisiana, 1961; Intern, Detroit Receiving Hospital, 1961-62; married; two children.

Dr. Melvin E. Clouse, Assistant Resident in Radiology — born in Vinita, Oklahoma, June 6, 1934; B.S., Texas Christian University, Fort Worth, Texas, 1957; M.D., University of Texas Medical Branch, Galveston, 1960; Intern, Philadelphia General Hospital, Philadelphia, Pennsylvania, 1960-61.

Dr. Richard E. Conway, Assistant Resident in Orthopedic Surgery — born in Medford, Massachusetts, January 10, 1931; A.B., Harvard College, 1952; military service: Lt., U.S. Navy, Line Officer in the Atlantic, Mediterranean, and Caribbean Areas during the Korean War; M.D., Harvard Medical School, 1959; Intern and Junior Assistant Resident on the Harvard Surgical Service at Boston City Hospital, 1959-61; Assistant Resident in Orthopedic Surgery, Children's Medical Center, 1961-62; married; one child.

Dr. Alfred J. Defalco, Intern in Surgery — born in New Haven, Connecticut, September 7, 1934; B.A., Trinity College, Hartford, Connecticut, 1956; U.S. Public Health Research Fellow in Neurophysiology, University of Rochester, Rochester, N. Y., 1956-58; M.S., University of Rochester, 1958; M.D., University of Rochester School of Medicine, 1962; married; two sons.

Dr. Khalil Germanos, Assistant Resident in Orthopedic Surgery — born in Akoura, Lebanon, September 14, 1933; B.A., Universite St. Joseph Jesuit, Beirut, Lebanon, 1952; Premedical School, Lyon, France; M.D., French Medical School, Beirut, 1958; Intern, Springfield Hospital, Springfield, Massachusetts, 1958-59; Resident for one year, Boston City Hospital, Boston, Massachusetts; six months of Orthopedics, Sacred Heart Hospital, Montreal, Canada, 1960; started Orthopedic training in the combined program of Massachusetts General and Children's Medical Center for 3½ years, Jan. 1, 1961.

Dr. David T. Harper, Jr., Intern in Medicine — born in Chicago, Illinois, May 10, 1936; A.B., Harvard College, 1958; M.D., Johns Hopkins Medical School, 1962; married; one son.

Dr. Norman G. P. Helgeson, Assistant Resident in Pathology — born in Minneapolis, Minnesota, January 6, 1931; B.A., University of Minnesota, 1952; military service: Lt. (jg), U.S. Navy, engineering on destroyers and mine sweepers in Far Eastern, European, and United States waters, 1952-55; M.S., University of Wisconsin, 1958; M.D., University of Wisconsin, 1961; Intern (rotating), Detroit Receiving Hospital, Detroit, Michigan, 1961-62; married.

Dr. Joshua Hollander, Assistant Resident in Neurology — born in New York City, December 28, 1936; A.B., Columbia University, New York City, 1956; M.D., College of Physicians and Surgeons, Columbia University, 1960; Intern in Medicine, Vanderbilt University Hospital, Nashville, Tennessee, 1960-61; Assistant Resident in Medicine, Vanderbilt University Hospital, 1961-62; married.

Dr. Donald L. Leake, Intern in Dental Medicine — born in Cleveland, Oklahoma, November 4, 1931; A.B., University of Southern California, 1953; Oboist, Columbia Records, 20th Century-Fox, 1953-56; San Diego Symphony Orchestra, 1953-58; Robert Shaw Chorale, 1954-55; Fulbright Scholar, Belgium, 1955-56; 1st Prix, Royal Conservatory of Music, Brussels, 1956; A.M., University of Southern California, 1957; D.M.D., Harvard School of Dental Medicine, 1962.

Dr. Alfred Leitner, Assistant Resident in Medicine — born in Vienna, Austria, 1932; B.S., Muhlenberg College, Allentown, Pennsylvania, 1953; M.D., University of Pennsylvania Medical School, Philadelphia, 1957; Intern, University of Michigan Hospital, Ann Arbor, 1957-58; military service: National Institutes of Health, Bethesda, Maryland, 1959-61; Research Fellow in Hematology, Oxford University, Oxford, England, 1961-62; married.

Dr. S. Bert Litwin, Assistant Resident in Surgery — born in Jasper, Alabama, February 21, 1934; B.S., University of Alabama, University, 1955; M.D., Harvard Medical School, 1959; Intern, Cincinnati General Hospital, Cincinnati, Ohio, 1959-60; Clinical and Research Fellow in Surgery, Massachusetts General Hospital, and Research Fellow in Surgery, Harvard Medical School, 1960-61; Post-Doctoral Fellow, National Heart Institute, National Institutes of Health, Bethesda, Maryland, 1960-61.

Dr. Aleksander Mathé, Resident in Psychiatry — born in Zagreb, Yugoslavia, July 31, 1934; graduate of the Gimnasium of Zagreb, 1952; M.D., Medical School, University of Zagreb, 1959; military service in Yugoslavia, 1959-60; Intern (rotating), Jewish Memorial Hospital, New York City, 1960-61; Resident in Psychiatry, Bellevue Psychiatric Hospital-New York University, 1961-62.

Dr. Luiz F. deQ. Mattoso, Assistant Resident in Radiology — born in Rio de Janeiro, Brasil, July 4, 1937; M.D., Faculdade National de Medicina, University of Brasil, 1961; six months of training in Radiology, Radiological Institute of Montevideo, Uruguay.

Dr. Gabriel B. Mirkin, Assistant Resident on the Children's Service — born in Brookline, Massachusetts, June 18, 1935; B.A., Harvard College, 1957; M.D., Baylor Medical School, Houston, Texas, 1961; Intern in Pediatrics, Michael Reese Hospital, Chicago, Illinois, 1962; married; one child.

Dr. Dennis D. O'Keefe, Intern in Surgery — born in Columbus, Ohio, July 19, 1937; A.B., Wittenberg College, Springfield, Ohio, 1958; M.D., Cornell University Medical College, New York City, 1962.

Dr. George N. Rogentine, Jr., Intern in Medicine — born in Minneapolis, Minnesota, August 29, 1936; A.B., Harvard College, 1958; M.D., University of Minnesota, 1962; married.

New addresses:

Dr. Richard F. Bedell (*C.M.* 1958), 1557 24th St., Boulder, Colo.

Dr. Irving D. Bornstein (a.r.p. *D.* 1961), 500 E. 33rd St., Chicago 16, Ill.

Dr. John M. Davis (*C.* 1961), 100 York St., New Haven 11, Conn.

Dr. Gordon S. Myers (*W.M.* 1942), Zero Emerson Place, Boston 14, Mass.

Dr. Edwin O. Wheeler (assoc. p.), Zero Emerson Place, Boston 14, Mass.

Brief bits:

Dr. Gordon L. Brownell attended the Symposium on Neutron Detection, Standardization and Dosimetry, held in Harwell, England, December 10-14, 1962. He presented a paper which will be published later. Its title is "Neutron spectroscopy and dosimetry at the Medical Therapy Facility of the M.I.T. Reactor".

Dr. Bradford Cannon has been elected to membership on the Board of Trustees of Proctor Academy, Andover, New Hampshire.

Dr. Richard B. Capps (*C.M.* 1931 and *E.M.* 1933) has been elected president of the staff of the Presbyterian-St. Luke's Hospital, Chicago, Ill. Along with his practice of internal medicine, he has established a laboratory for research in liver disease — now partially endowed. He has won distinction as president of the Society for Investigation of Liver Disease.

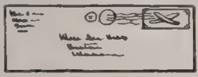
Dr. Edwin F. Cave participated in a course given by the New York and Brooklyn Regional Committee on Trauma of the American College of Surgeons, held in New York City, December 12, 13, and 14, 1962. The course was conducted by Sir Reginald Watson-Jones of London, and American orthopedic surgeons. Dr. Cave's subjects were "Fractures about the elbow" and "Fractures of the shaft of tibia". He also took part in a symposium on "Treatment of intracapsular fractures of the hip".

Dr. Earle M. Chapman gave addresses in Asheville and Morganton, North Carolina, on November 6 and 7, 1962, for the Continuing Education Program of the University of North Carolina Medical School. He spoke on "Diseases of the thyroid".

Dr. Witold Drabikowski (res. fel. *M.* 1962) is now at the Nencki Institute of Experimental Biology, Warsaw, Poland

Dr. John Gergely recently attended the Symposium on Contractile Proteins of the Japanese Biochemical Society in Tokyo, as an invited speaker. He also gave lectures on the biochemistry and biophysics of muscle contraction at the Universities of Tokyo, Sapporo, and Okayama.

Dr. Lloyd H. Smith, Jr. was visiting lecturer at the meeting of the Central American Society of Pediatrics, held in Panama on December 14, 1962. He also lectured at Roosevelt Hospital in Guatemala City on December 18.



Mr. Crockett received this letter from Mr. Joseph T. Prekup not long ago. Mr. Prekup was Administrator at McLean Hospital until his departure to assume his present duties at Maricopa County General Hospital in Phoenix, Arizona, where he is Associate Director:

> I welcome the opportunity to drop you a brief note and trust that things are well with you. Needless to say, I miss Boston and the Massachusetts General very much. As you know, it was and will always be very dear and near to my heart. However, things being as they are, the change to Arizona has been a good one so far. With the recent local elections over, the political climate continues to be excellent and Fred and I are having the opportunity of developing the kind of facility we think is necessary to meet the needs of this particular community.
>
> I know you are extremely busy, but I would like to hear from you when you can find a brief moment. I understand the Rehabilitation Building [at McLean Hospital] is now progressing nicely. Thanks for your many efforts in obtaining funds for this building. It will be something we can all be proud of.

We are especially grateful to Dr. Joseph A. Capps (*E.M.* 1896) for sending us this letter.

> I have long since retired from active practice, as I have passed my 90th birthday; but I find some occupation as an Emeritus Trustee of the Presbyterian-St. Luke's Hospital in Chicago.
>
> Longevity has its drawbacks. As I look at the picture of the 1896-1897 M.G.H. interns over my desk and reflect that they are all gone, including Dan Jones, Harvey Cushing, Elliott Joslin, and Bob Greenough, there is no satisfaction in being the last survivor.

This interesting letter has come from Dr. Howard M. Kravetz (clin. & res. fel. *M.* 1962), written from 909 East Brill Street, Phoenix 6, Arizona:

> After browsing through the last issue of THE NEWS, I am most interested to learn whether or not I am a "singleton" here in Phoenix, Arizona. I have asked that question of internists and surgeons here, but to date have found no one from the M.G.H. who is in this community.
>
> I must say that Phoenix represents the last frontier in American medicine as far as large cities are concerned. The calibre of the practitioners here, who have come from many large medical centers in the United States, certainly astounded me upon my arrival here. The phenomenal growth of this medical community has kept stride with the rapid expansion of the city itself.
>
> The vigor and enthusiasm is infectious and pervades all levels of medical practice here. The opportunity to study all phases of clinical pathology is unlimited. This city has been a "funnel" for persons with all types of illness, particularly pulmonary, and thus is a vast reservoir for patient care and treatment.

[No, Dr. Kravetz is not a "singleton" in Phoenix. He apparently made only a very hurried inquiry. MGH-ers are almost everywhere! According to our 1962 *Directory,* names of our alumni are listed as being in 46 of our States, including the District of Columbia, and in 30 foreign countries, from Australia to Wales. The names of 9 of our alumni appear as being in Arizona—4 of them in Phoenix. Perhaps even more will appear in the new 1963 *Directory,* soon to be revised and compiled.—*Editor*]

It was good to hear from Dr. Ralph Luikart, II (*M.* 1944)—our "singleton" in Santa Barbara, California. He writes:

> At long last I am replying to your request for a little news from me, as a "singleton" in this area.
>
> My wife and I came here with our small son and infant daughter in 1949 because we had fallen in love with the climate, mountains, and ocean of this area. Santa Barbara was then a relatively small town, already having a very capable dermatologist and thereby making the start a little more problematical for me than it might have been. However, my practice grew slowly but steadily until it became adequate.
>
> From the beginning I associated myself with U.S.C., where I teach and do a little research every Friday in Los Angeles.
>
> Nine years ago we had our third child, Scott, who seems to have completed our family. We live in a semi-ranch area, and have horses and sundry other animals to keep the children busy.
>
> My dabblings have included some interest in X-ray physics, cutaneous surgery, superficial chemical surgery, skiing, ham radio, real estate, and golf.
>
> Virginia and I miss our old Boston friends.

A brief note, with a promise of a longer letter in the future, has come from our "singleton" in Petah Tiqva, Israel—Dr. Zvi Laron (r.p. *C.M.* 1955). He writes:

> Thank you for your letter, and please accept my apologies for answering only now. I was abroad and returned only recently.
>
> I shall be very glad to send you a report on my activities and the facilities here. It was good to know that you had not completely forgotten me.
>
> I have heard about the wonderful changes that occurred at the M.G.H., and I hope to be able to visit you again some day.

Our "singletons" have been responding most generously to our letters of inquiry about them, for which we are very grateful. This reply has come from Dr. Gardiner Pier (*W.S.* 1943), our only alumnus in Truckee, California:

> A card from the Fruit Street Athletic Association unfortunately arrived on the day of their party in Atlantic City, but I doubt that even that invitation could move me right now.
>
> Anyone who has ever visited these parts can understand why I envy no one, despite a low income and a high cost of living. My kind of surgery, too, is fascinating (not to watch!). It is general, indeed, and fraught with unusual backwoods challenges. Fortunately, our twenty-one bed hospital is still adequate, though we're working hard to expand it.
>
> Yet there is time to take advantage of my surroundings during some part of almost any day, all year round. In summer, for instance, there are tennis courts outside my office, and in winter I often make a run down the mountain before the Ski Patrol gets busy enough to put me to work.
>
> The Squaw Valley office is frequently visited by old friends from such distant places as Boston!
>
> Several times a year I venture down to San Francisco, where I am effectively brought up to date by their excellent postgraduate courses at U. C. Hospital or the Presbyterian.
>
> But I do miss New England in October!

Another "singleton" heard from—Dr. Arnold M. Gordon (*C.M.* 1929). From 4406 Greenwood Drive, Des Moines, Iowa, he writes:

> Thank you for your interest in me.
>
> I had a pediatric internship at the M.G.H. (a long, long time ago), following a general rotating internship at St. Luke's Hospital in New Bedford, Massachusetts.
>
> I did general practice for a year in Boston, then spent a year in postgraduate study in internal medicine and gastroenterology, in Europe and in this country.
>
> I then practised internal medicine and gastroenterology in Des Moines, and I married a Des Moines girl. I took postgraduate studies in diagnostic X-ray from time to time, and did X-ray work all during my World War II service, mostly in North Africa and Italy.
>
> I had a bad heart attack (coronary thrombosis) six or seven years ago, and I subsequently gave up my office. Since then, I have been working half time as an X-ray consultant to a private medical clinic and to a U.S. Veterans' Hospital.

We were very pleased to receive this letter from Dr. Wilder Tileston (*E.M.* 1900)—our "singleton" in Carmel Valley, California:

> In March 1952 I retired from practice and, with my wife, took a trip around the world. After a year of travel, we settled down in this sunny valley in California.
>
> I have no professional activities, but I try to keep up with medicine by reading the *New England Journal of Medicine.*
>
> We have an interesting social life, largely among retired Army and Navy people. I soon found it wise, in case of doubt, to address everyone in the group as "Admiral" or "General".
>
> We keep healthy and happy by working outdoors, looking after the flowers and the shrubs, and the insect pests!
>
> The old M.G.H. still has a warm place in my heart.

Dr. Ken Hashimoto (a.r.p. *D.* 1959) wrote us a long letter shortly before he left Japan to return to Boston. Regrettably, space limitations prevented our including it in the last two issues of THE NEWS. Dr. Hashimoto is now working in Dr. Walter F. Lever's laboratory at the Boston Dispensary, 25 Bennet Street, but we give you the letter now because we think you will be interested in Dr. Hashimoto's account of conditions as he found them, in the field of medicine, in Japan.

> Thank you very much for your letter of August 20, which reached me just a few days ago. Surface mail takes a month to cross the Pacific, therefore please don't blame me for the delay in replying.
>
> I am delighted to write a short report about how I am getting along in Niigata, especially how I have survived through the all-limited practice under the National Health Insurance System as a practitioner in the town.
>
> Three years have elapsed since I left M.G.H. on one of those hot summer days of 1959. The glistening green of the trees and the lawn between the White Building and the Research Building on that day is still vivid in my memory.
>
> After a two-months' itinerary through almost all the countries in Western Europe, I sailed back home from Marseille through the Suez and around Southeast Asia.
>
> Contrary to my own desire, I had to assume

JOHN W. WEBB, DIRECTOR OF PHARMACY

my father's practice. He was suffering from a malignancy of the liver and died six months after my return. With one year's interposition of a research activity in the Kyoto University, I have been in the practice of dermatology and venereal diseases ever since.

In Japan, where forty-six medical schools produce more than three thousand M.D.'s every year for a population that is about two-thirds of that of your country, the surplus of physicians in universities and large hospitals makes it impossible for others to participate in the activities going on in those large institutions unless they get employed as full-timers with meager allowances. There is no such a system as Board of Consultants or Attending Physicians equivalent to yours—that is, the hospitals are closed to the practitioners in the town, and, accordingly, the university men maintain a much higher level of practice than the local M.D.'s. However, ninety percent of the medical cases are in the hands of the local practitioners, either general or specialty, and almost all of them are insurance doctors, under the National Health Insurance System controlled by the Government. I became one of these local M.D.'s.

Once you sign the contract with the National Insurance System, you must abide by the very ridiculous rules of the system—that is, "The Directions How to Treat Your Patients". Take a case of furunculosis, for example. The Direction tells us to use one of the sulfa drugs first, irrespective of the causative organisms (because the sensitivity tests are not recommended at this initial stage of treatment). Now that the resistant staphs are rarely sensitive to the sulfa drugs, the Direction approves the use of penicillin, which is no longer almighty, and then the use of broad spectrum antibiotics. A week or so is wasted before the right medicine can attack the resistant staphs. This step-by-step method is impractical and even dangerous. If these rules, which nobody observes, had been strictly followed, our nation would long ago have been relieved of its heavy burden of overpopulation. If any insurance practitioner honestly observed this law, no patient would come to him for a long course of rather expensive treatment. What does the doctor do to insure the health of his patients as well as his income? He uses, of course, the most effective broad spectrum antibiotics from the beginning, and makes a report (which is also a bill) for the Treasury of the National Insurance Bureau, stating that he couldn't help but use an expensive antibiotic because any one of the sulfa medicines or penicillin was not effective and his patient's general condition had rapidly been aggravated, etc. His "composition" is complete and he gets paid. The Reviewer of the Treasury, who is usually a professor of his specialty in one of the university hospitals in his locality, knows everything, including the phony contents of the report, but passes the bill if it is acceptablv composed in view of the Direction.

New modalities of treatment using new drugs are impossible, at least officially, under the National Health Insurance System, which has been so made as to check the expensive treatments and to recommend the cheaper ones. The cheaper the medicine you prepare for the patients (because of a traditional Japanese custom, we still use mortar and pestle and seldom write prescriptions for druggists) the more the profit you gain. If you give your patient aspirin pills, for example, you can get a net profit (margin) of 8 cents, while you can get only 7 cents when you give expensive tablets of steroid. There is no consideration for your cautiousness or thoughtfulness in deciding the indication of steroids. In this system, your diagnostic acumen is not duly evaluated, nor is your professional experience which has accumulated through the years, because they pay you 17 cents for ordinary diseases and 25 cents for "special diseases" as a diagnostic fee, irrespective of the length of your career. If you are an internist, the best work is to visit a patient at his home because a house call pays you 45 cents, and more if it is late or raining or the patient's house is more than a mile away.

Sometimes an internist must compete with the druggists as to how cheaply he can sell medicines, because all kinds of medicines (except narcotics) are available to everybody without prescription. Japanese newspapers are full of advertisements of new drugs and new brands, such as "Achromycine V for dysentery", "Serpasil for hypertension", "Neophylline (aminophylline) for your heart", etc. Thanks to the public health education by these advertisements, we see no fresh cases of syphilis, even in large dermatology services, but ever-increasing sero-resistant cases of late lues. Likewise, there are a lot of cases of resistant staph infections which can be controlled only by the newest antibiotics.

The insurance surgeon is no better in his business; the operation fee has no comparison with yours. For example, craniotomy pays you only $20, pulmonary lobectomy $25, gastrectomy $25, etc., including all expenses for the materials and nursing. There is no operation listed in the Directions which pays you more than $30.

Interestingly enough, this system makes a quack a millionaire and an excellent doctor poor, because it is not prohibited to treat any secondary events which ensued from the main disease and no time limit is set for the period of treatment if it is within two years. If the operation wounds get infected because of inferior sterilization techniques, you are allowed to treat the condition with "acceptable" modalities of treatment to add some more to your bill. If you neglect to give a patient tetanus to incur an unhappy event, you are not punished but are given a premium of payment for the treatment of a very difficult case of incessant seizure.

In spite of everything, my office is quite busy with an average of forty patients' visits a day. I am sure that my "medical composition" is much better than my English composition. I enjoy many American films on my TV and in the movie theaters. Among them I like Ben Casey the best. Vincent Edwards appears in a monkey suit and strolls through the hospital, which reminds me of the days I spent in the U.S. I am going to return to the Hub, but not to the Mecca, to my great regret. I'll join the research team of Dr. Walter F. Lever, who is now more active in the Boston Dispensary than in the M.G.H. It seems to me that I move once every three years to seek something new, this time with my wife and a small daughter who was born this last May. I am looking forward to seeing you all and the new developments in the Hospital, to which I couldn't contribute more than $2.

Please be assured that I shall subscribe to THE NEWS as soon as I get back to Boston, which will be before long. I couldn't pay for it when I left M.G.H. last time. I was very grateful to you when you sent me a copy, because you had reported in it that my work done with Dr. Cohen was published in the *Journal of Investigative Dermatology.*

I brought back home with me a chestnut from the horse chestnut tree in the green yard in front of your office, but it failed to bud the following spring. I imagine that huge tree has a lot of nuts this fall, too.

The News

No. 220 Boston, Mass. March 1963

MEDICAL ILLUSTRATION AND PHOTOGRAPHY

THE DEVELOPMENT OF VISUAL EDUCATION SERVICES FOR MEDICAL RESEARCH AND TEACHING AT MASSACHUSETTS GENERAL

In an academically affiliated teaching hospital, the continuous staff contributions to medical research and education, directed toward the care of the sick, have established the M.G.H. as a leader among hospitals of the world. With the rapid advance of medical and scientific knowledge and techniques during the past twenty years, has grown a continuing demand to communicate this new information. Over the past thirty years, 20 medical textbooks have been illustrated for the M.G.H. and H.M.S. staffs. In 1960, 730 papers were published on research and clinical findings based on medical and surgical cases in Massachusetts General. The design and production of 14 scientific exhibits during the past two years, utilizing the services of our medical artist and photographer, reflect the continuing demand that new medical information by visual media (drawings and photographs) be afforded. Closely linked in the medical communication chain are the picture-makers—the medical artist and the medical photographer, whose common objectives are to add visual clarity to the written and spoken word.

A review of the early common interests in medicine of the doctor, the artist, and the photographer, the growth of medical illustration as a paramedical profession, the growth of the medical art and photography departments at the M.G.H., with recent administrative changes and plans for the future, are within the scope of this report.

The role of the doctor as an investigator in scientific research and as a teacher is deep rooted in early medicine at the Universities of Salerno, Bologna, and Padua, beginning in the tenth century. During the sixteenth century in Italy, physicians and apothecaries of the day formed the Guild of St. Luke for the study and teaching of anatomy and medicine. Painters who gathered at the apothecary shops for their colors and to talk about art and artists were soon incorporated into this same guild. Common interest in anatomy by both the physician and the artist who established close contacts during this time became an important factor in the development of scientific anatomy. With the publication of the monumental *De humani corporis fabrica* in 1543, the anatomist Andreas Vesalius emerged as the "first man of modern science", and Sir William Osler called the "Fabrica" the greatest medical book ever written. Based on direct observations of the anatomical demonstrations, the illustrations by the artist Jan Stephen van Calcar have been accepted as a significant contribution to this first scientific medical book. About three hundred fifty years later, this same common interest in the broader aspects of medicine developed into the paramedical profession of medical illustration. This branch of applied art requires both a knowledge of medical subjects and artistic skills for the successful communication of medical information by visual media.

With the increased demands for books as medical knowledge expanded, printers looked for ways to produce books more quickly and more economically. Wood engravings were replaced with copper and then steel engravings and etchings. Lithography (drawing on stone) was developed in 1799 for the economical reproduction of illustrations, and to show fine details.

The discovery of photography through the experiments of Daguerre in France in 1839 and of Fox-Talbot in England in 1841 established a milestone in pictorial reproduction methods that equalled that of the first movable type and the printing press in about 1440. Manual copying of original drawings was soon replaced by the photomechanical reproduction techniques of photoengraving. An additional visual medium was added to graphic illustration in the use of the camera for recording unusual cases in medicine. Medicine, and the artist as well, gained a close associate when the photographer could help in meeting the illustration requirements for medical research and teaching.

After the Renaissance, artists continued to illustrate medical books. However, scientific accuracy by the artist, with rare exceptions, was sacrificed for decoration, and the need for artists with knowledge of and interest in the medical sciences became more evident with the development of newer methods of reproduction for book illustrations. Medical men, surgeons, and anatomists who were also capable artists prepared their own drawings for publication, to insure scientific accuracy of their careful observations. Notable among these doctor-artists during the period 1757 to 1859 were Albinus, Pieter Camper, Scarpa, Sir Charles Bell, Lord Lister, and H. V. Carter (Gray's *Anatomy*).

Staff interest in illustration was indicated at the M.G.H. in 1851 by a suggestion from the Medical Board that an artist be attached to the Hospital "who might make drawings of various morbid growths" (see Washburn's *The Massachusetts General Hospital—Its development, 1900-1935*, p. 107). Six years later the Trustees approved this suggestion and later specified the duties of the artist in the 1861 By-laws of the Medical Board, Chapter X. "He shall, under the direction and at the discretion of the Physicians and Surgeons, make accurate drawings of such anomalous and rare cases of disease as shall be useful for future reference and examination. He shall be present and assist the Physicians and Surgeons whenever his services may be desirable. All copies and drawings shall be carefully preserved in a portfolio provided for the purpose, and shall be placed in the Pathological Cabinet, under the care of the Curator; and they shall not be taken from the Hospital without the consent of the Visiting Committee." Dr. Lucius M. Sargent, Jr. and Dr. Henry P. Quincy were appointed "artists of the Hospital" and served from 1861-1864 and 1872-1892, respectively. During this period and earlier, Dr. Henry J. Bigelow utilized the services of an artist to illustrate his lectures on surgical pathology. His interest in both art and photography led to his use of photography for recording unusual tumors in some of his patients. Dr. Bigelow's drawings and photographs were later given to the Warren Anatomical Museum of the Harvard Medical School. In 1870, a drawing by Edward Waldo Emerson, a first year H.M.S. student (and son of Ralph Waldo Emerson) was included in the first recorded case history of muscular dystrophy at the M.G.H. (*New England J. Med.* *244*: January 1951).

For the next few years, unofficial artists were employed on a part-time or free-lance basis by individual surgeons, anatomists, and pathologists on the M.G.H. staff, to illustrate unusual clinical and pathological findings for teaching and for publication. Mr. H. T. Aitken and Miss Etta Piotti made outstanding contributions to both the Anatomy Department of the H.M.S. and the surgical staff of the M.G.H. from about 1900 to 1932. However, the official position of "Hospital artist", established in 1857, lapsed after 1892.

In 1894, during this lapse, the accomplished German artist, Max Brödel, came to Johns Hopkins University to illustrate a book, *Operative gynecology*, for Dr. Howard A. Kelly. The artist, with his background of illustration acquired in an anatomical laboratory of His, Braune and Spalteholz, his deep interest in research, and his artistic skills, and Dr. Kelly combined their interest and experience in communicating medical knowledge in the publication of an outstanding textbook of surgery.

The impact of Brödel's lucid illustrations based on original observation and his refusal to perpetuate the errors of other artists who only copied the works of earlier ones, led to the founding at Johns Hopkins Hospital, in 1911, of the first School of Medical Art in the world. A curriculum offered to students with artistic ability and an interest and education in the medical sciences emphasized a thorough knowledge of the anatomy and histology, as well as the disease processes, of the human body. Illustration techniques suitable for reproduction were emphasized, to develop an understanding of the most effective means of visualizing the intricate anatomical relation of the structures of the human body.

Brödel's high standards of scientific accuracy and excellent draftsmanship, as evidenced through his work and his instruction, were responsible for establishing medical illustration as a significant paramedical profession. The increasing recognition of the value of medical illustration to research and teaching is reflected in the development of schools for the formal training of medical artists in six centers of medical education in the United States. The Association of Medical Illustrators, formed in 1945, has continued to maintain these same high standards among its members, who are advancing the field of visual education in medical centers of the United States, Canada, and England.

World Wars I and II were considerable factors for focussing the attention of the medical profession on the value of the medical artist and the photographer in medical teaching and research. New emphasis on teaching methods with visual media was slowly adopted by university educators and required the services of specialists for the design, production, and use of illustrations for slides, movies, exhibits, and, later, television.

In 1930, Muriel McLatchie Miller, a pupil of Max Brödel, came to the M.G.H. to illustrate Dr. Joe V. Meigs's first book on gynecological tumors. In 1932, after completing her second book assignment and with the recommendation and financial sponsorship of Dr. Edward D. Churchill, Mrs. Miller was appointed a full-time medical artist for the M.G.H. staff. With a studio located in a corridor of Bulfinch 4 until 1939, she first illustrated surgical and pathological specimens for lectures and journal publication; but the scope of her illustration activities broadened through the years to include drawings of surgical procedures, surgical anatomy, neuroanatomy, endoscopy, orthopedic surgery, fracture service, and plastic surgery. In fact, she was responsible for all graphic illustration for the M.G.H. staff. Exhibit design and production further broadened the area of her service and, before long, her ideas on the effective presentation of statistical data for medical research and teaching were requested, and charts and graphs also became her responsibility. After moving to White 3A in 1939, part-time voluntary assistants helped her to meet the increased illustration requirements of the staff.

In 1941, the administration agreed to the establishment of a School of Medical Illustration, as it was felt desirable to offer training in the New England area. This was the third such school to be founded in the United States, the others being located in Baltimore and Chicago. A full-time assistant on a free-lance basis helped with production from 1940 to 1942, when World War II made adequate staffing a problem. With only limited space available, the School was first located in a corridor of the Domestic Building. The curriculum for the medical art student, based on the Brödel School, added new courses which were made necessary by the broader scope of medical illustration which had been developing since 1930. From a broad foundation in Anatomy, Histology, Physiology, and Embryology taught by Dr. Robert M. Green, and later by Dr. George Erikson, of the Harvard Medical School, the students were instructed in illustration techniques —pen and ink, continuous tone and color —suitable for reproduction purposes in publications and in lectures. Illustration projects during the first two years were mainly on anatomical subjects based on anatomical, surgical, or autopsy studies. Instruction in Endoscopic Illustration, Eye Anatomy, and Moulage was added to the curriculum, along with Dental Anatomy. Pathology and Neuroanatomy lectures and demonstrations were offered by the staff of the Pathology Department. Lectures and seminars in Administration, Book Illustrating, Operating Room Procedures, as well as field trips to a photoengraving plant and other art departments, added depth to the curriculum. A third year internship program in Surgery, Pathology, Medicine, and Photography for the students developed further application of art to medicine and gave an opportunity to illustrate more practical assignments related to their future work as illustrators. As the students developed technical skills and medical knowledge, they were also able to give part-time assistance in the production work in the Department of Medical Art. During the war and thereafter, this assistance was of inestimable value both to the Hospital and to the student, who gained valuable experience from close supervision of his work by the chief medical artist and the director of the School. In 1959, the School and the Medical Art Department, previously separated for lack of space, were finally brought together in their present location on the third floor of the Old Pathology Building. A large studio with laboratory, library, and lecture room, in close proximity to the production department, greatly improved the development of the teaching program. From its beginning in 1941, the School (directed by Mrs. Miller) was operated as a privately owned school, using the space made available by the Hospital.

During her thirty years as a Medical Artist for the M.G.H. and her nineteen years as Director of the School of Medical Illustration, Mrs. Miller contributed her artistic skills and her knowledge of medical subjects in a wide variety of illustrations for 18 textbooks, for lectures, exhibits, motion pictures, and for journal publications. Her contributions to the Hospital's program of research and teaching have added outstanding recognition to the value of a Visual Education Service in a teaching hospital. Graduates from her School have likewise helped to improve the standards of visual education in many medical centers in the United States. Mrs. Miller's retirement in June 1960 led to changes that were recommended to the Hospital administration after careful study of the situation. These will be discussed in a later section.

Photography, too, as a medium of illustration and of recording unusual clinical and pathological cases for teaching and research, ran a parallel course with Medical Art at the M.G.H. A review of these historic developments was written for the May 1959 issue of THE NEWS, and will be only highlighted here.

After the announcements in Europe of a new method of making pictures with a camera and photosensitized plates by Daguerre (1839) and Fox-Talbot (1841), Boston's interest in photography in the early 1850's soon stimulated investigation into its use for medical teaching. At the M.G.H., Dr. Oliver Wendell Holmes, a staff physician, soon became an enthusiastic photographer. Dr. John B. Brown, an orthopedic surgeon, used photographs to document the progress of his patients. A prompt reaction to this use appeared in an 1858 editorial in the *Boston Medical and Surgical Journal*, requesting the medical profession to make greater use of photography and urging that hospitals "have photographists attached to them as they now have microscopists and chemists". Dr. J. Homer Wright, staff pathologist, developed the techniques of photomicrography and found this "a useful method of making illustrations to accompany published results" of his research.

From 1885 to 1919, the task of clinical photography was assigned to the head apothecary, beginning with William Cameron. This additional duty was a natural and practical one because of the technical requirements for a knowledge of chemistry in the processing of photographic plates and prints. The apothecary and the physician of the nineteenth century through common interests, as with the artist in the sixteenth century, together began to apply the use of photography to medical teaching and research at M.G.H. Walter J. Dodd, head apothecary in 1895, became also the clinical photographer. His interest in Wilhelm Roentgen's new discovery led to experiments with his own X-ray machine and the study of its use as a diagnostic tool. After earning his M.D. degree in 1908, his duties as an apothecary and clinical photographer were assigned to Joseph Godsoe, and the Hospital moved Dr. Dodd to the staff of the newly formed Radiology Department as a pioneering Skiagrapher.

With the advances in pharmacology during World War I, pharmacy at the Hospital dropped its "sideline of photography", and this service, on a commission basis, became the responsibility of a local commercial photographer.

Although the Medical Board had received recommendations for the establishment of a Photography Department in 1900, action was deferred until the Trustees approved such a plan in 1927. In 1930, when the Baker Memorial was opened, the Hospital appointed Mr. Wilbour C. Lown as its first full-time staff photographer. His studio was located in the Bulfinch basement. Mr. Lown gradually built up a service to the Hospital that has continued to apply new photographic techniques for illustration and for record purposes. Surgical and pathological specimen photography, photo copying and clinical photography were the early requirements for the Photography Laboratory. Part-time assistants who volunteered their services kept budget and administrative duties at a minimum. A number of medical textbooks written by members of the M.G.H. staff during Mr. Lown's thirteen years of service here gave him credit for his outstanding work. A significant photographic record in color was made in 1942 by Bruno Micheleit to show clinical aspects of burn victims of the Cocoanut Grove fire. The entire June 1943 issue of the *Annals of Surgery* gave a full report of a new technique for the treatment of burns which had only a short time before been developed at the M.G.H. For five months after Mr. Lown's departure for military service in 1943, the Photography Laboratory was directed by Annette Conry, a graduate of the School of Medical Illustration who had studied photography with Mr. Lown in her student curriculum.

Mr. Lown and Mrs. Miller came to the Hospital at the same time and thus began a close alliance between Medical Art and Photography which was important in achieving the common objectives of the two production units of Visual Education Services which exist today.

After the succession of Richard St. Claire in 1944 and Mark McCann in 1947, Donald C. Withee was appointed head of the Department in 1952 and was responsible for much of the growth in the photographic service. Administrative responsibilities grew as a larger staff was required to meet the Hospital's increasing needs for a wide variety of photographic services. Routine work consisted of photocopying of artwork, X-rays, and book illustrations. Additional services included photography of patients, surgery, laboratory equipment, identification photographs, group pictures and others for publicity. Surgical and clinical motion pictures, and photomicrography became Don Withee's specialties. Processing of special EEG films, illustrations for medical textbooks, and many other photographic services, including a large pictorial exhibit for our 150th Anniversary, marked major photographic contributions from the Photography Laboratory under Don's direction. In 1959, Frank McCarthy, a staff photographer with 10-years' experience, transferred to the Pathology Department to assume responsibility for the continued development of their slide subscription program for the weekly C.P.C. published in the *New England Journal of Medicine*. Mr. Withee resigned in 1961 to accept a new position in California.

When Mrs. Miller retired in June 1960, the Hospital administration agreed to officially accept her gift of the School as a Hospital responsibility in its continued interest in education for the paramedical professions. Mr. Thomas A. Stebbins was appointed her successor as Director of the School of Medical Illustration and the Medical Art Department. After a careful study of other schools and medical art departments, an Administrative Committee, headed by Dr. Jack R. Dreyfuss, also recommended that the Hospital consider the benefits of administrative integration of the Medical Art Department, the Photography Laboratory, and the School into one central Visual Education Services Department. With the resignation of Mr. Withee in June 1961, Mr. Stebbins was asked to inaugurate this new program of Visual Education Services, with responsibilities for the business activities of each of the three units, to act as liaison between these units and the Hospital administration, and to solve various problems of personnel, equipment, space, and budget. With administrative approval, Mr. Stanley Bennett, a staff photographer with 8-years' experience, was appointed Chief of the Photography Unit. A staff of five assistants includes Clayton Hubbard and Peter Pierce as assistant photographers, with Ruth Carbone and Emily MacNaught as photography assistants, and Virginia Bunshaft as an office assistant.

Mrs. Edith Tagrin was appointed Chief of the Medical Art Unit, with Sidney Rosenthal as assistant medical illustrator and instructor in the School of Medical Illustration. Paul Andriesse joined the staff as full-time assistant medical illustrator a year later. Mrs. Helen Moseley continued as part-time office assistant for the Medical Art and the School units.

Among the Photography Unit's recent contributions to the Hospital's objectives in education and research are the photographic records relating to the arm surgery of Everett Knowles for public relations use, and new photographs for a revised brochure on Storrow House. Motion picture projects on animal research for Dr. John W. Irwin, and for Dr. Vernon H. Mark of the new Kennedy Laboratory, plus extensive footage to show surgery of the newborn for the Children's Service are indications of a continued need for this photographic medium. A photomicrograph showing cells of infectious mononucleosis, taken by Mr. Bennett, was used on the cover of the October 1962 issue of *Tech Engineering News*.

Recent contributions from the Medical Art Unit have been the development of illustration techniques to help visualize the three-dimensional relations of the ultrastructures of cells as seen in electron micrographs. Scientific exhibits have included research reports on an In-phantom Radiation Dosimeter, Molecular Biology of the Melanocyte, Reconstructive Urologic Surgery, Ureterovesical Reflex, Diabetic Retinopathy, Focussed Ultrasound, and the Blood Bank Reference Laboratories Program. Several of these received national awards for their contributions to medicine. Two medical textbooks, with illustrations by Edith Tagrin, were published, while three others are still in production for later publication. An increased number of individual drawings for publication has also indicated the continued need for an adequate staff of illustrators. Consultations to discuss illustration problems for publications, lectures, and conferences have also increased as the medical staff becomes more cognizant of the need for careful planning of visual material. Accelerated research activities have increased the number of complex biochemical and physiological charts and graphs that require a mutual understanding of the potentials and limitations of the use of visual media.

The School curriculum has been slightly modified after administrative study and recommendations. Pathology lectures have been doubled, and anatomy lectures and demonstrations have been concentrated in the first year to allow for increased illustrative experience in the clinics and in surgery. With continued interest of the Association of Medical Illustrators in present-day educational standards for the medical artist, accreditation, possible university affiliation, and the study of anatomy and other basic sciences on the medical school level have become prime considerations in the curricular development of the School.

The recent expansion and intensification of the whole research function of the Hospital, together with a re-evaluation of the teaching objectives of the M.G.H., have indicated a need for continued administrative and staff support for maintaining a competent group of medical illustrators and photographers. The use of television for undergraduate and postgraduate teaching is being effectively utilized in other medical centers to help communicate the advances in medicine. Such a medium may ultimately prove of value in the M.G.H. program of medical education.

Space requirements for a geographically and administratively centralized Visual Education Services Department have been evaluated and will be continually studied until a more efficient operation of these services here at the Hospital can be brought about.

The medical artist is often asked to explain why a photograph is not actually better for illustration than a drawing. The artist himself who may use photographs for reference knows the advantages of the camera in recording a fleeting instant of action and in demonstrating the actual and specific subject matter that is in front of the lens. A limitation of the camera is that it cannot interpret the subject, but when time and expense are factors in illustration, a photograph is often the medium of choice.

A drawing or painting, either realistic or schematic, can often show more than is seen by the camera. Generally only the surface relations of the subject matter are seen in a photograph. By a drawing, the artist can interpret what is visible with relation to what is known to exist even though it is not visible. From a knowledge of the purpose of the illustration and of his subject matter, he can discriminate between the important details and the trivial—he may eliminate a clutter of hands and instruments which hide structures that must be clearly visualized to be understood; and he may, by technical means, show inner structures through the outer surface as if it were transparent. He may cut away a section of the structures seen in order to reveal their hidden inner relations, combining this with an orientation view and an enlarged close-up view of the finer structural details. Often a single drawing is a synthesis of many views of the subject or many similar subjects designed to illustrate the important characteristics of size, form, and texture most clearly. By the use of light and shadow, a drawing can better show the general picture resulting from a synthesis of visual observations—the artist can focus the reader's eye on the significant parts of the illustration, while less important areas needed for orientation may be subdued or de-emphasized.

The artist is often asked to reconstruct a surgical procedure or illustrate a pathological specimen, as it existed before operation, from either a verbal description alone or from observations of X-rays or photographs when available. By his intimate knowledge of the structures of the human body and their changes in disease he is able to make a visual interpretation of what he only hears described or actually sees.

With the development of electron microscopy to reveal the ultrastructures of cells, the medical artist today faces new challenges—he must help to interpret visually what is seen in these greatly enlarged photographs. By studying many photographs of these structures, the artist must now be prepared to illustrate 3-dimentional views of these new structural relations.

Thomas A. Stebbins, A.B.,

Director, School of Medical Illustration and *Visual Education Services Department*

The Board of Trustees, at their meetings on January 4 and 18, voted:

To change Dr. Francis L. A. de Marneffe's title from Director of Hospital Affairs at McLean to Director of McLean Hospital;

To invite Dr. John H. Lawrence of the Donner Laboratory and Donner Pavilion at the University of California to give a Richardson Lecture at the Hospital on May 31.

To accept the resignations of:

Dr. Brian C. Dalton from the position of Clinical Fellow in Anesthesia, effective January 31;

Dr. Mudlagiri K. Gaitonde, Assistant Biochemist at McLean Hospital, effective retroactively to June 30, 1962;

Dr. J. Evarts Greene from the position of Clinical Associate in Medicine;

Dr. Marjorie B. Lees, Associate Biochemist at McLean Hospital, effective retroactively to September 30, 1962;

Dr. Edward Lowenstein from the position of Clinical Fellow in Anesthesia, effective January 24.

To appoint:

Dr. Donald L. Bornstein as Clinical and Research Fellow in Medicine, beginning January 1;

Dr. Lucille P. Carter as Assistant in Psychiatry, beginning January 15;

Dr. Bennett M. Derby as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;

Dr. John H. Gould as Exchange Assistant Resident on the Children's Service, from January 16 through February 26;

Dr. Herbert A Haessler as Assistant in Pediatrics on the Children's Service, beginning January 1;

Dr. William C. Kvaraceus as Research Associate in Education in the Department of Psychology at McLean Hospital, beginning September 1, 1962;

Dr. Richard N. Lolley as Research Fellow in Neuropathology at McLean Hospital, beginning October 1, 1962;

Dr. Charles F. McKhann, former Second Assistant Resident in Surgery, as First Assistant Resident in Surgery, beginning January 1;

Dr. Howard S. Maker as Research Fellow in Biochemistry at McLean Hospital, beginning July 1, 1962;

Dr. Joseph M. Miller as Clinical Assistant in Medicine, beginning January 1;

Dr. Stig H. M. Nyström as Clinical and Research Fellow in Neurosurgery for one year, beginning March 1;

Dr. Emmanuel J. Perakakis as Clinical Fellow in Anesthesia, beginning June 1;

Dr. Kunio Suwa as Clinical Fellow in Anesthesia, beginning July 1;

Dr. Yasuo Takahashi as Research Fellow in Biochemistry at McLean Hospital, beginning September 25, 1962.

The Trustees also voted to appoint the following Residents in Psychiatry at McLean Hospital, beginning July 1:

Dr. Jacqueline M. Amati
Dr. Samuel H. Barondes
Dr. Douglas Buchanan
Dr. Richard D. Budson
Dr. Roy M. Coleman
Dr. Theodore Dreier, Jr.
Dr. Matthew P. Dumont
Dr. Sidney Green
Dr. Alexandra M. Kail
Dr. Stephen S. Leavitt
Dr. Bernard Levey
Dr. Harvey M. Shein
Dr. John B. Spillane
Dr. Lawrence A. Stone
Dr. Larry H. Strasburger

At their meetings on December 19, and January 15 and 23, the General Executive Committee voted:

To promote Dr. Roger H. Morris to the position of Chief Resident in Anesthesia, effective as of January 19;

To terminate the appointment of Dr. Yoshitaka Shimizu as Research Fellow in Medicine, effective as of December 22, 1962.

To reappoint:

Mrs. Olga Sears Karplus as Research Fellow in Psychology in the Department of Psychiatry for one year, beginning February 1;

Dr. Margaret H. MacGillivray as Clinical and Research Fellow on the Children's Service for one year, retroactive to September 1, 1962;

Gerald L. Mechanic, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning March 1;

Dr. Nancy T. P. Nichols as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;

Gene M. Smith, Ph.D. as Research Fellow in Anesthesia, retroactive to September 1, 1962.

To appoint:

Dr. Mercedes A. Abunto as Graduate Student Assistant in Medicine, assigned to Cardiology, for the period January 1 through May 31;

Dr. Stuart J. Saunders as Research Fellow in Medicine for one year, beginning November 1.

* * *

✓ A SERVICE OF DEDICATION

A large group of friends and acquaintances of the late Miss Edith M. Terry gathered in The Chapel on January 30 in memory of her devotion as a social worker for many years in the Cardiac Clinics of the Hospital.

On the altar was a brass cross — a gift from the Committee for Home Care of Cardiac Children, who dedicated the cross in appreciation of Miss Terry's work here from 1925 to 1952. Vases of white lilies graced the altar. Soft organ music, including the hymn "When I survey the wondrous cross", preceded the prepared program which began with a few remarks by our Chaplain, Mr. Allan W. Reed. Dr. Bland then gave a résumé of Miss Terry's work. This was followed by a prayer, written by a patient for persons serving in this Hospital and read in unison by the assemblage. A benediction by the Chaplain concluded the ceremony.

The 71st annual Vincent Show, for the benefit of the Vincent Memorial Hospital, opens Tuesday evening, April 2, at 8:30, and will run through Saturday evening, April 6. There will be a matinee on Saturday afternoon at 2:30.

The script has been written by three young sisters who are members of the Vincent Club — Maria, Annie Lawrie, and Ethel Ryerson. The authoresses have taken an active part in previous Vincent Shows, and worked at the North Shore Music Circus last summer.

Mrs. Francis Keppel is again the Show Chairman and coordinator of the hundreds of Vincent members who will be working on the music, scenery, props, and behind the footlights, including the large "Front-of-the-House" Corps. The professional director will be Mr. Charles L. Tate of the Charles Blake Enterprises, Inc.

The title of this year's show is "A Bird in the Bush", in which the three authoresses take a nostalgic look at the period when the Vincent Hospital and the Club were founded. The plot, set in the Edwardian era, has scenes laid in England, France, and India, and a heroine who hails from Australia.

Tickets will go on sale March 18 at New England Life Hall, and will range in price from $1.25 to $6.00. The ticket office telephone number is KEnmore 6-4156. Members of the Ticket Committee will be on hand there to help you on Mondays through Fridays from 9:30 A.M. to 5:30 P.M.

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SEVEN 150th ANNIVERSARY PROJECTS

A few of our doctors have made inquiries as to how the funds which were contributed during the 150th Anniversary Program have been and are to be used. Anticipating that others might appreciate having this information, we give you here a brief summation.

The Orthopedic Research Laboratories, dedicated in September 1960, were the first project to be completed. Under the direction of Dr. Melvin J. Glimcher, a team of scientists and doctors from the Hospital, Harvard Medical School, and M.I.T., are pooling their knowledge in histology, biochemistry, physical chemistry, and solid state physics in the study of the skeleton. Separate units are named in memory of outstanding orthopedic surgeons who served on our Staff — Drs. Joel E. Goldthwait, Armin Klein, Robert B. Osgood, and Marius N. Smith-Petersen. An article by Dr. Joseph S. Barr, describing in detail the functions of the laboratories, appeared in the February 1961 issue of THE NEWS.

The dedication of our James Howard Means Metabolic Research Laboratories, given in memory of Aimee and Winthrop Sargent, took place on June 7, 1961. Dr. C. Sidney Burwell, the principal speaker at the dedicatory ceremony, paid a well-deserved tribute to Dr. Means and spoke of the activities to be carried on in this area. Dr. Burwell's speech was published in the October 1961 NEWS. Two laboratories, two instrumentation rooms, a constant temperature room, a cold room and a dark room, a library, and a conference suite make up the space devoted to the study of metabolic research. The work is under the direction of Dr. John B. Stanbury.

In November 1961, THE NEWS published a comprehensive article, written by Dr. Francis de Marneffe, on the then-proposed McLean Hospital Rehabilitation Center. A copy of the architects' plan was included, showing the occupational therapy room, the library, the educational department, the music room, the day care center, the patio, and the village green. The "green", with its store, restaurant, beauty salon, laundromat, barber shop, bank, and post office, will offer to the patients many activities found in community life. The Center will be completed in 1963.

The Lincolnshire Hotel, located at 20 Charles Street, was purchased and is now a residence for about 150 student nurses. A library, classrooms, lounges, a snack bar, a squash court, and a laundry have been incorporated.

One of the outstanding renovations in the Hospital is the new 22-bed recovery room which has replaced the old 4-bed facility. The very latest in equipment for patient care following surgical procedures is now provided. A cardiac pacemaker, a TV monitor for visualizing heart beats, suction tubes for secretions, oxygen supply equipment, and blood pressure machines are only a few of the features of this most modern postoperative recovery room for efficient care of our patients.

THE NEWS will publish soon a report in detail on the Intensive Care Unit. Briefly, this modern Medical Service installation, with its unusual air-conditioning system designed to prevent recirculation of air from the patient areas, contains such equipment as oxygen, suction, and compressed air facilities in each patient's section of this new 18-bed unit.

The dedication of the Joseph P. Kennedy, Jr. Memorial Laboratories for Research on Mental Retardation took place on November 29, 1962. An article in THE NEWS of January 1963 reported that donations from the Kennedy Foundation, the United States Government, the Trustees of the Massachusetts General Hospital, and the Spaulding Foundation made these laboratories possible. The three major objectives to be pursued are: to improve the care of infants and children with diseases of the nervous system, to aid in the education of students and physicians in this field, and to investigate the cause, treatment, and prevention of diseases of the nervous system of infants and children. There is now adequate work space for these activities, with specially constructed laboratories for brain wave tests, research in experimental psychology, physiology, and neurochemistry, and for administration and study.

Here is a very abbreviated summary of the contributions made toward the 150th Anniversary Fund:

Total amount of money raised, as of September 17, 1962 — $12,872,214; spent or committed to date — $4,268,000; funds available for special projects — $2,058,000; 150th Anniversary expenses, including the cost of the Convocation — $595,969; bequests and gifts not available for 150th Anniversary projects — $2,674,245; building funds available for proposed new construction — $3,276,000.

Dr. Martin H. Flax, Assistant Pathologist at Massachusetts General and Instructor in Pathology at the Harvard Medical School, has been awarded a fellowship by the Medical Foundation — a United Fund agency. It will run for three years, starting on July 1.

Dr. Flax intends to do further research on the basic features of "autoimmune disease", primarily with the aid of the MGH Pathology Department's electron microscope.

In discussing his forthcoming project, Dr. Flax said, "'Autoimmune disease' results from an immune response by an individual to some of his own tissues. In contrast to inoculation with foreign materials, such as vaccines, an individual's own tissue components are generally incapable of stimulating an immune response. However, there are certain tissue constituents, often called 'autoantigens', which are in some instances treated as foreign by the body's own immune system. They then initiate a series of immunological events which lead to damage of the normal tissue from which the antigen is derived, producing an 'autoimmune disease'. These diseases, involving such organs as the brain, eye, thyroid, and the blood, occur spontaneously in man, but similar diseases can be experimentally produced in animals. Detailed analysis of these experimental conditions should clarify how these diseases are produced, and may suggest the means for their control."

Dr. George L. Nardi, Associate Visiting Surgeon at Massachusetts General Hospital and Assistant Clinical Professor of Surgery at the Harvard Medical School, has been awarded a research grant of $11,539 for the year 1963 by the Medical Foundation.

Dr. Nardi's research will involve the study of fundamental physiological and biochemical processes in the pancreas of dogs. It is expected that this basic research will result in a better understanding of the human pancreas, which is involved in such illnesses as diabetes and pancreatitis.

George A. Talland, Ph.D., Psychologist in our Stanley Cobb Laboratories for Psychiatric Research and Assistant Professor of Psychology at Harvard Medical School, has been awarded a research grant of $6,338 for the year 1963 by the Medical Foundation.

Dr. Talland's research will be concerned with the effect electric shock treatment has on memory. According to Dr. Talland, "The proposed pilot study will form an extension of the current program of the Experimental Psychology Laboratory of the Stanley Cobb Laboratories for Psychiatric Research, in which investigations of memory function occupy a central position of interest."

The Massachusetts General Hospital has received a $200,000 grant from the Hood Dairy Foundation for a new blood bank. The money will be used to increase the blood refrigeration and storage capacity from 300 to 500 units, double the donor beds, and expand the waiting room, laboratories, and research area.

Dr. Morten Grove-Rasmussen, Director of our Blood Bank, reports that 24,476 transfusions were performed at M.G.H. last year.

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STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and

Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all recent articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Bendixen, H. H., and Laver, M. B.
Circulatory effects of thiopental sodium in dogs.
Anesth. & Analg. 41:674, 1962.

Smith, G. M., Weitzner, M., and Beecher, H. K.
Increased sensitivity of measurement of drug effects in expert swimmers.
J. Pharmacol. & Exper. Therap. 139:114, 1963.

Biochemistry

Schmid, K., Binette, J. P., Kamiyama, S., Pfister, V., and Takahashi, S.
Studies on the structure of α_1-acid glycoprotein. III. Polymorphism of α_1-acid glycoprotein and the partial resolution and characterization of its variants.
Biochem. 1:959, 1962.

General Surgery

DeGroot, L. J., Hall, R., McDermott, W. V., Jr., and Davis, A. M.
Hashimoto's thyroiditis.
New England J. Med. 267:267, 1962.

Huston, C. J. W., Adams, L. C., Field, R. A., and McDermott, W. V., Jr.
Effect of insulin on glucose uptake by the isolated perfused canine liver.
Lancet 1:357, 1962.

Kestens, P. J., McDermott, W. V., Jr., and Haxhe, J. J.
Experiences de survie apres perfusion hepatique chez le chien.
Lyon chir. 58, no. 2, 1962.

McDermott, W. V., Jr.
The diagnosis and treatment of bleeding esophageal varices.
Epatologia 8:109, 1962.

McDermott, W. V., Jr.
Doctor afield: Edward Hand, 1744-1802 — Physician and General.
New England J. Med. 266:456, 1962.

McDermott, W. V., Jr., Victor, M., and Point, W. W.
Exclusion of the colon in the treatment of hepatic encephalopathy.
New England J. Med. 267:850, 1962.

Oral Surgery

Trieger, N.
Fluothane anesthesia for ambulatory oral surgery patients.
Oral Surg. 16:31, 1963.

Orthopedic Surgery

Salib, P.
Orthopaedic and traumatic skeletal lesions in ancient Egyptians.
J. Bone & Joint Surg., Brit. Vol., 44 B: 944, 1962.

Radiology

Janower, M. L.
Mastocytosis of the gastrointestinal tract. Report of a case.
Acta radiol. 57:489, 1962.

Lavender, J. P.
Swollen painless knee.
J.A.M.A. 183:180, 1963.

Lawrence, J. H., Tobias, C. A., Born, J. L., Wang, C. C., and Linfoot, J. H.
Heavy-particle irradiation in neoplastic and neurologic disease.
J. Neurosurg. 19:717, 1962.

Maruyama, Y., and Little, J. B.
Roentgen manifestations of traumatic pulmonary fat embolism.
Radiology 79:945, 1962.

Books

Aufranc, O. E.
Constructive surgery of the hip.
St. Louis, The C. V. Mosby Company, 1962.

Fitzpatrick, T. B., and Walker, S. A.
Dermatologic differential diagnosis.
Chicago, Year Book Medical Publishers, Inc., 1962.

Janower, M. L. (Editor)
Technological needs for reduction of patient dosage from diagnostic radiology.
Springfield, Ill., Charles C. Thomas, 1963.

Miscellaneous

Viets, H. R.
Hinckley's who was who on Ether Day.
Boston Medical Library, 1962.

This is the last issue of THE NEWS in which 1962 titles will appear.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Academy of Sciences of the USSR. Institute of Higher Nervous Activity.
Works. Pathophysiological series, vol. 4.
Washington, D.C., National Science Foundation, 1958.
(19A)

Academy of Sciences of the USSR. Institute of Higher Nervous Activity.
Works. Physiological series, vol. 4.
Washington, D.C., National Science Foundation, 1962.
(19A)

American Association for the Advancement of Science.
Fundamentals of keratinization.
Washington, D.C., American Association for the Advancement of Science, 1962.
(5B)

American Hospital Association.
Hospital accreditation references.
Chicago, American Hospital Association, 1961.
(39C)

Aufranc, O. E.
Constructive surgery of the hip.
St. Louis, The C. V. Mosby Company, 1962.
(18N)

Bocko, E. I. (Editor)
Studies in higher neurodynamics as related to problems of psychiatry.
Washington, D.C., National Science Foundation, 1961.
(19L)

Bockus, H. L.
Gastroenterology, ed. 2, vol. 1.
Philadelphia, W. B. Saunders Company, 1963.
(16D)

Bourne, G. H.
Division of labor in cells.
New York, Academic Press, Inc., 1961.
(2Am)

Brennan, M. J., and Simpson, W. L. (Editors)
Henry Ford Hospital International Symposium on biological interactions in normal and neoplastic growth.
Boston, Little, Brown and Company, 1962.
(13V)

Burnett, Sir F. M.
Natural history of infectious disease, ed. 3.
Cambridge, Mass., At the University Press, 1962.
(11A)

Carvalho, A. P. de (Editor)
Symposium on the Specialized Tissues of the Heart.
New York, Elsevier Publishing Company, 1961.
(15B)

DePalma, A. F. (Editor)
Clinical orthopaedics, no. 24.
Philadelphia, J. B. Lippincott Company, 1962.
(18E)

de Reuck, A. V. S., and Cameron, M. O. (Editors)
Ciba Foundation Study Group No. 13, Resistance of bacteria to the penicillins.
Boston, Little, Brown and Company, 1962.
(22Yc)

Diaz, A. J. (Editor)
Guide to microforms in print, 1962.
Washington, D.C., Microcard Editions, Inc., 1962.
(1B)

Diaz, A. J. (Editor)
Subject guide to microforms in print, 1962-63.
Washington, D.C., Microcard Editions, Inc., 1962.
(1B)

Diem, K. (Editor)
Documenta Geigy. Scientific tables, ed. 6.
Ardsley, N. Y., Geigy Pharmaceuticals, 1962.
(31E)

Grabar, P., and Miescher, P. (Editors)
Second international symposium on immunopathology, Brook Lodge, Michigan, 1961: Mechanisms of cell and tissue damage produced by immune reactions.
Basel, Benno Schwabe & Co., 1962.
(8G)

Gresham, G. A., and Jennings, A. R.
An introduction to comparative pathology.
New York, Academic Press, Inc., 1962.
(8R)

Grigor'eva, T. A.
The innervation of blood vessels.
New York, Pergamon Press, 1962.
(15B)

Guerra, F.
American medical bibliography, 1639-1783.
New York, Lathrop C. Harper, 1961.
(1Mu)

Harlow, H. F., and Woolsey, C. H. (Editors)
Biological and biochemical bases of behavior.
Madison, University of Wisconsin Press, 1958.
(19L)

Hayashi, O. (Editor)
The oxygenases.
New York, Academic Press, Inc., 1962.
(5C)

Hocking, G. M.
A dictionary of terms in pharmacognosy.
Springfield, Ill., Charles C. Thomas, 1955.
(22C)

International Congress of Neuropathology. 2nd. London, 1955.
Proceedings, pts. I and II.
Amsterdam, The Excerpta Medical Foundation, 1955.
(19D)

International Congress of Psychology. 16th. Bonn, 1960.
Amsterdam, North-Holland Publishing Co., 1962.
(19L)

Jolliffe, N. (Editor)
Clinical nutrition, ed. 2.
New York, Harper & Bros., 1962.
(5M)

Karamyan, A. I.
Evolution of the function of the cerebellum and cerebral hemispheres.
Washington, D.C., National Science Foundation, 1962.
(19C)

Kasdon, S. C.
Atlas of *in situ* cytology.
Boston, Little, Brown and Company, 1962.
(13V)

Kline, N. S.
Handbook of psychiatric treatment in medical practice.
Philadelphia, W. B. Saunders Company, 1962.
(19S)

Lasagna, L.
The doctors' dilemmas.
New York, Harper & Co., 1962.
(1P)

Leningrad Scientific Society of Neuropathology and Psychiatrists.
Problems of psychiatry and neuropathology, vols. 1 and 2.
Washington, D.C., National Science Foundation, 1961.
(19D)

Lee, R. I.
Letters from Roger I. Lee.
Brookline, Privately printed, 1962.
(1Hb)

Lewis, N. (Editor)
The new Roget's thesaurus of the English language in dictionary form, rev. ed.
New York, G. P. Putnam's Sons, 1961.
(1A)

McDermott, W. (Editor)
Conference on airborne infection, Miami Beach, Dec. 7-10, 1960.
Baltimore, Williams & Wilkins Company, 1961.
(9G)

McLean, F. C. (Editor)
Council for International Organizations of Medical Science symposium on radioisotopes and bone.
Philadelphia, F. A. Davis Company, 1962.
(18C)

McNerney, W. J., and others.
Hospital and medical economics, 2 vols.
Chicago, Hospital Research, 1962.
(39C)

Marble, A.
The chemistry and chemotherapy of diabetes mellitus.
Springfield, Ill., Charles C. Thomas, 1962.
(13D)

Meyer, K. F.
Disinfected mail.
Holton, Kansas, The Group Printers, Inc., 1962.
(32C)

Miller, L. F., and Liebenson, H. A.
Medical and legal evaluation of disability in personal injury cases.
Chicago, The Year Book Publishers, Inc., 1962.
(36P)

Murphy, R. W.
How and where to look it up.
New York, McGraw-Hill Book Company, Inc., 1958.
(1A)

Mussen, P. H. (Editor)
Handbook of research methods in child development.
New York, John Wiley & Sons, Inc., 1960.
(26As)

Ochsner, A., and DeBakey, M. E. (Editors)
Christopher's minor surgery, ed. 8.
Philadelphia, W. B. Saunders Company, 1959.
(23M)

Ongley, P. A.
Heart sounds and murmurs.
New York, Grune & Stratton, 1960.
(15E)

Quimby, E., and others.
Radioactive isotopes in clinical practice, ed. 2, 2 vols.
Philadelphia, Lea & Febiger, 1958.
(36Ja)

Ramanathan, N. (Editor)
Symposium on collagen.
Boston, Little, Brown and Company, 1962.
(5B)

Slome, D. (Editor)
Wound healing. Proceedings of the symposium held at the Royal College of Surgeons, Nov. 12-13, 1959.
New York, Pergamon Press, 1961.
(23T)

Stern, M. B.
We the women.
New York, Schulte Publishing Co., 1963.
(1E)

Strehler, B. L.
Time, cells, and aging.
New York, Academic Press, Inc., 1962.
(13Po)

Thannhauser, S. J.
Textbook of metabolism and metabolic disorders, ed. 2, vol. 1.
New York, Grune & Stratton, 1962.
(5M)

Vanderbilt, A.
Amy Vanderbilt's complete book of etiquette.
Garden City, N. Y., Doubleday & Company, Inc., 1958.
(1A)

Waelsch, H. (Editor)
Biochemistry of the developing nervous system.
New York, Academic Press, Inc., 1955.
(19C)

Walker, A. E., and Jablon, S.
A follow-up study of head wounds in World War II. National Research Council Follow-up Agency. Committee on Veterans' Medical Problems.
Washington, D.C., U.S. Government Printing Office, 1961.
(23P)

Wolstenholme, G. E. W., and Cameron, M. P. (Editors)
Ciba Foundation Symposium on transplantation.
Boston, Little, Brown and Company, 1962.
(23N)

BIOGLET

Dr. Robert R. Young, Assistant Resident in Neurology — born in Washington, Pennsylvania, August 26, 1934; S.B., Yale University, 1956; Fulbright Fellowship in Neurophysiology to Australia with Professor J. C. Eccles, 1956-57; M.D., Harvard Medical School, Boston, Massachusetts, 1961; Intern in Medicine, Peter Bent Brigham Hospital, Boston, 1961-62; married; one child.

New addresses:

Dr. Lawrence J. Barrows (r.p. *N.* 1952 and r.p. *N.P.* 1953), Pathology Dept., Veterans Administration Hospital, 150 S. Huntington Ave., Boston, Mass.

Dr. Colin H. Bolton (res. fel. *Biochem.* (*M.*) 1962), Dept. of Organic Chemistry, The University, Woodland Rd., Bristol 8, England

Dr. Hugh F. Folsom (*W.M.* 1931), Townshend, Vt.

Dr. Saul M. Marcus (*Bd. of Cons.*), 416 Marlborough St., Boston, Mass.

Dr. Laurence D. Trevett (a.r.p. 1933 and r.p. *N.* 1934), 412 Beacon St., Boston 16, Mass.

Dr. Chiu-an Wang (*W.S.* 1944), Zero Emerson Place, Charles River Park, Boston 14, Mass.

Brief bits:

Dr. Joseph C. Aub was invited to be present at the dedication of the new Metabolic Ward at Roswell Park Institute in Buffalo on January 29. He spoke on "Reflections on metabolic research".

Dr. Edwin F. Cave was in Montreal from February 3 to 6, serving as Visiting Professor pro tempore on the Trauma Service of the Montreal General Hospital.

Dr. Oliver Cope addressed the Academy of Surgery of Detroit on February 14. His subject was "The surgery of nodular goitre as an example of the changing emphasis in treatment of endocrine disease". On February 27 Dr. Cope gave the Lenhart Lecture at Western Reserve Medical School in conjunction with the Cleveland Surgical Society. He spoke on "Hyperparathyroidism: Experiences in diagnosis and management of 300 cases".

Dr. Thomas B. Fitzpatrick has been elected a corresponding member of the Societas Dermatologica Austriaca. Last May he was the principal speaker at the 45th Congresso Nazionale della Società Italiana di Dermatologia e Sifilografia in Rome, and also lectured to the Faculty of Medicine at the University of Frankfurt. In September, Dr. Fitzpatrick was the Chairman of a Symposium on Pigmentation, which was one of the main themes of the meeting of the International Congress of Dermatology, held in Washington, D. C. On November 20, he delivered the Eleventh Sigmund Pollitzer Lecture at the New York University School of Medicine, New York City. Also in November, Dr. Fitzpatrick discussed problems in the diagnosis of malignant melanoma, in a Symposium on Tumors of the Skin held at the University of Texas, M. D. Anderson Hospital and Tumor Institute.

Dr. William V. McDermott, Jr. returned recently from Puerto Rico, where he was a guest speaker at the annual meeting of the Puerto Rican Medical Association. He spoke on "The pathogenesis and surgical treatment of cirrhotic ascites", and again on "The management of bleeding esophageal varices". Dr. McDermott also was a member of a panel on upper gastrointestinal hemorrhage at one of the regular meetings of the New York Academy of Medicine.

The following exhibits by members of our Staff were presented at the annual meeting of the Radiological Society of North America: 1. Dr. S. P. Bohrer, "Radiology on stamps"; 2. Drs. J. R. Dreyfuss, D. B. Skinner, G. L. Nardi, and J. W. Tanner, "Azygos venography"; and 3. Drs. P. F. J. New, and E. W. Webster, "Auto-tomography". Dr. Bohrer's exhibit was awarded an honorable mention.

Dr. Byron H. Waksman lectured before the French Society of Microbiologists on the topic "The role of the thymus in immunological reactions" on December 6, 1962, at the Pasteur Institute in Paris. He was awarded the Pasteur Medal for recent studies by his laboratory in this field.

Dr. Edward W. Webster gave a refresher course for the third consecutive year at the annual meeting of the Radiological Society of North America, on November 26, 1962, entitled "Fluoroscopy: Physics, electronics, and physiology". He also delivered several lectures on instrumentation for radioactivity measurement in St. Louis on December 10 and 11, during a special course organized by Washington University, entitled "Radioactive isotopes technology in biology and medicine". Dr. Webster was elected Vice-President of the American Association of Physicists in Medicine at their annual meeting in Chicago on November 29. He was also elected to Associate Fellowship of the American College of Radiology in December.

Dr. James C. White was in Japan during the month of October 1962, at the invitation of the Japan Neurosurgical Society. This turned out to be an unusually busy and fascinating month, with lectures in Sapporo, Fukushima, Tokyo, Nagoya, Okayama, and Kyoto, in addition to the neurosurgical meeting in Ise City. In between visits to their medical schools, there was little of Japan that his hospitable hosts did not take him to see. Many of these men had trained in the United States — Dr. Teruyoshi Hashiba, now Professor of Neurosurgery in Sapporo, and Shinichiro Endo, Professor of Surgery in Fukushima, having had part of their training in neurosurgery at M.G.H. Both of these former Fellows have very active departments in their universities and a stimulating interest in research.

Dr. Stanley M. Wyman has been elected to the Board of Directors of the Radiological Society of North America.

This nice long letter has come from Dr. Sedgwick Mead (*E.M.* 1940 & *Path.* 1941), our "singleton" in Vallejo, California, written from the Kaiser Foundation Rehabilitation Center, 2600 Alameda Street:

The last time I wrote you was about eight years ago, on the occasion of our removing from Washington School of Medicine in St. Louis to our present assignment in Vallejo. Here I am Medical Director of the Kaiser Foundation Rehabilitation Center—a 74-bed, severe disability inpatient-type center. Our patients run to the catastrophic type, including, of course, many patients with strokes and paralysis agitans, but also many forms of trauma, including teen-agers with tetraplegia from diving accidents, water skiing, the ubiquitous automobile, and other causes. Traumatic encephalopathy is common, also, and usually tragic. Our center has a geriatric flavor despite the above, with the median age running about 55 and the average length of stay being just under 2 months.

Our center, unlike most rehabilitation centers throughout the country, has the important actuarial backstop of a comprehensive health plan membership numbering nearly half a million in the San Francisco Bay area. In spite of this important help, less than half of our patients are members of the Kaiser Health Plan, the remainder being private patients,

Thomas A. Stebbins, A.B., Director, School of Medical Illustration and Visual Education Services Department

workmen's compensation referrals, and patients from county, state, and federal agencies. We are one of the few rehabilitation centers in the country with a waiting list for admission. There are 4 other full-time physicians, of which 2 are psychiatrists, 1 an orthopedist, and 1 an internist/cardiologist. There are about 35 other personnel of various sorts involved in the rehabilitation part of our general hospital.

We have the feeling that in rehabilitation centers direct patient care is important, but not important enough to justify the center's existence unless it also does a consistent teaching job. To this end, teams from our center have carried out institutes of from half a day to five days' duration, both at a county level in northern California and also under sponsorship from state heart associations and the Western Branch of the American Public Health Association in Arizona, Idaho, and Wyoming. Our residency in physical medicine and rehabilitation is conducted jointly with the University of California Medical Center, San Francisco, where I hold a teaching appointment. Also, we shall soon activate a residency exchange with Letterman General Hospital. We have teaching affiliations (internships) with San Francisco State College in vocational counseling and speech.

Most gratifying of all our teaching involvements is the world-wide scope of our graduate physical therapy program in "proprioceptive neuromuscular facilitation" under the direction of Miss Margaret Knott. This program has been attracting students for 3-month or 6-month affiliations since 1948. More than 125 students from the British Commonwealth, the Scandinavian countries, northern Europe, Argentina, Uruguay, Israel, Hong Kong, and the Philippines have been trained here. In this respect, our "International House" at Vallejo quite resembles M.G.H. These courses are usually signed up for two years in advance, since only a restricted number can be accepted at any time. The program is conducted under the auspices of the International Exchange Service of our State Department.

Our hospitalization is set up on the progressive patient care principle, with patients usually being admitted to a severe disability ward, where nursing services amount to about 6 hours per patient per day. Next they go, when judged safe to do so by a self-care team, to an intermediate ward where nursing hours are about 4 hours a day. Finally, before discharge, patients spend a few weeks or days on self-care, with no nursing services. The hospital bill is drastically reduced accordingly.

I have the pleasure of acting as consulting neurologist to the Kaiser Hospitals and as physiatrist to State Crippled Children Services, Stockton State Hospital, Letterman General Hospital, San Joaquin County Institutions, and Livermore V. A. Hospital.

On the personal side, we live on a hill overlooking San Francisco Bay and out through the Golden Gate. The harbor is certainly one of the most beautiful in the world, and the constant change of cloudscapes is a never-ending marvel for us. Marge (formerly Miss Chick of the night supervisors) does the honors as chef, hostess, and gardener. Sedgwick, Jr. is a junior at Harvard this year, and the cadet, Marshall, is a third year student at Thomas Jefferson School in St. Louis. Last summer he spent some time in Florence; then we met in London for a tour of the National Spinal Injuries Center at Stoke-Mandeville Hospital, for the Paralympic Games, and for visits also to Oxford and Stratford-on-Avon.

We were very pleased to receive this letter from Dr. Lyman G. Barton, Jr., (*E.S.* 1914), our "singleton" in Plattsburgh, N. Y.:

I fear that I have had a very undistinguished career and have little of interest for the M.G.H. News. However, I will try to give you, for what it is worth, a summary of my activities over the years.

Following my service on East Surgical, I started practice in Willsboro, a small town 28 miles south of Plattsburgh, where, for about 4 years, I had a "horse and buggy" type of practice, doing minor and some major surgery in the homes.

The following spring I went overseas with the first Harvard Unit — an experience I look back to with great pleasure.

In September 1915 I married Aethel Dodge, a graduate of the M.G.H. Training School for Nurses. We have 4 children and 9 grandchildren. Neither of my sons studied medicine, but we have 2 Ph.D.'s in the family. My elder daughter is head of the Art Department at Sweet Briar College, Virginia.

In 1919 I moved to Plattsburgh, where I was on the surgical staff of our two local hospitals until three years ago, when, because of a couple of coronaries, I became largely retired.

Through the efforts and hospitality of our [Harvard Medical School] Class agent, Frank Rackemann, I had a most enjoyable time at our 50th Reunion last June and hope that most of us can make our 55th.

Sorry not to have something more interesting or startling to report.

Dr. Mariano M. Alimurung, a Graduate Student Assistant in Cardiology here at M.G.H. in 1948, is now an Associate Professor of Medicine, and Chief of Cardiology and Chief of Clinics at Santo Tomas University and the University of Santo Tomas Hospital in Manila, Philippines. This nice letter from Dr. Alimurung to Dr. Knowles arrived recently:

First of all, I wish to express my personal satisfaction in seeing that we are remembered by the MGH. Being in a very distant location now, it pleases me much to hear from my dear old MGH, more particularly when a big achievement is made. Yes, we have heard much about the drama of Everett Knowles. In my own case, I was particularly moved when I read its detailed account in a recent issue of the MGH News. In fact, through my suggestion, our Dean's Office here mimeographed the whole story contained in The News and it was then circularized to all our faculty members. This was done not only because of its unique interest as a milestone of medico-surgical achievement but, as I told our Dean here, it also typifies the way the MGH handles such big news and hands it to the lay press, protecting all interests concerned.

May I, therefore, submit here my own modest share, as solicited, for the much-needed additional construction in the Emergency Ward. It is a small share, but it carries with it profound sentiments of appreciation, felicitation, and best wishes from an MGH alumnus out in the Far East. I always take pride in the fact that it has been my good fortune to have had my graduate training under MGH tutelage, hence I keep in close contact with the MGH. The MGH News is my regular reading reference since I came home in 1950, and I never fail to visit the MGH whenever I visit Boston.

My very best wishes for continued success.

This very brief note arrived from Dr. Fernando Cardenal (a.r.s. *Or.* 1959) not long ago, in which he says, in part:

I am now leaving the Congo, after 18 months there, and shall write from my new address in the Canaries.

I will certainly send you a note about the Congo.

Please hold up the mailing of The News till I send you my new address.

The News

MASSACHUSETTS GENERAL HOSPITAL 1811

No. 221 Boston, Mass. April 1963

MASSACHUSETTS EYE & EAR INFIRMARY

SUGAR CATARACTS

Although transparent, the lens of the eye is a dense tissue containing the highest concentration of proteins in the body. It is not simply a bag of proteins, but is an encapsulated organ made up of many modified cells — the lens fibers. A sheet of epithelium beneath the capsule covers the anterior surface of the lens, but does not extend beyond the equator. Here, at the equator, the epithelial cells undergo transformation. The cells progressively lose their nuclei along with most other formed elements, become elongated, and are gradually transformed into lens fibers. As new fibers are formed they displace the older fibers toward the center of the nucleus of the lens. Since new fibers are continually formed from the cells at the equator, the growth of the lens never ceases throughout life. A cross section of this multilayered structure has an onion-like arrangement. There are no blood vessels supplying the lens, so it must receive nutrients from, and dispose of the end products of metabolism into, the intraocular fluid bathing it. Nor can cells enter or leave the lens. In its normal habitat the lens is therefore in a state of tissue culture; consequently, it is not difficult to maintain it in a sterile culture for some period of time after removal from the eye.

Frequently in old age or in disease a loss of transparency of the lens occurs. This impairs vision and necessitates removal of the opaque lens (cataract). There are a number of different types of cataracts. One type, the sugar cataracts, have been widely studied because they are easily produced experimentally. Characteristic of a diabetic cataract are the lens changes observed in young diabetic patients which occur underneath the anterior and posterior capsule as small discrete opacities having a radiating distribution. In the more advanced stages, vacuoles and waterclefts are observed. A second clinical type of sugar cataract occurs in infants with congenital galactosemia. Lens changes develop shortly after birth, and if detected early enough are reversible by withdrawing the source of galactose from the diet. Galactosemia is a gene-linked hereditary disease in which the primary defect is a deficiency of the enzyme, galactose-1-phosphate uridyl transferase. The lack of this enzyme interferes with the utilization of galactose and results in the accumulation of galactose-1-phosphate in tissues.

The diabetic cataract encountered clinically can be reproduced in rats by alloxan injection, and the galactosemic cataract by feeding a diet rich in galactose. It may be possible that other sugars besides glucose and galactose are cataractogenic in rats if their concentrations in the blood stream could be maintained sufficiently high for long periods. Thus far, the only other cataractogenic sugar which has been studied to any extent is xylose.

A number of theories have been proposed to explain the development of sugar cataracts. A lack of insulin has been thought to depress the rate of glucose metabolism in the diabetic lens. However, no major change in the rate of glucose metabolism has been observed in these cataracts. In galactose cataract, even though the activity of galactose-1-phosphate uridyl transferase is normal, an accumulation of galactose-1-phosphate occurs. The accumulation of this substance has been suspected of altering some phase of carbohydrate metabolism, but no definite site of action has been established to account for the development of opacities. It has been shown that galactose-1-phosphate inhibits the phosphoglucomutase reaction to some extent. Whether it is a sufficiently effective inhibitor to prevent synthesis of essential polysaccharides has not been determined.

An appealing hypothesis now under consideration is that a mechanism common to all sugar cataracts is responsible for the cataractous process. Such a mechanism would eliminate insulin deficiency or the accumulation of galactose-1-phosphate as the primary factors causing cataracts. A common factor in hyperglycemia, galactosemia, or xylosemia is the availability of a high concentration of sugar in the aqueous humor. It appears that this condition sets off a sequence of events, initiating the cataractous process. The close similarities in morphology and histopathology of each kind of experimental sugar cataract lend support to the hypothesis that a common mechanism initiates the cataractous process. In these experimental sugar cataracts, opacities are first observed at the periphery or equatorial region of the lens. Moreover, the first pathological sign, which occurs very early at the onset of the disorder, is the appearance of hydropic lens fibers caused by an accumulation of fluid. In the more advanced stages the swelling continues until the fibers rupture, disintegrate, and lead to interfibrillar clefts. This histological picture is observed in each kind of sugar cataract. It suggests that differences in osmotic pressure between the intralenticular and intraocular fluids develop, and the swelling of the lens fibers is caused by movement of water into the lens fibers. Osmotic effects in sugar cataracts have been suspected for some time. In 1925, Sir Duke Elder, after reviewing reports of of a number of diabetic cases, concluded that during hyperglycemia the patients became myopic, apparently due to the swelling of the lens, while hypermetropia resulted when the blood sugar was lowered.

However, no satisfactory explanation could account for the hypertonicity developing in the lens during the cataractous process until recently, when the enzyme aldose reductase was shown to function in this ocular tissue. This enzyme is capable of reducing a number of aldoses to their sugar alcohol form. Because of this enzyme the following sequence of events may transpire in sugar cataracts. The increased concentration of sugar in the aqueous humor facilitates the uptake of sugar by the lens and this in turn accelerates the reduction of sugar to sugar alcohol. Since the lens membranes are relatively impermeable to sugar alcohols, the formation of polyol is much more rapid than its elimination. This leads to a progressive accumulation of the osmotically active sugar alcohol within the lens fibers, thus creating a hypertonic condition. Osmotic equilibrium is maintained by passage of water from the aqueous humor into the lens fibers, causing them to swell.

Evidence for this sequence of events was obtained by analyses of the lenses of rats maintained on a galactose-enriched diet. These rats relatively quickly developed opacities within 5 days after the initiation of the diet. The accumulation of both dulcitol (the sugar alcohol of galactose) and water began immediately, and by the 5th day the dulcitol concentration was 117 μmoles/kg. lens water. This represents a remarkably high concentration when it is realized that it is identical with the concentration of potassium in the lens. The water content in these lenses was elevated by 20-30% above the normal value. The increases in dulcitol and water are probably even more striking than indicated by these values, since the accumulation is not distributed uniformly but is confined principally to the superficial layers of the lens.

Differences in the rates of cataract development in the rats made diabetic by alloxan injection and in those fed galactose have been known for some time. Opacities appear much earlier in the lens of a galactose-fed rat than in that of a diabetic rat, even though the blood sugar level may be lower in the galactose-fed rat. If the osmotic theory of sugar cataract is valid, this difference in the rate of cataract development must be related to the rate of accumulation of sugar alcohol. Analyses of the lens of a diabetic rat revealed that the sugar alcohol level was much lower than that of a galactose-fed rat. Another interesting finding was that in the diabetic lens an increase in fructose was also observed, whereas no ketohexose was found in the galactose cataract. The explanation for this difference was due to the substrate specificity of another enzyme involved in the metabolism of sugar alcohol in the lens. The enzyme polyol dehydrogenase oxidizes a number of sugar alcohols to their corresponding ketohexoses in the presence of diphosphopyridine nucleotide (DPN). Thus sorbitol (the sugar alcohol of glucose) is oxidized to fructose. However, dulcitol is not a suitable substrate for polyol dehydrogenase. Therefore dulcitol, unlike sorbitol, is not further metabolized in the lens. Since fructose is utilized by the lens to some extent and is also eliminated by diffusion into the aqueous humor, the sum of sorbitol plus fructose was always much lower in the diabetic lens than the level of dulcitol accumulating in the lens of a galactose-fed rat. For these reasons the hypertonic condition arising in the diabetic lens is not as severe as that which develops in the galactose cataract.

Since opacities developed so rapidly in the lens of a galactose-fed rat, it seemed feasible to produce this type of cataract *in vitro*. This was accomplished by a sterile culture of rabbit lens in a medium containing high levels of galactose. A control lens was incubated in a medium simulating the aqueous humor, while the other lens from a rabbit was incubated in the same medium containing galactose. The control lens remained transparent for the 3-day period of incubation. The lens incubated in the galactose-containing medium developed a slight haziness at the periphery after the first day of incubation. This haziness developed into a definite ring of opacities by the end of the second day. By the third day the opacification was quite marked at the equator of the lens, while the central region remained clear. Histological examination revealed that hydropic lens fibers were numerous in the equatorial region. Thus, the early histologic changes of the cataractous process developed *in vitro* were very similar to those observed in the lens of the galactose-fed rat.

With the larger rabbit lens a much better quantitative relationship between the dulcitol accumulation and the increase in water could be established. Similar to that observed in the rat lens, a substantial accumulation of dulcitol and water occurred in the rabbit lens during the organ culture procedure. Furthermore, the increase in dulcitol was directly proportional to the increase in water. This relationship was maintained during the entire 3-day period. The ratio of the net increase in sugar alcohol to that of water appeared fairly constant, and the value approached the tonicity of the incubating medium. This means that the accumulation of osmotically-active substance was offset by a net movement of water into the lens. The lens of a young rabbit apparently responds to a difference in the tonicity of the intralenticular fluid and of the environment fluid by the loss or gain of water. This indicates that the lens acts as a delicate osmometer capable of responding to small differences in osmotic pressure.

These findings were further supported by the data on the changes in the cation content of lenses incubated in a galactose-containing medium. The total cation (Na + K) concentration, expressed on a water basis, was much lower in the lenses incubated in the galactose medium than those in the control medium. However, when these values were expressed on a dry weight basis, no difference was observed. The results indicated that in the lenses incubated in galactose only an increase in water occurred while the absolute amount of cations did not change. These findings further support the conclusion that the increase in water observed in the lens during the incubation in the galactose medium was caused by the accumulation of dulcitol.

Studies of the properties of aldose reductase revealed that the enzyme does not function to any significant extent until glucose or galactose is present in high concentrations. Under normal circumstances the concentration of glucose in the lens is sufficiently low so that only a small fraction of glucose is reduced to sorbitol, most of it being phosphorylated and metabolized through the Embden-Meyerhof pathway. When glucose is available in high concentrations, as it is in diabetes, its reduction to sorbitol is facilitated. Another important factor determining the amount of glucose reduced in the lens is the low concentration of hexokinase. Since the activity of the tricarboxylic acid cycle is so limited in the lens, the glucose metabolism proceeds essentially as far as lactic acid. Therefore the principal means of eliminating lactic acid in the lens is by diffusion into the aqueous humor. Since the lens is a dense tissue and avascular, an excessive production of lactate may become deleterious, and so it is important that the rate of glycolysis be controlled in some manner. The sluggishness of the hexokinase reaction accomplishes this by serving as the rate-limiting step in lens glycolysis. If this step were bypassed, lactate production would increase by 5- to 10-fold. Since the concentration of hexokinase is low, the enzyme is saturated by low levels of glucose, and any increase in the glucose concentration of the lens accelerates the aldose reductase reaction. Therefore the combination of the presence of an active aldose reductase and the relatively inactive hexokinase appears to render the lens peculiarly vulnerable to the effects of the high concentration of sugar in the aqueous humor.

There are other changes occurring in sugar cataracts that can be directly related to the effects of swelling of the lens or to enzymatic interactions which result during the formation of sugar alcohols. In the enzymatic reduction of aldoses to sugar alcohol the essential cofactor is reduced triphosphopyridine nucleotide (TPNH). In the lens, TPNH is primarily generated by the hexose monophosphate shunt mechanism. An interaction of the dehydrogenases of this pathway and aldose reductase is therefore possible. As the concentration of glucose was raised in the incubation medium, an increase in the rate of oxidation of C-1 of glucose, but not that of C-6, was observed. The increase in C-1 oxidation of glucose was paralleled by an increase in sorbitol production. The hexokinase reaction was saturated at the low levels of glucose employed. Further increase in glucose did not affect the rate of glycolysis but did accelerate the aldose reductase reaction which, in turn, accelerated the hexose monophosphate shunt mechanism by increasing the rate of reoxidation of TPNH.

The acceleration of the shunt mechanism by stimulation of the aldose reductase reaction was also demonstrated by incubating rabbit lens in high levels of galactose. The amount of C-1 of glucose oxidized through the shunt mechanism could be almost entirely accounted for by the quantities of dulcitol formed. Therefore, the production of dulcitol diverted TPNH away from the mechanisms which normally reoxidize it. This may account for the lowered glutathione level observed in sugar cataracts. It appears that in the lens, as in the red cell, the level of glutathione is dependent upon the glutathione reductase reaction in which oxidized glutathione is enzymatically reduced by TPNH.

One means of restricting the production of sugar alcohol is by depressing the activity of the hexose monophosphate shunt mechanism. There would then be less TPNH available, and this in turn would decrease the rate of reduction of aldose. Investigators have observed that in the lens of a galactose-fed rat, the glucose-6-phosphate dehydrogenase activity drops early in the course of the cataract. The mechanism which depresses the activity of this enzyme is not understood. One report indicated that the presence of galactose-1-phosphate markedly inhibits the activity of this enzyme, but this could not be confirmed by other investigators. It appears that the lens attempts to counteract the accumulation of sugar alcohol by suppressing the activity of the hexose monophosphate dehydrogenase.

An alteration of the amino acid transport mechanism is another secondary change manifested as a consequence of the osmotic changes in the lens during the cataractous process. The lens, because of its avascularity, must rely largely on active transport mechanism to obtain foodstuffs present in low concentrations in the aqueous humor. In the lens of a galactose-fed rat or a diabetic rat, one of the early biochemical changes to occur is a drop in the level of amino acids. In sugar cataracts the mechanism for the active transport of amino acids into the lens is markedly depressed. This can be demonstrated in an *in vitro* system by incubating the lens in a medium with or without added galactose and by following the uptake of a nonmetabolizable amino acid, α-amino isobutyric acid (AIB). In an overnight incubation, the control lens in a medium without galactose showed a marked concentration of AIB, while a strikingly lowered uptake of AIB was observed in the lens incubated in the presence of galactose. The decrease in the activity of the amino acid transport mechanism is apparently due to the osmotic changes of the lens. This appears to be the case, since a lowered uptake of AIB was observed when the lens was incubated in a slightly hypotonic medium. The more the lens swelled, the less AIB was taken up. Another approach, showing that the depressed uptake of AIB in the galactose-incubated lens was due primarily to osmotic changes, was to prevent the lens from taking up water during incubation. This was accomplished by correcting the hypertonicity in the lens by increasing proportionately the tonicity of the incubating medium by adding sugar alcohol to it during the course of the experiment. In a lens incubated in a compensated medium, an increase in water was prevented; and even though dulcitol accumulated, the AIB uptake was 80% of normal. The evidence obtained in these experiments suggests that osmotic changes may be responsible for the depressed amino acid uptake in sugar cataracts.

Although other aspects need to be explored before the accumulation of sugar alcohol can be accepted as the initiating mechanism of the cataractous process, it appears to be consistent with many of the biochemical and pathological changes observed in sugar cataracts. It is hoped that further investigations along these lines may lead to a better understanding of the pathogenesis of not only sugar cataracts but of other cataracts as well.

Jin H. Kinoshita, Ph.D.,
Biochemist in Ophthalmology

The Board of Trustees, at their meetings on February 1 and 15, and March 1, voted:

To accept the resignation of Dr. John K. Cobb, Assistant in Radiology, effective as of February 1;
To accept with regret the resignation of Karl Schmid, Ph.D., Associate Biochemist (Medicine), effective as of December 31, 1962;
To accept the resignation of Dr. Maurice Victor, Neurologist, effective as of December 1, 1962.

To appoint:

Dr. Kurt J. Bloch to the position of Assistant in Medicine, beginning July 1;
Jean B. Burnett, Ph.D. to the position of Assistant Biochemist in Dermatology;
Dr. Leonard S. Bushnell as Assistant Resident in Anesthesia, beginning August 1;
Dr. Sheldon Cooperman as Clinical Assistant in Pathology, retroactive to November 1, 1962;
Kaney Ebisuzaki, Ph.D. as Assistant Biochemist (Research Chemistry), beginning February 1;
Dr. Irwin M. Freedberg as Clinical Associate in Dermatology;
Dr. Hanne Gram as Clinical and Research Fellow in Pathology for one year, beginning July 1;
Dr. Mehran Goulian to the position of Assistant in Medicine, beginning July 1;
Dr. Hiroki Hirai as Clinical and Research Fellow in Neurosurgery, for the period April 1, 1963 through August 31, 1964;
Dr. Gary Jacobson as Clinical and Research Fellow in Psychiatry, beginning July 1;
Dr. Burnham E. Lamkins as Clinical Associate in Dermatology, beginning July 1;
Nancy Mello, Ph.D. to the position of Assistant Psychologist;
Dr. John W. L. Parry as Clinical Fellow in Anesthesia, beginning October 1;
Mr. George Putnam as Associate Trustee for two years;
Annette M. C. Rapin, Ph.D. as Assistant Biochemist (Research Chemistry) beginning February 1;
Mr. Elliot L. Richardson as Associate Trustee for two years;
Dr. Dwight R. Robinson as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Frederick J. Samaha as Clinical and Research Fellow in Neurology for one year, beginning July 1;
Robert Scheuplein, Ph.D. to the position of Assistant Biologist in the Department of Dermatology;
Mary J. Spiro, Ph.D. as Assistant Biochemist (Medicine) for one year, beginning July 1;
Dr. James L. Steele as Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Jan A. C. de Kock van Leeuwen as Visiting Psychiatrist pro tempore, for the period February 15 through March 31;
Dr. Alfred D. Weiss as Assistant in Neurology, effective as of February 1;
George F. Wilgram, Ph.D. to the position of Assistant Biochemist in the Department of Dermatology;
Dr. Edward D. Williams as Clinical and Research Fellow in Pathology, retroactive to November 1, 1962;
Dr. Gerald F. Winkler as Assistant in Neurology, beginning July 1;
Dr. R. Lewis Wright as Clinical Assistant in Neurosurgery, for an eight-month period, beginning May 1.

Governor Peabody has appointed Mr. H. Brooks Beck a Trustee of the Hospital.

At their meetings on January 9, February 13, 20, and 27, and March 6, the General Executive Committee voted:

To reappoint:

Dr. Anthony F. H. Britten as Clinical and Research Fellow in the Blood Bank for one year, beginning January 15;
Arthur B. Callahan, Ph.D. as Research Fellow in Physics (Medicine) for one year, beginning March 1;
Dr. Bruce W. Fischberg as Clinical and Research Fellow in Psychiatry for one year, beginning January 1;
Dr. Jorgen G. Jacobsen as Clinical and Research Fellow in Medicine for one year, beginning April 1;
Dr. Arthur S. Kunin as Clinical and Research Fellow in Medicine for one year, beginning March 1;
Dr. Miguel A. Leibovich as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Aleksander Mathé as Assistant Resident in Psychiatry for one year, beginning July 1;
Dr. Byron N. Rudolph as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;
Dr. Lawrence C. Salvesen as Clinical and Research Fellow in Psychiatry for one year, beginning July 1.

To appoint:

Dr. Yoshiro Aso as Visiting Fellow in Medicine for one year, beginning April 1;
Dr. Guido Belsasso-Prister as Assistant Resident in Psychiatry at the General Hospital for one year, beginning July 1;
Ora Kedem, M.Sc., Ph.D. as Research Fellow in Medicine for one year, beginning July 1;
Dr. Hitoshi Takahashi as Research Fellow in Dermatology.

* * *

Dr. Clement B. Sledge (sr. r.s. *Or.* 1962), a Teaching Fellow in Orthopedics at Harvard Medical School, has been awarded a three-year fellowship, to begin July 1, by the Medical Foundation —a United Fund agency.

Dr. Sledge will be doing research on bone. For the first two years he will be working in Cambridge, England, at the Strangeways Laboratories, to study techniques of tissue and organ culture with Dr. Honor B. Fell. Dr. Fell's particular interest is tissue and organ culture in the study of bone. For the third year of his fellowship, Dr. Sledge will do further work with Dr. Melvin J. Glimcher here in the Orthopedic Research Laboratories at the M.G.H.

* * *

MASSACHUSETTS GENERAL HOSPITAL'S CONTRIBUTION TO THE EDUCATION OF CLERGYMEN

The clergy have been associated with the Massachusetts General Hospital—sometimes happily, sometimes unhappily —since the very beginning of this institution. It was a clergyman who saw the need of a hospital here in Boston and initiated the first effective step taken toward the foundation of the Massachusetts General; Dr. John C. Warren, while not a clergyman himself, left a sum of money to be used to supply the Hospital with "religious and moral publications"; and, in more recent times, Dr. Richard C. Cabot suggested (and helped implement) a period of "internship" for ministers or seminary students within the Hospital.

This summer, another group of ministers and seminary students will submit themselves to the disciplines of the medical community and the direction of the Chaplain Supervisor. Many individuals from the various professions represented here will contribute their time and energy to this Summer School of Pastoral Care, and the students themselves will provide many hours of personal contact with patients and staff members.

Rather than describe "what happens" in the summer course, I would like to tell about some of the things that our clergy often learn through this relationship with one of the great medical centers of the world.

First of all, we learn from the patients, with whom we spend the greatest amount of our time. We learn, for one thing, that people have tremendous resources for growth and health within them. We are constantly amazed at what can happen within a given person, in spite of those so-called bad things that go to make up a disease. Clergymen need to learn that the Spirit of Healing does reside within people—that it does not have to be captured and then administered to the patient.

We also learn from patients the fact that emotions and feelings are as important to most people as rational statements and physical conditions. We witness over and over again a person enabling himself to endure disappointment, sorrow, extreme pain—and finally, death— by dealing wholesomely with his *feelings* about these events, recognizing the truth which underlies the cliché that "God does not give us more than we can bear".

Then, we learn from patients the drastic and killing results of the de-personalization of our culture. We come to know closely the heart and soul of the patients who come to the Hospital seeking, in addition to physical treatment, treatment of the whole person. And these are not patients who necessarily need referral to the Psychiatry Department. They are the everyday people of this world who find themselves lost in a technological culture, both without and within the hospital.

From the staff of the Hospital we learn many things, too. Perhaps most importantly, we learn that professional men *can* submit themselves to the scrutiny of their fellow-men. The Clinico-Pathological Conference demonstrates the need for anyone dealing with human living to recognize a source of inquiry and judgment beyond his own capabilities. Not many clergymen would normally submit their sermons, their "pastoral counseling", to such judgment, but here in the medical community we do just that—even if for only a brief time.

We also learn from the staff what it means to do *hard* work. No matter what the supposed rewards are for members of the medical profession, it still is usually *hard* work. Clergymen usually have so many tasks to perform in parish life that they may end up jabbing away at each task but not really accomplishing much except keeping busy. While the same can be true of any profession, we observe that the discipline of a medical center does demand great concentration of effort and great offerings of energy.

We also learn from the staff the results of specialization. We see how lives are prolonged and made useful, how pain is relieved, how concentration of effort within a given field has made this a more wholesome and bearable world in which to live. We usually learn to appreciate anew the advantages that have come from one person's being willing to specialize, and thus, perhaps, finding an entirely new method of dealing with disease. Also, we can see the disadvantages of specialization—how this narrowing down of the boundaries of our world tends to exclude more and more of the rest of reality from our range of vision. The Church—highly specialized—needs to recapture for itself a wider vision of reality that eventually may make unnecessary such words as "secular" and "religious".

Clinical pastoral students certainly benefit from their stay here at Massachusetts General Hospital. The welcome and cooperation we always receive make us feel at home and free us so that we can offer all that we may have for the benefit of this place. Most of the students who come feel as if they have nothing to offer (compared with the other professions here which can *do* something for the patients). However, I feel that perhaps the one thing we can offer is that for which we are trained (and paid): to ask, considerately and non-judgmentally, "What is the meaning of all this?"

The Rev. Allan W. Reed,
Chaplain Supervisor

Chaplain Allan W. Reed, in his above article, speaks of Dr. John C. Warren's gift of $1,000 for the purchase of religious publications to be distributed to patients in, or about to leave, the Hospital. From that early beginning has grown our present Warren Library. Its librarian, Mrs. Sara P. Allen, tells us there are now over 5,000 volumes available for circulation among our house patients and members of our professional and non-professional staffs. The famous bookcart, devised by Dr. Joseph B. Howland (*W.S.* 1897 and past assistant director) several years ago and widely copied in other hospitals, carries books of various types to the in-patients on a regular schedule and displays them in such a manner that individual choices as to reading matter may be made.

Dr. Warren was 63 years old when he wrote the letter to the Trustees announcing his gift. He died 15 years later. Believing that our readers might be interested in refreshing their memories as to Dr. Warren's exact wording, we give you a copy of the letter, which is in our Archives files.

"To the Trustees of the Massachusetts General Hospital

"Gentlemen,

"Having in the course of my practice had occasion to notice that patients recovering from accidents or illness, and those long confined by chronic diseases, are particularly susceptible of moral and religious impressions when judiciously conveyed, I many years since made a provision in my Will for paying to the Mass. Genl. Hospital the sum of one thousand dollars, the interest of which should, under the direction of the Trustees, be employed for the purchase of religious and moral publications to be distributed and given to the patients while in the Hospital, and also one or more of such publications to be given to each patient on leaving the Hospital, so far as the interest of the above mentioned fund may be sufficient for this purpose.

"My life having been protracted by the will of Providence beyond the period I had expected at the time the Will alluded to was made, I have now thought it best to execute the disposition myself. I have therefore caused to be deposited in the Life Insurance Company [Massachusetts Hospital Life Insurance Company] the sum of one thousand dollars, the interest of which I request you to have the goodness to cause to be employed in the purchase of publications of a religious and moral description to be distributed and given to the patients in the Hospital and those leaving the Hospital as above mentioned.

"Perhaps it may be thought that the interest of this sum might be more usefully employed in administering to the physical sufferings of patients in the Hospital, but I have been led to hope and believe that there never will be a want of benevolent persons who will be ready to contribute to this object, whereas there are few who might have an opportunity of observing the circumstances which call for moral aid, and I have therefore concluded to make the disposition above mentioned and sincerely hope it may meet with your approbation.

"I have the honor to be
Very respectfully
Yr. obdt. ser^{vt}
John C. Warren
"Boston, Nov.$^{br.}$ 6th 1841."

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all recent articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) classification of material, 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter, and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

General Medicine

Senior, J. R., and Isselbacher, K. J.
Demonstration of an intestinal monoglyceride lipase: An enzyme with a possible role in the intracellular completion of fat digestion.
J. Clin. Invest. 42:187.

General Surgery

Huggins, C. E.
Reversible agglomeration used to remove dimethylsulfoxide from large volumes of frozen blood.
Science 139:504.

Medical Science

Lotz, M., Fallon, H. J., and Smith, L. H., Jr.
Excretion of orotic acid and orotidine in heterozygotes of congenital orotic aciduria.
Nature, London 197:194.

Orthopedic Surgery

Rowe, C. R., and Sorbie, C.

Fractures of the spine in the aged.
In Clinical orthopaedics and related research, No. 26, Philadelphia, J. B. Lippincott Company, chap. 4.

Psychiatry

Sifneos, P. E.
The role of the educator and the clergyman in mental health work.
Acta neurol. et psychiat. hellen. 1:212.

Radiology

Carter, G. B., and Tanner, J. W.
Enlarging abdominal mass.
J.A.M.A. 183:588.

McCoy, W. T., and Robbins, L. L.
Emphysema: The pulmonary enigma.
Texas J. Med. 59:15.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Allen, A. C.
The kidney: medical and surgical diseases, ed. 2.
New York, Grune & Stratton, 1962.
(17D)

Bannerman, R. M.
Thalassemia.
New York, Grune & Stratton, 1962.
(14B)

Black, D. A. K.
Renal disease.
Oxford, England, Blackwell Scientific Publications, 1962.
(17D)

Cold Spring Harbor Symposium on Quantitative Biology, vol. 27.
Basic mechanisms in animal virus biology.
Cold Spring Harbor, Long Island, N. Y., The Biological Laboratory, 1963.
(2As)

Coombs, R. R. A., Coombs, A. M., and Ingram, D. G.
Serology of conglutination and its relation to disease.
Oxford, England, Blackwell Scientific Publications, 1961.
(8G)

Fitzpatrick, T. B., and Walker, S. A.
Dermatologic differential diagnosis.
Chicago, Year Book Medical Publishers, Inc., 1962.
(27D)

Fryer, J. H. (Editor)
Hypertension and coronary artery disease.
Philadelphia, J. B. Lippincott Company, 1962.
(15D)

Gross, F. (Editor)
International symposium on protein metabolism.
Berlin, West Germany, Springer Verlag, 1962.
(5M)

Harris, R. S., and Wool, I. G. (Editors)
Vitamins and hormones, vol. 20.
New York, Academic Press, Inc., 1963.
(5N)

Heller, H., and Clark, R. B. (Editors)
Neurosecretion. (Memoir of the Society for Endocrinology No. 12)
New York, Academic Press, Inc., 1962.
(14K)

Hodgman, C. D. (Editor)
C. R. C. standard mathematical tables, ed. 12.
Cleveland, Chemical Rubber Publishing Company, 1959.
(36E)

Hodgman, C. D. (Editor)
Handbook of mathematical tables.
Cleveland, Chemical Rubber Publishing Company, 1962.
(36E)

Hodgman, C. D., and others. (Editors)
Handbook of chemistry and physics, ed. 44.
Cleveland, Chemical Rubber Publishing Company, 1963.
(36E)

Hodgman, C. D., and others. (Editors)
Mathematical tables from *Handbook of chemistry and physics*, ed. 11.
Cleveland, Chemical Rubber Publishing Company, 1959.
(36E)

Hodgman, C. D., and others. (Editors)
Tables for identification of organic compounds.
Cleveland, Chemical Rubber Publishing Company, 1960.
(5A)

Lwoff, A. (Editor)
Biological order.
Cambridge, Mass., Massachusetts Institute of Technology Press, 1962.
(2Am)

Nastuk, W. L. (Editor)
Physical techniques in biological research, vol. 4.
New York, Academic Press, Inc., 1962.
(2As)

Pollard, M. (Editor)
Perspectives in virology.
New York, John Wiley & Sons, Inc., 1959.
(11As)

Rosenblith, W. A. (Editor)
Processing neuroelectric data.
Cambridge, Mass., Massachusetts Institute of Technology Press, 1959.
(19J)

Rosenblith, W. A. (Editor)
Symposium on principles of sensory communication.
New York, John Wiley & Sons, Inc., 1961.
(19C)

Schmitt, F. O. (Editor)
Macromolecular specificity in biological memory.
Cambridge, Mass., Massachusetts Institute of Technology Press, 1962.
(19J)

Smith, K. M., and Lauffer, M. A. (Editors)
Advances in virus research, vol. 9.
New York, Academic Press, Inc., 1962.
(8G)

Sobotka, H., and Steward, C. P. (Editors)
Advances in clinical chemistry, vol. 5.
New York, Academic Press, Inc.
(7D)

Symposium on Fundamental Cancer Research. 15th, 1961.
The molecular basis of neoplasia.
Austin, University of Texas Press, 1962.
(13V)

Warren, R.
Surgery.
Philadelphia, W. B. Saunders Company, 1963.
(23A)

Wilson, M.
The anatomical foundation of neuroradiology of the brain.
Boston, Little, Brown and Company, 1963.
(19J)

Wolff, H. G.
Headache and other head pain, ed. 2.
New York, Oxford University Press, 1963.
(19F)

The world of learning, ed. 13.
London, England, Europa Publications Ltd., 1963.
(1A)

* * *

VOLUNTEER GROUP
MGH SERVICE LEAGUE

One of the functions instituted by the MGH Service League during this past year was the establishment of the Information Booth in the Brick Corridor. The booth is now staffed by Service League members five days a week, on a 10 A.M. to 3 P.M. schedule. It takes 40 volunteer assignments per month to insure its efficient and continuous operation. Mrs. John W. Cass, Jr. is the present chairman.

This desk is supplementary to the Information Desks provided by the Hospital in the White, Warren, and Baker lobbies. It was first suggested by the Advisory Committee to the Volunteer Service. Dr. Chester M. Jones, Chairman of the Advisory Committee, appointed a group from the Ladies' Visiting Committee and the MGH Service League to make a preliminary survey. Eight volunteers, under the supervision of Miss Mary Ruth Wolf and Mrs. Floyd H. Blackman made the initial study. Six of these volunteers manned a booth in rotation from 10 A.M. to 3 P.M., April 13 through April 17, 1959. Their purpose was to evaluate the needs and classify the types of questions asked; 376 questions were asked and answered—an average of about 75 per day. The most frequent inquiries were for the location of doctors' offices, the clinics, and routes to the various buildings and other areas. Miss Lepper, Mr. Katzer, and Miss Wolf all shared in the development of this service, which was ultimately started in the spring of 1962 under the chairmanship of Mrs. Melvin J. Glimcher.

From the outset this information service met with an enthusiastic response from the staff and the public. The workers have certainly felt that they were satisfying an essential need of the Hospital —simultaneously extending warmth and friendliness to those who seek their aid.

At the present time, under the guidance of Mrs. Francis M. Ingersoll, the Service League is conducting a pilot study for a second Information Desk to be established in the Clinics Building.

This letter, expressing appreciation of the Staff Wives Association (the earlier name of the present MGH Service League) was written directly to the Editor of THE NEWS. It came from Dr. Maurice McGregor (clin. & res. fel. *M.* 1955), now a member of the staff of the Royal Victoria Hospital in Montreal, Canada:

> I would like, through your columns, to express appreciation of the wonderful job done by the Massachusetts General Hospital Staff Wives Association.
>
> I spent a year in Boston some time ago and became fully aware, for the first time, of the very great need of overseas visitors for personal contacts. Through the Association I was able to meet some Americans in their homes and form some enduring friendships. It is undoubtedly in part due to the Association that my memories of Boston, and the Massachusetts General Hospital in particular, are so pleasant.
>
> Many thanks.

New addresses:

Dr. Stanley P. Bohrer (*S.* 1959 & r.p. *R.* 1963), Hammersmith Hospital, DuCane Rd., London W. 12, England

Dr. George B. Carter (r.p. *R.* 1962), Parkland Memorial Hospital, 5201 Harry Hines Blvd., Dallas, Tex.

Dr. Efrain O. Contreras (clin. & res. fel. *M.* 1962), Hospital Latina Americano, 15 Sur 302-308, Puebla Pue, Mexico

Dr. Mary Stuart (Blakely) Fisher (*M.* 1949), Philadelphia General Hospital, Philadelphia, Pa.

Dr. William Franklin (a.p.), 100 Country Club Rd., Newton Centre; Zero Emerson Place, Boston, Mass.

Dr. John L. Fromer (clin. assoc. *D.*), 605 Commonwealth Ave., Boston, Mass.

Dr. A. Erik Gundersen (*S.* 1956), Ulleval Hospital, Oslo, Norway

Dr. Donald K. Lewis (assoc. s. *Otolar.*), 5 Emerson Place, Charles River Park, Boston, Mass.

Dr. Edward Lowenstein (c.r.p. *An.* 1962), Mount Sinai Hospital, New York 29, N. Y.

Dr. William T. McCoy (r.p. *R.* 1960), 19 Avenel Gardens Rd., Medindie, South Australia

Dr. Rhoda U. Musgrave (r.p. *Psychiat.* (*McL.*) 1937), Nevada State Hospital, Reno, Nev. (mailing address: P.O. Box 2460, Reno, Nev.)

Dr. Albert E. Parkhurst (*W.M.* 1919), Beverly Hospital, Beverly, Mass.

Dr. Thomas S. Risley (*E.S.* 1942), Beverly

Jin H. Kinoshita, Ph.D.—Biochemist in Ophthalmology, Massachusetts Eye and Ear Infirmary

Hospital, Beverly, Mass.

Dr. Charles E. Rounds (Dn. 1947), 97 Columbian St., So. Weymouth, Mass.

Dr. Beatrice E. Sleigh (clin. fel. *An.* 1959), 48 Tarnwood Park, Court Rd., Eltham, London S.E. 9, England

Dr. James W. Tanner (r.p. *R.* 1962), 2106 Hayes St., Wichita Falls, Tex.

Dr. Harold C. Urschel, Jr. (*S.* 1956), 3810 Swiss Ave., Dallas 4, Tex.

Dr. Nicholas T. Zervas (sr. r.s. *N.S.* 1961), Jefferson Medical College, 1025 Walnut St., Philadelphia 7, Pa.

* * *

Brief bits:

Dr. Henry K. Beecher was recently Visiting Professor in Psychiatry at the University of North Carolina. Last autumn, as has already been reported in The News, he was Visiting Professor of Medicine at Emory University.

Dr. Earle M. Chapman addressed the Clark County Medical Society, Springfield, Ohio, on January 21. His subject was "The treatment of hyperthyroidism". On February 11 he spoke at the University of Kansas Postgraduate Medical Symposia in Kansas City on "The nodular goiter" and "Treatment of hyperthyroidism".

Dr. Oliver Cope was appointed Professor of Surgery at Harvard Medical School on January 1. Previously, he had been an Associate Professor of Surgery.

Dr. Richard A. Field was the principal speaker at a joint meeting of the Montreal Ophthalmological Society and the Montreal Division of the Quebec Diabetic Association, held in Montreal on February 21. In April, Dr. Field will be the guest speaker at a joint meeting of the British Diabetic Association and the Irish Ophthalmological Society, at which time he will present a paper entitled "Experiences with hypophyseal stalk section in the treatment of hemorrhagic diabetic retinopathy".

* * *

This nice long letter has come from Dr. William K. Livingston (*W.S.* 1922), our "singleton" in Camp Sherman, Oregon:

I doubt that I have ever received a more appealing form letter and I hasten to send "news" for The News from an isolated MGH-er.

When I retired a few years ago as Chief of Surgery at the University of Oregon Medical School, they were good enough to give me the Emeritus title. We were very fortunate in persuading Bert Dunphy to take over my assignments. In order to get out from under foot and give Bert a free rein, I spent a year in Australia on a Fulbright scholarship and came back to find Bert doing a grand job. He seems to be as enthusiastic about living in Oregon as we are about having him here.

Camp Sherman, where my wife and I live, is not a military post, as some people assume from its name. Actually, the post office is a part of a small country store in a resort area on the Metolius River in Eastern Oregon, about 150 miles southeast from Portland. As it is on the east side of the Cascade range of mountains, it is much drier and sunnier than on the Willamette valley side. This river and its tributary, Spring Creek (on which we have our cottage), gets its water from some unknown and never-changing source. It springs from the foot of a black mountain and within a few yards is a "river". It never changes its temperature more than four or five degrees, winter or summer, its crystal-clear water never gets muddy, never floods, and never freezes. Our cottage is close enough to Spring Creek to hear the murmur of the water, and faces Mount Jefferson, which never loses its snow fields and glaciers in summer and its pure white in winter. The winter community here is small, compact, and friendly, and people know you, your car, your bad habits, and even your thoughts—but it is a nice place to live in!

For interests, I retain intermittant contact with my research group in the Medical School, work on a book that will probably never see print, and throw pots in my ceramic shop. I search for volcanic materials to make glazes that might reproduce our "shibui" colors—red pumice roads, yellow pine, etc.

Best regards to you and all the MGH-ers who read The News.

This cordial letter has come from Dr. Walid Mnaymneh (sr. r.s. *Or.* 1962). From the American University Hospital, Beirut, Lebanon, he writes:

Since I left the M.G.H. last June and returned to my home country, Lebanon, I have had a difficult time trying to get over the idea that my stay at the General is over. I can say without hesitation that the years I spent there were among the best years of my life. I recall that my Chief, Dr. Joseph S. Barr, told me shortly after my arrival at the Hospital, "Walid, you will find the MGH environment quite a unique one." I certainly did, and in the most favorable way. The spirit of the doctor-patient relationship, the relationship between the attending staff and the resident staff, among the residents themselves and among the different hospital services were most admirable.

My wife, Dr. Latifeh Ghandur-Mnaymneh (res. fel. *Path.* 1961) and I are working at the American University Hospital in Beirut—she as an Assistant Professor in Pathology, and I as an Assistant Professor in Orthopedic Surgery. It may be quite pleasing for you to know that in this small place, several thousand miles away, we already have a small group of MGH alumni: Dr. Samuel Kirkwood, Dean of the Faculty of Medical Sciences; Dr. Craig Lichtenwalner, Dean of the School of Public Health and Assistant Dean of the Faculty of Medical Sciences; Dr. John L. Wilson, Professor and Chairman of the Department of Surgery; and Dr. Munir Shamma'a, Assistant Professor of Internal Medicine (Gastroenterology). Reminiscence of the old days at the M.G.H. is a heartening subject of conversation to all of us.

The American University Hospital is well known to some of your distinguished men, such as Drs. Edward D. Churchill, Raymond D. Adams, Grantley W. Taylor, and John F. Burke. We enjoyed the visit of Dr. and Mrs. Donald M. McKee a couple of months ago when they were on their way to the Holy Land.

If any of you happen to be traveling through the Middle East, be sure to stop in Beirut and visit us.

The News

Massachusetts General Hospital 1811

No. 222 Boston, Mass. May 1963

ACUTE PSYCHIATRIC SERVICES IN THE EMERGENCY WARD

The changing role of the Hospital in relation to the community is receiving vigorous and widespread attention. In no area of the Massachusetts General Hospital is the demand of the community greater than in the Emergency Ward, where upwards of 44,000 patients will be admitted this year. Part of this pressure for services in the EW is caused by the increasing number of individuals with acute and chronic psychological problems, many of whom require continuing treatment that involves not only the Emergency Ward but the clinics, the Department of Psychiatry, and the Social Service Department, as well. Although enormous strides have been made and are being made in understanding and treating emotional disorders, this growing demand for psychosocial service is, for many reasons, generally unmet throughout the nation: lack of trained personnel, lack of adequate facilities, and the inflexible adherence to traditional practices and procedures. With regard to the last reason—when a patient does not fit into the particular set of therapies offered in many institutions, he is often labeled as unmotivated or otherwise unsuitable for treatment. When referral to another treatment agency is recommended, it is very often not viewed as an integral part of the first therapeutic encounter and a first step in carrying out a comprehensive treatment plan, but as a facile means of disposition. The program we have developed in the EW demonstrates the way in which this situation may be ameliorated.

As we noted, radical changes in the EW have been taking place. These reflect case loads of patients with psychosocial problems who desire treatment. For example, it was estimated that 300 patients were seen for psychiatric care in the EW in 1952. In 1956 Dr. Jack H. Mendelson estimated that over 750 psychiatric patients were seen in the Psychiatry Service of the EW, while Dr. Howard T. Blane reported 875 individuals seen in 1958. Our present carefully tabulated data reveal that, if present trends continue, over 3,000 individuals will be seen by the Acute Psychiatric Services in the EW in 1963, for a total of 5,000 visits in one year. This increase in the number of persons seeking psychiatric aid is not a problem for the Massachusetts General Hospital alone. Bellak, in Elmhurst, N. Y., has instituted a "Trouble Shooting Clinic" in the EW, and the Albert Einstein Medical School has for two years operated an EW Psychiatry Clinic similar to ours.

At one time the EW was mainly a life-death unit, but gradually and increasingly it is fulfilling the role of a community general practitioner, with the estimate that only 5% of the EW population fits into the life-death model. However, the life-death model of rapid diagnosis, immediate and urgent intervention, and recognition of only the presenting problem persists and is often transmitted throughout all specialties in an Emergency Ward. Balanced against this model is the changing reality that an increasing number of people with minor medical problems, chronic debilitating illnesses, and psychosocial crises are coming to the EW. What we are therefore confronted with is a need to intensively evaluate the patient medically, psychiatrically, and socially, and to arrive at a treatment plan which may involve not only the patient but also his family, his environment, and the use of extrahospital community resources. Contrary to the operation of most psychiatric emergency services where immediate short-term treatment planning is the major goal, we shall emphasize long-term planning which incorporates short-term goals.

In order to trace the evolution of our current effort of research, service, and training in the Acute Psychiatric Services of the Emergency Ward to meet the growing demand, we must briefly review our work in alcoholism, which serves as the model for the present undertaking.

In 1952, when the Alcohol Clinic opened its doors as a State-supported operation, two objectives existed: (1) to see if psychodynamic psychotherapy could be effective in the treatment of alcoholism, and (2) to see if, from this psychiatric encounter, we could evolve other techniques of treating alcoholism. The necessity for both objectives derived from a commonly-held impression that psychiatric treatment was ineffective with alcoholics, and our belief that so little scientific effort had been attempted in understanding the principles underlying alcoholism that techniques were limited to symptomatic treatment alone.

In 1957 Mendelson and I reported that, out of more than 1200 alcoholics seen annually in the EW, less than 1% made their way to the Alcohol Clinic for continued treatment. At first our impression was similar to that of the general public and the medical profession: alcoholics are not interested in receiving treatment. However, we soon came to recognize that modifications in psychotherapeutic techniques were necessary if we wished to establish workable treatment relationships with most alcoholics. Support from the National Institute of Mental Health enabled us to test our ideas in two studies — the design, methodology, and results of which were reported elsewhere.(1) The aim of these studies was to see if we could motivate alcoholics to enter treatment. In brief, our approach involved these five points: (1) the use of a psychiatrist and social worker to modify the traditional mode of initial contact with the alcoholic in the Emergency Ward by offering the patient a nonfragmented, consistent relationship; (2) further utilization of psychodynamic understanding of alcoholism by constructively meeting the alcoholic's dependency needs; (3) the practical application of the theory that patients asking for help during an acute episode of a chronic problem are asking for aid for the underlying problem as well; (4) the incorporation of Dr. Erich Lindemann's crisis theory, whereby the patient in crisis is considered to be in a propitious state for therapeutic intervention; and (5) utilization and integration of a large number of community resources in our program. The first year's study showed that 62% of the experimental population started treatment; and, as a result of modifications in technique, 77% started treatment during the second year's study. Subsequently we received funds to support the undertaking as a demonstration-service oriented program in the EW which is currently in operation, and preliminary figures indicate that 95% of the referred population started treatment. Because we have also become especially aware that studies in alcoholism have focused mainly on those most severely ill and deprived and therefore most difficult to reach, we are in the process of undertaking studies in the early identification and treatment of alcoholism and alcohol-related problems. These studies include a survey of female alcoholism and the effect of alcoholism in parents upon the emotional development of their children.

In July 1962, Dr. Lindemann, Chief of our Department of Psychiatry, asked that we apply the model of our work with the alcoholic to the general psychiatric population in the Emergency Ward. This undertaking is designed to meet the increasing demand for psychosocial service, of which we spoke earlier, in consonance with the goals of the Administration of the M.G.H. in its expanding interest in the Hospital's role in the community.

In review, then, we are attempting a new and expanded approach to the problems to be met in the Acute Psychiatric Services in the EW. This endeavor is modeled after our work with alcoholics in the EW and is based upon 4 assumptions: (1) a patient asking for help with his immediate problem is at the same time asking for help with his underlying problem, and a crisis situation is a propitious moment in which to make an alliance; (2) strengthening the patient's motivation to enter therapy and maintain the relationship is mainly the responsibility of the caretaker and the agency; (3) if treatment facilities are not available in an institution, careful and efficient interagency referrals can be made, tailored to the needs of the patient and within the resources available; and (4) that the Acute Psychiatric Services in the EW are an excellent locale for the training of young psychiatrists for their general practice in psychiatry.

With the background in mind, what are the aims and operations of the Acute Psychiatric Services? Our aim is to deal with the broad range of psychiatric patients coming to the EW — many of them considered unreachable or untreatable — who, we believe, can be motivated to enter and maintain treatment by an approach tailored to evaluate and meet the individual's requirements, and integrated with the efforts of existing community resources. To achieve our aim we attempt the following: (1) a careful team evaluation of the patient and his primary social system; (2) comprehensive treatment-planning that involves the patient and his family with intrahospital as well as community resources; (3) careful utilization of initial contacts with patients and family members, to enhance motivation for continuing care; (4) follow-through on referral to other resources, to solidify working rapport with extrahospital facilities and to serve as a check-up on the correctness of treatment-planning for patients; (5) continuing cooperation, coordination, and consultation with a variety of community agencies in treatment-planning and implementation; (6) an in-service training program for residents in psychiatry, social work students in psychiatry, and psychology trainees, and the complementary program of training for community agents, both lay and professional; and (7) the building of a body of knowledge from the Acute Psychiatric Services patient population that may result in new avenues of research and treatment.

The services operate as follows: Dr. Freddy H. Frankel (c.r.p. *Psychiat.* 1953), who recently rejoined us from South Africa, acts as coordinator of the service. Dr. Frankel serves on a full-time basis in the EW, managing administrative problems, supervising residents in psychiatry, reviewing the daily patient population and records, coordinating the team efforts of our residents and social workers, and conducting conferences, consultations, and liaisons with community agencies. He is ably assisted in these multiple efforts by Dr. Gerhart A. Duda on a full-time basis and by Dr. Robert L. Bragg on half-time service. A first and a third year resident in psychiatry are on duty in the EW at all times. At present, the first year resident evaluates every patient referred to the service, taking into account the information gained by the social worker. Then, mutually arrived at short-term and long-term treatment plans are developed. Third year residents serve as front-line reviewers of the patients examined by the first year resident and often, in the event of simultaneous referrals, they evaluate and plan for patients who cannot be seen by the first year man. In the near future, the third year residents will be the front-line psychiatrists in the EW, since the problems to be met there require the more, rather than the less, experienced psychiatrist.

Psychiatric social service is heavily involved in the Acute Psychiatric Services of the Emergency Ward. Under the direct supervision of Miss Eleanor Clark and with the enthusiastic cooperation and support of Miss Josephine C. Barbour, Director of the Social Service Department at the Hospital, the social workers do an initial intake with all patients, gather information from relatives or others who accompany the patient, investigate the patient's social environment, make specific arrangements in the event of referral to community resources, provide short- and long-term case work, and, as noted above, cooperate with other staff members in treatment-planning. In order to employ the special capabilities of the workers most effectively, social work assistants assume some of these day-to-day activities. Finally, daily problem-solving rounds are held in the EW by senior staff psychiatrists and are attended by the psychiatrists and social workers who were on duty during the previous 24 hours.

When a patient is referred to the service, his name, unit number, and the time of referral are entered on a flow chart. The intake social worker sees the patient briefly, but immediately. The psychiatrist then sees the patient, while the social worker interviews the person who accompanies the patient and, when indicated, gathers information over the telephone from sources outside the Hospital. A long-term treatment plan is formulated calling upon consultation with other staff members if necessary. When one contact is insufficient for arriving at a long-term plan, an interim plan is made and the patient and/or his family are given a return appointment for long-term planning and follow-through. Patients whose situations are not deemed emergencies are evaluated and planned for at a slower pace, with 3 to 5 return appointments, as might be necessary. Coffee is provided for patients who must wait, and a social worker, social work assistant, or secretary sees that the patient is kept informed as to inadvertent delays if they occur, so that he will not feel neglected.

Since, as we have shown in our alcoholism work, the initial contact of a person in crisis with caretakers is of prime importance in enhancing or inhibiting motivation for treatment, we make a continuous effort, first of all, to try to gratify within the limits of reality the expressed needs of the patient in order to constructively utilize his dependence. Further, we offer a continuous interest in, and unfragmented relationship with, and acceptance of, the directly or indirectly expressed feelings of the patient. Also, as noted above, we attempt to enhance motivation by recognizing with the patient not only his immediate problem but those underlying problems as well. We try, further, to strengthen motivation by reducing reality frustrations to a minimum, i.e., avoidance of lengthy waits, fragmented contacts with a number of personnel, or behavior on the part of any member of the staff which can be interpreted by the patient as hostile or rejecting.

Since patients do not live in a vacuum, we have learned that maximum motivation, evaluation, and treatment must be developed within the setting of the individual, his family, and the community. This involvement of the family in early planning and treatment is immensely useful in enlisting the family's aid in programing and in enhancing motivation. Interpretation of aims, reassurance, and discussion of the problems that may arise for relatives as a consequence of the treatment plan tend to reduce the gross and subtle pressures relatives can exert to influence negatively the patient's decision regarding treatment plans. In this way, the family, not the patient alone, becomes the focus of treatment.

The use of extrahospital community resources bears a major significance in our work. Very early in our experiences with the alcoholic we recognized that the M.G.H. was in no position to provide many of the basic needs of the socially deprived patient, nor should it. Search for existing facilities revealed that although many were listed as available to alcoholics, their administrative practices excluded those patients they supposedly served (e.g., the alcoholic must have lived in one residence for 5 years or must have been sober for 3 months, or he must pay a high fee, etc.). We learned, however, that many of these community agencies would alter their existing practices when approached in relation to our work. In addition, when we evaluated the strengths and weaknesses of a particular institution or agency for ourselves and made referrals to their strengths and avoided referrals to their weaknesses, better interagency working relations resulted. Coupled with our follow-through practice, whereby the psychiatrist and social worker kept in frequent contact with the caretakers of the extrahospital resource, a working rapport developed. The other agency did not feel that the M.G.H. had "dumped" the patient on them, and they correctly felt that our continuing interest in the patient offered them the opportunity for consultation and support in their efforts. As a result, interagency and interprofessional tensions and conflicts from which the patient is the one who suffers were reduced.

One consequence of our integration of extrahospital resources in our psychiatric-alcoholic programs has been the survey of "repeaters" in the EW. Our initial survey revealed 30 patients who had multiple visits to the EW (some up to 50 visits) in a short span of time. Not only did these patients make frequent use of EW facilities of the M.G.H., but they drew heavily upon other agencies: general, mental, and tuberculosis hospitals; social welfare agencies; and courts and correctional institutions. Although these patients circulate from agency to agency and were often referred to as "well known", examination of their records revealed little in the way of essential history, comprehensive evaluation, and treatment-planning. Making the rounds from agency to agency, costing the community large sums of money, these patients never benefit from a carefully evaluated, well-coordinated community effort, whereby their needs are determined and treatment-planning implemented. The results of our survey of the "repeater" patient have been made available to the Commissioner of Public Health in order to help him get legislation for funds for half-way houses and therapeutic community-style hospitals. In this way we hope to realize the goal of our philosophy that successful efforts within the M.G.H. will create sufficient pressure outside the Hospital to generate the rightful assumption of responsibility on the part of the community.

We believe that in the acute psychiatric service in the emergency ward of a large general hospital, services must be offered to all who ask for help. We believe, therefore, that we must pursue systematically and continuously the search for methods of therapy for those patients who do not enter or who prematurely discontinue therapy. One reason why patients do not enter or prematurely discontinue therapy is the factor of low socio-economic class position. Explanations of the relation between low social position and unsuitability for psychiatric treatment have ranged from ineffective communication between middle-class therapists and lower-class patients to divergent value systems between physician and patient. Our research with alcoholics, a majority of whom were from lower social class positions, revealed that action-oriented encounters whereby concrete needs were met, rather than a verbal-thinking approach, were essential in the initial therapeutic encounters.

Along with the low social class patient who receives treatment with difficulty is the patient population which falls into the area of social deviation, character disorder, passive-resistance, and those patients whose medical problems are more socially acceptable than their underlying, pressing psychosocial difficulties. Many of the above noted problems contribute to the difficulties of the Acute Psychiatric Services in the EW.

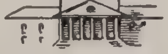
Beyond the changing character of the Emergency Ward, the need for new psychiatric techniques for evaluation and treatment and the necessity for coordination of community resources, lies the untapped body of knowledge in the EW concerning acute psychiatric problems which lends itself to research and teaching purposes. Since the structure of medical practice is changing, as reflected in the changing pattern of emergency services, research into the new patient populations and their problems becomes essential, as well as the development of teaching practices. The EW is an excellent locale for the young psychiatrist to have a wide range of experiences. However, it is important to both patient care and the psychiatrist's learning experience that proper supervision of this learning experience be close at hand.

There are many phases of our activities which we cannot describe in this brief article: the necessary follow-through, cross-checking within and without the Hospital, and the circumventing of innumerable obstacles and frustrations which beset most patients; an elaboration of the intricacies of treatment-planning, use of community resources, and inservice training and education involving social workers, volunteer college students, and mental health workers in the community. What we hope is that when our program is fully developed, just as with the alcoholic, general psychiatric patients often considered unreachable and untreatable may indeed be reached and treated — this, regardless of the kind of problem or the social class position. We further hope to show that reaching and treating individuals in psychosocial stress does not require radical changes in commonly held viewpoints with regard to the treatment of psychiatric problems. Reaching and treating patients involves, rather, careful conducting of the initial contact and shifts of emphasis in dynamic theory: from the individual *in vacuo* to the individual as a member of a dynamic social system; from an agency as the sole treatment resource to a community of agencies; from an effort to fit all patients into a middle-class value system to an effort to understand and function within the value system of each patient's subcultural group. These we hope, ultimately, will be the contributions of the new endeavor in the Acute Psychiatric Services of the Massachusetts General Hospital.

Morris E. Chafetz, M.D.,
Director, Alcohol Clinic and
Acute Psychiatric Services

REFERENCE

(1) Chafetz, M. E., Blane, H. T., Abram, H. S., Golner, J., Lacy, E., McCourt, W. F., Clark, E., and Meyers, W.: Establishing treatment relations with alcoholics, J. Nerv. Ment. Dis. *134*: 395-409, 1962.



The Board of Trustees, at their meetings during March, voted:

That Dr. Erich Lindemann be granted leave of absence with pay for the period March 12 through June 10;

That Dr. Howard P. Baden, Clinical Associate in Dermatology, and Dr. Ruth K. Freinkel, Assistant Dermatologist, be allowed to see a limited number of private patients at the Hospital;

To accept the resignation of Dr. Joseph Dobkin as Assistant Biochemist at McLean Hospital, effective retroactively to January 26;

That the resignation of Dr. Winfield S. Morgan, Associate Pathologist, be accepted with regret, effective March 31;

That the resignation of Dr. Herman Turndorf, Assistant in Anesthesia, be accepted with regret, effective March 15.

To promote:

Dr. Bruce W. Fischberg from Clinical Fellow in Psychiatry at McLean Hospital to Clinical Assistant in Psychiatry at McLean, effective retroactively to January 1;

Dr. Eda M. Kahana from Clinical Fellow in Psychiatry at McLean Hospital to Clinical Assistant in Psychiatry at McLean, effective July 1.

To appoint:

Dr. Otto Appenzeller as Clinical and Research Fellow in Neurology for one year, beginning May 1;

Lenin A. Baler, Ph.D. as Assistant Psychologist, beginning April 1;

Dr. Sidney A. Blubaugh as Assistant Resident in Anesthesia, beginning September 1;

Dr. Randolph Catlin, Jr. as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert Cserr as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Ralph B. Dell as Exchange Assistant Resident on the Children's Service, for the period February 27 through April 9;

Dr. Marianne Dierks as Assistant Resident in Psychiatry for one year, beginning July 1;

Dr. Donald G. Dorencamp as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Robert A. First as Assistant Resident in Orthopedic Surgery for one year, beginning April 1;

Dr. Ramon S. García as Clinical and Research Fellow on the Children's Service for one year, beginning July 1;

Peggy J. Golde, Ph.D. as Assistant Sociologist, beginning April 1;

Dr. Frank Haendel as Clinical and Research Fellow in Psychiatry, beginning July 1;

Dr. Francoise Halkin as Clinical Fellow in Anesthesia (resident status) for one year, beginning April 1;

Dr. Howard T. Hermann as Assistant Psychiatrist at McLean Hospital, beginning September 1;

Dr. James C. Jordan as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Alfred J. R. Koumans as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Sidney Levin as Associate Attending Psychiatrist at McLean Hospital, beginning March 15;

Dr. John B. Livingstone as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Donald A. McGee as Clinical and Research Fellow in Neuropathology for one year, beginning July 1;

Dr. Raymond J. McGill, Jr. as Assistant Resident in Dermatology, beginning July 1;

Dr. Michael T. McGuire as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. James W. Meade as Clinical Assistant in Surgery, with the privilege of assisting Dr. Robert Linton, beginning July 1;

Dr. Donald J. Morrison as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Joseph Pines as Clinical and Research Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;

Dr. Judith G. Ronat as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Christopher Van A. Rowland, Jr. as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Krishna M. Saxena as Clinical and Research Fellow on the Children's Service for one year, beginning July 1;

Dr. Edwin L. Tolman as Assistant Resident in Dermatology, beginning July 1;

Dr. Michael J. Walker as Clinical and Research Fellow in Psychiatry for one year, beginning July 1;

Dr. Dale E. Wenlund as Second Assistant Resident in Radiology, beginning July 1;

Dr. John B. West as Assistant Physician, beginning July 1 (title Clinical Fellow until license is received);

Dr. Edwin T. Wyman, Jr. as Assistant in Or-

thopedic Surgery;
Dr. Donald N. Wysham as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. Shing Y. Yip as Assistant Resident in Dermatology, beginning July 1;
Dr. Thomas E. Zion as Clinical Fellow in Neurology, to act as Resident, beginning July 1.

The Trustees voted to appoint the following Interns on the Medical Service, to begin July 1:

Dr. Arthur J. Atkinson, Jr.
Dr. Winthrop H. Churchill
Dr. Robert B. Copeland
Dr. Bernard G. Forget
Dr. Thomas D. Gelehrter
Dr. Albert R. Martin
Dr. Frederick L. Moolten
Dr. Gordon T. Moore
Dr. John Noble, Jr.
Dr. Richard K. Root
Dr. Jay H. Sanders
Dr. Samuel R. Snodgrass, Jr.

The Trustees also voted to appoint the following Interns on the Children's Service, to begin July 1:

Dr. Lewis B. Holmes
Dr. Mark E. Molliver
Dr. Esther H. Robinson
Dr. Joel Rutman

At their meeting on March 29, the Trustees changed the titles of three members of the Administrative Staff, to indicate more clearly the responsibilities and functions of the individuals involved. Mr. Henry J. Murphy becomes Associate Director, Mr. Lawrence E. Martin becomes Associate Director and Comptroller, and Mr. David C. Crockett is Deputy to the General Director. In addition, Dr. Dale R. Lindsay, at present Chief of the Division of Research Grants at the N.I.H., will, as of August 1, become Deputy to the General Director for Research Administration.

At their meetings on March 6 and 27, and April 3, the General Executive Committee voted:

To accept the resignation of Dr. Sharad G. Joshi from the position of Research Fellow in Medicine, effective as of February 2;
To promote Dr. Donald L. Leake to the position of Resident in Dental Medicine for one year, beginning July 1;
To reappoint Dr. Isadore Starr as Clinical Fellow in Medicine for one year, beginning April 14.

To appoint:

Mary C. Glick, Ph.D. as Research Fellow in Biochemistry (Medicine) for one year, beginning as of February 18;
Dr. Perla B. Salama as Research Fellow in Neurology, assigned to Electroencephalography, for the term December 15, 1962 through March 15, 1963;
Dr. Prem S. Sarin as Research Fellow in Medicine for one year, beginning September 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all recent articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Anesthesia

Laver, M. B., and Turndorf, H.
Atrial activity during halothane anesthesia in man.
Anesthesiology 24:133.

Slater, E. M., Surtees, A. D., Tassie, J. A., and Todd, D. P.
Anesthesia by remote control during radiation therapy.
Anesthesiology 24:112.

General Medicine

Smith, L. H., Jr., and Lotz, M.
Studies on congenital orotic aciduria: Comparison of orotic acid metabolism in microorganisms.
J. Lab. & Clin. Med. 61:211.

General Surgery

Grillo, H. C.
Origin of fibroblasts in wound healing: An autoradiographic study of inhibition of cellular proliferation by local X-irradiation.
Ann. Surg. 157:453.

Laboratory Science

Dvorak, H. F., Kosunen, T. U., and Waksman, B. H.
The "transfer reaction" in the rabbit. I. A histologic study.
Lab. Investig. 12:58.

Waksman, B. H.
The pattern of rejection in rat skin homografts, and its relation to the vascular network.
Lab. Investig. 12:46.

Orthopedic Surgery

Cave, E. F.
The healing of fractures and nonunion of bone.
Surg. Clin. N. America 43:317.

Cave, E. F.
The past and present of trauma.
Surg. Clin. N. America 43:337.

Pathology

Munger, B. L., and Roth, S. I.
The cytology of the normal parathyroid glands of man and Virginia deer. A light and electron microscopic study with morphologic evidence of secretory activity.
J. Cell. Biol. 16:379.

Roth, S. I., and Munger, B. L.
Recent advances in the histology and ultrastructure of the parathyroid glands.
In Evaluation of thyroid and parathyroid functions, F. W. Sunderman and F. W. Sunderman, Jr., Editors, Philadelphia, J. B. Lippincott, chap. 17.

Roth, S. I., and Munger, B. L.
Recent advances in the pathology of the parathyroid glands.
In Evaluation of thyroid and parathyroid functions, F. W. Sunderman and F. W. Sunderman, Jr., Editors, Philadelphia, J. B. Lippincott, chap. 18.

Psychiatry

Whiskin, F. E.
The use of the "soliloquy" in the therapy of the silent juvenile.
J. Offender Therapy 6:62.

Radiology

Potsaid, M. S.
New developments in fluoroscopy.
M. Science, March 10:349.

Wang, C. C.
Experimental studies of relative biological effectiveness of 910-Mev alpha particles in mammalian cells.
Radiology 80:304.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Anfinsen, C. B. (Editor)
Advances in protein chemistry, vol. 17.
New York, Academic Press, Inc., 1962.
(5B)

Berl, W. G. (Editor)
Physical methods in chemical analysis, ed. 2, vol. 1.
New York, Academic Press, Inc., 1959.
(5Am)

Berl, W. G. (Editor)
Physical methods in chemical analysis, vol. 4.
New York, Academic Press, Inc., 1961.
(5Am)

Biochemical Society Symposia, no. 22.
The structure and function of the membranes and surfaces of cells.
Cambridge, England, At the University Press, 1963.
(5A)

Burstone, M. S.
Enzyme histochemistry, and its application in the study of neoplasms.
New York, Academic Press, Inc., 1962.
(5Am)

Buxton, C. L., and Southam, A. L.
Human infertility.
New York, Paul B. Hoeber, Inc., 1958.
(24E)

Caspari, E. W., and Thoday, J. M. (Editors)
Advances in genetics, vol. 11.
New York, Academic Press, Inc., 1962.
(2Am)

Christensen, H. N.
Biological transport.
New York, W. A. Benjamin, Inc., 1962.
(5Am)

Clayson, D. B.
Chemical carcinogenesis.
Boston, Little, Brown and Company, 1962.
(13V)

Comar, C. L., and Bronner, F. (Editors)
Mineral metabolism, vol. 2, pt. B.
New York, Academic Press, Inc., 1962.
(5M)

Gunsalus, I. C., and Stanier, R. Y. (Editors)
The bacteria, vol. 4.
New York, Academic Press, Inc., 1962.
(11A)

Harkins, H. N., and Nyhus, L. M. (Editors)
Surgery of the stomach and duodenum.
Boston, Little, Brown and Company, 1962.
(23R)

Leigh, D.
The historical development of British psychiatry, vol. 1.
New York, Pergamon Press, Inc., 1961.
(19S)

Richter, G. W., and Epstein, M. A. (Editors)
International review of experimental pathology, vol. 1.
New York, Academic Press, Inc., 1962.
(8As)

Société de chimie physique.
Deoxyribonucleic acid.
New York, Pergamon Press, Inc., 1962.
(5B)

Tobias, C. A., and Lawrence, J. H. (Editors)

Advances in biological and medical physics, vol. 8.
New York, Academic Press, Inc., 1962.
(5Am)

Who's who, ed. 115.
London, England, Adam and Charles Black, 1963.
(1E)

Wolfrom, M. L., and Tipson, R. S. (Editors)
Advances in carbohydrate chemistry, vol. 17.
New York, Academic Press, Inc., 1962.
(5D)

Zangwill, O. L.
Cerebral dominance and its relation to psychological function.
Springfield, Ill., Charles C. Thomas, 1960.
(19L)

* * *

PARKINSON'S DISEASE PROJECT

We became specifically interested in Parkinson's disease in 1938, in the winter, about a year after the founding of the Electroencephalographic or Brain Wave Laboratory. During a study of the brain waves and tremor frequency in a group of Parkinson patients, we found we needed 15 more patients. Since I was then a consultant to the Long Island Hospital, where there was a large number of these patients permanently on the chronic wards, we decided to go there. Therefore, on a cold brisk morning, late in February, we took the entire EEG equipment and a portable alternating current generator, because the current on Long Island was direct current, down to the Municipal Wharf and loaded it onto the small Long Island steamer. We took everything we had in the laboratory at that time: technicians, storage batteries on wheels, tool kits, and a special direct current timer made at the Massachusetts Institute of Technology just for this trip. We think it was the first time that a brain wave laboratory took a short sea voyage. There were no casualties. We spent about 9 hours at the hospital and collected data on over 22 patients, giving us an adequate number for our study.

A paper which resulted from this study showed there was no relationship between the brain wave frequency and the tremor rate. In June of that year my paper, sponsored by Dr. Stanley Cobb, was presented at the meeting of the American Neurological Association and was subsequently published in the *Journal of Neurophysiology*. It was the first paper from the Electroencephalographic Laboratory and the first from this Parkinson's Disease Project.

In 1948, renewed interest in this disease was stimulated by a chance to test a synthetic drug, Panparnit, in a group of these patients. We had the good fortune to have at that time, in Dr. Stanley Cobb's department, Dr. Denis Leigh of London, who was assigned to this particular project. In order to get enough patients for trial of this new compound we established in the Neurological Out-Patient Department a Parkinson's Disease Clinic which met on Wednesday mornings under the supervision of Dr. Leigh and me. One purpose of such a special clinic is to provide an adequate number of patients for such testing and keep them together. It was soon evident that there was a need of some kind of objective measurement applied to the patient each time he came to the clinic. Therefore we began the development and trial of various types of objective tests of function, rigidity, and tremor in our patients. A favorable report of this first drug was presented before the American Neurological Association in June 1949.

From that time on, the clinic was maintained and a number of other compounds were under test. In the autumn of 1949, Dr. John Stobo Prichard, a neurologist from London, came to us for a year's work in our Parkinson's Disease Project. The clinic had now grown and there were a large number of patients who were in the Hospital for various periods, as well as private patients who were coming to see us in our office. We were applying these tests, as well as the usual neurological assessment, to all of the patients every time they were seen. It now became quite obvious that help was needed in the examination and follow-up of these patients. A nurse was employed who administered the tests, kept the books, and assisted the physician in the Parkinson's Disease Clinic. In 1951, Mrs. Garrison was in charge, and from 1952 through 1958, Mrs. Sylvia Walker was in charge of this program. From 1958 to the present, Mrs. Helen Tewksbury has been employed full time at this work.

During the course of these 15 years of clinic operation, over 25 different objective tests have been tried. Some of these have been reported in detail in the medical literature, a number have been abandoned as inaccurate or too complicated, but at the present time we use about 8 which we feel give us a reliable, standard estimation of the Parkinson's ability to use his muscles. The most useful of these is the bulb ergogram, which we have used since 1952. We have a number of speed and motor tests, such as drawing 10 circles as fast as possible, walking a 10-meter course as rapidly as possible, and a simple but rather boring test for most patients: taking off their shoes and socks and putting them on again as rapidly as possible—each part of the process being timed by the nurse in charge.

During these 15 years we have tried 35 different substances taken by mouth, and half a dozen substances that can be used only by intravenous or intramuscular routes. An example of an unexpected valuable side issue that we certainly missed out on in the testing of a drug follows: We were given some tablets in 1954 by one of the pharmaceutical houses to try against Parkinsonian tremor. Since this particular substance had been used successfully against the spasmodic jerking movements in dogs who had encephalitis from distemper, it was thought that it, therefore, might be useful in the tremor of Parkinson's disease. We were given 10,000 sugar-coated tablets containing this material, as well as a supply of intravenous ampoules of the same material. This particular trial was clearly negative. Twelve patients had been on the oral tablets for several months without any improvement in their tremor, even when large doses of the drug were taken. Side effects from this particular substance were minimal, and the dose could be increased until slight unsteadiness and dullness appeared which would promptly disappear when the dose was reduced. Intravenous injections of this same material produced no reduction in the tremor, which we were measuring by the electromyogram as well as clinical evaluation. Therefore, we concluded that the substance was not useful to our patients and so notified the drug company, asking what they wanted us to do with the remaining 2,000 tablets. These were sent to their director of medical research, whose curiosity was several degrees beyond that of the author of this article. Before throwing them into the waste barrel he wondered what they tasted like. He bit into one of the tablets and was astounded to find that his mouth became immediately anesthetized. He called me on long distance telephone to ask if I had ever tasted the medication, or if I had had any report from any of our patients about this phenomenon. We had had absolutely no comment. Apparently our patients had swallowed all of the sugar-coated tablets without biting into them, so we had nothing to contribute to this discovery. To make a long story short, the company immediately developed this material into a topical anesthetic, and used our carefully controlled data on 12 patients to convince the Federal Drug Administration that the material was safe for human beings. This material is now on the market as a topical anesthetic. It is in general use by dentists, and nose and throat and genito-urinary surgeons throughout the United States. Of course, since that time the undersigned has bitten into any product that has come to the project for testing, but opportunity knocks only once in a matter of this sort.

Collaboration with neurosurgeons

Since the beginning of this project, we have collaborated with neurosurgeons in trying to help patients with Parkinson's disease. In 1939, two of our patients had total thyroidectomy in an effort to reduce their tremor, but in both of these the procedure was a failure. In 1940, the late Dr. Roland Klemme persuaded Dr. James C. White to try some of his cortex ablation operations to reduce rigidity and tremor in Parkinson's disease. Dr. White operated on 12 patients during the period from 1940 through 1942. In only one was there a good result. In this young man (H. B.) the tremor and stiffness of the left side was completely taken away without any weakness or awkwardness. Localized brief epileptic seizures occurred at first, but have been controlled completely by drugs since 1945. This man, now 44 years old, is still free of all Parkinson's disease (his right side never was affected) and works as a railroad fireman. With only an 8 percent favorable result rate, the Klemme type of operation was abandoned.

After the second World War, when Dr. James C. White and I had returned from duty with the United States Navy, we again had the problem of what to do for the Parkinson patients who were not being helped adequately by drugs. In 1947, an Australian doctor, Dr. B. Wyke, visited us and suggested an operation on the outer brain itself that convinced us, from the account of his observations in Australia, that it would relieve the shaking and stiffness. Dr. White performed this procedure on two of our patients in the presence of Dr. Wyke. We were much disappointed with the results, and we found out that at several centers in the United States operations of this type had been done with Dr. Wyke in attendance and had not turned out well at all. A group of eight of us who had had this experience reported together on a total of nine operations, and Dr. Stanley Cobb edited the report. The article, which was published in the *Archives of Neurology and Psychiatry,* indicated that this type of approach was not successful in any of the cases. During this type of surgery it was quite obvious that our method of quantitating the motor performance and tests in our Parkinson patients was very useful in evaluating and proving that such kinds of surgery were not helpful.

During this period we also cooperated with Dr. White in three operations on the cerebral peduncle — two of which were fairly successful in relieving tremor and some rigidity, but they were rather dangerous procedures and the patients were quite ill for some time afterward. We were sufficiently discouraged from these results to abandon this approach. We also followed a good suggestion from some of the physiologists working at the Massachusetts Institute of Technology that the cutting on both sides of that part of the 8th nerve that is involved with the balancing mechanism might help these patients. This was done in two of our group of Parkinson patients, but again the results were disappointing and that procedure was discontinued.

We did have a remarkably good result in a patient who had the unusual complication of a burning pain over his entire right side. This patient was operated on by Dr. William Sweet. He removed a considerable amount of cortex from the opposite side, in the frontal area, with a good disappearance of this pain, although the Parkinson's disease itself, as one would suspect, was unaffected.

In 1953, Dr. Irving S. Cooper in New York reported on his tying of the choroidal artery which relieved tremor and stiffness on the opposite side in patients with Parkinson's disease. We began to consider this procedure with Dr. White and Dr. Sweet. When Dr. Cooper developed, a year later, a better procedure — namely, that of injecting alcohol through a cannula into the globus pallidus, we thought it sufficiently safe and logical to attempt this with some of our own group. Dr. Sweet and his associates began to see special patients who were young enough to withstand this procedure, and whose symptoms were more one-sided than the others', which would make it unnecessary to do the operation on both sides.

This really began a very active collaboration between Dr. William Sweet and his associates and the Parkinson Project, because we furnished the patients, did the preoperative and postoperative follow-ups, and collaborated intensively in this very difficult problem—namely, that of selecting the right patients for the procedure. At the same time that this collaboration with our own Department of Neurosurgery was going on, patients were being referred directly to Dr. Cooper at St. Barnabas Hospital in New York.

In 1955, I attended an International Neurological and Neurosurgical meeting in Montevideo, Uruguay, where this problem of brain surgery in Parkinson's disease was discussed in some detail, and we had an opportunity there, with both Dr. Sweet and Dr. Cooper, to describe our evaluation and report on the results.

In 1956, the Parkinson's Disease Foundation, Inc. was established to support and encourage basic research on this disease and I was appointed one of the members of the Medical Advisory Board. We received financial help from this foundation in support of our own endeavors at the Massachusetts General Hospital, and also actively collaborated in an International Symposium sponsored by the United States Public Health Service and this foundation at Arden House in 1959. In the previous year (1958), there was a symposium at Houston, Texas, on Parkinson's disease, and again we collaborated actively, reporting our methods of evaluation of patients, before and after surgery, and the criteria for selection of the right type of patient for the operation.

There has been a most pleasant and active cooperation and liaison with neurosurgeons over the past ten years, not only in our own institution but in New York and elsewhere, both in evaluating the results of their surgical interventions and in helping neurosurgeons select the right patients for the procedures. For example, in 1956 and 1957, Dr. Albert C. England, Jr. and I went down to Dr. Cooper's nearly every week to examine his patients who had come back for follow-up study after the various procedures had been done, and we also examined patients before operation. This resulted in our confirming the fact that this type of basal ganglia surgery which was now being done in many centers throughout the world did provide, in the majority of patients, permanent relief from their rigidity and tremor. These joint efforts are being continued here at the present time with Dr. William Sweet and his associate, Dr. Raymond N. Kjellberg, and with Dr. Cooper in New York. Dr. England and I act as the neurologists involved in this project.

In 1961, Dr. David C. Poskanzer returned to the Neurological Service after his training as a resident, and joined our Parkinson's Disease Project to study the relationship of age in our patient population and the possibility of our patients having an infective origin for the disease — possibly the virus associated with epidemic encephalitis during World War I, or even the Spanish influenza which was current at that time. We had found previously very suggestive evidence that our patients, as a group, were older people, suggesting a common cause for this disorder. We felt, from our own data, that it was not due to the increased life span of the general population in the United States. With Dr. Poskanzer on the team, and his special qualifications in Public Health and Epidemiology, we were much strengthened in continuing this investigation.

Dr. Poskanzer examined the records of all patients with Parkinson's disease who had been seen at the Massachusetts General Hospital since 1873. He found that between 1873 and 1917, approximately half the number of years to the present time, there were only 33 patients with Parkinson's disease at the Hospital, whereas since 1917 up to the present time the number has risen to over 1400. It is quite obvious that some of these identifications are due to our own interest in the disease and the establishment of our Parkinson's Disease Clinic and Project, but we felt that this was not the main cause of this increase. Other centers had also described an unusually large increase in patients with this disease. Dr. Poskanzer strongly supported our original feeling that this disease went back to the period of worldwide epidemics from 1917 through 1929, and, with his more accurate and up-to-date epidemiological survey, the material was put together in such a way that it seemed quite convincing. This was reported at a special meeting in Florida in October 1962, and will appear shortly in the *Journal of Chronic Diseases.* For example, he pointed out that 10 percent of our large number of patients gave a positive history of having had lethargic encephalitis and another 35 percent gave a positive history of having had Spanish influenza during that period of time. In a group of patients and persons who did not have Parkinson's disease, who were matched for age and sex so that they would be the same, we found that none of these controls, so-called, had any history of encephalitis and only 14 percent of them gave a history of having had Spanish influenza during this period of time.

These differences are highly significant and certainly suggest that this group is aging as a "cohort" and when they die off through various causes — old age, and so on, since Parkinson's disease itself is not a killer — this disease should then become as uncommon as it was before the first World War. Dr. Poskanzer estimates that this would probably be somewhere round 1985, and we would hope that the Massachusetts General Hospital News, in that year, will recall this article and make a note whether or not these predictions have come out as expected.

This forecast or tentative guess that the disease is going to diminish slowly with the passing years until somewhere round 1985 is only one side of the problem. Others in this country feel — and these would be best represented by Dr. Lewis J. Doshay of New York, and Dr. Leonard Kurland, Chief of the Epidemiology Branch of the United States Public Health Service in Bethesda, Maryland — that the increasing number of elderly patients with Parkinson's disease reflects the fact that there are more people living in this geriatric age group today than there were twenty-five or fifty years ago. They would agree that we do not see today the younger patients who have had encephalitis and that we see patients whose disease often begins in this geriatric period after the age of sixty, and so on, and is associated with hardening of the arteries and other signs of aging. They do not necessarily believe that the aging process causes the disease, but they certainly feel that it is in this age group that Parkinson's disease begins. Their feeling, therefore, is just the opposite to ours — namely, that as more and more people survive to the seventies and eighties, the more will Parkinson's disease develop, and, instead of diminishing to a level which one can estimate for the years before the first World War, the disease is steadily going to increase in numbers until over one million or one and one-half million people will have Parkinson's disease in the United States. One can be certain that this difference of opinion about the future of this disorder will resolve itself in the course of the next five to ten years by the simple results of whether or not there is an increase in the number of new patients and in the total number of patients in any community at any given time.

We have encountered from time to time patients whose father or brother had Parkinson's disease, and the question is raised as to whether this is a familial disorder or whether there is a strong familial predisposition to acquiring Parkinson's disease. About five years ago we made a preliminary check on some of our patients and found that approximately 4 percent reported the disease in direct members of their family, such as a parent, sibling, or child. This is considerably lower than in the Swedish reports, where familial incidents reached over 30 percent. In 1963 Dr. Poskanzer reviewed our total group of patients for familial incidence and found it somewhere round 6 percent. It is worth while at this point to mention that we have encountered a total of 12 pairs of twins in our series of patients, one-half of them identical, and in none of these was the other twin affected by the disease. This does not prove that the disease is not familial, but it is strong evidence against it because familial disease is usually present in both members of twins, especially in identical twins. It might be worth mentioning here that on the Island of Guam, a territory of the United States in the far west Pacific, there is an extraordinary group of patients who have a disease somewhat like Parkinson's, as we know it, but with a considerable number of differences. The inhabitants of this island — Chamorros — suffer from a familial condition of muscle wasting which produces death in three or four years, and is very similar to amyotrophic lateral sclerosis seen in the United States. The difference on Guam, however, is that in percentages, in some villages, there are nearly 100, and sometimes 200, times the number of patients with this disorder than in any other part of the world. There is also a condition that begins at about the age of fifty, in which the mind is affected in nearly every patient, that resembles in some ways Parkinson's disease, but there is a very high familial incidence and, peculiarly enough, some of the patients with this Parkinson's dementia complex, as it is called, also have the muscle wasting disease. The two clinical conditions overlap in over one-third of the cases. We were so interested in this that Dr. Kurland took me out there in April 1961 to set up the Electroencephalographic Laboratory in the Guam Memorial Hospital's Research Unit and to look over this extraordinary group of neurological patients. In October 1962 a second conference was held on Guam and on this occasion not only I attended, but Dr. Raymond D. Adams, Chief of our Neurology Service, was one of the consultants. We examined these patients carefully during this four-day period. The tremendous activity of the research unit on Guam has been seriously curtailed this year by extensive damages to both the hospital and the island in general by a terrible typhoon which swept the island in November 1962.

We have no clear idea at the moment as to what causes these peculiar neurological diseases among the Chamorros on Guam and we are hoping that, if the cause of such peculiar concentration of this disease on this small island is found out, some of this information may be of use in the management of patients in this country.

The Parkinson's Disease Clinic

It was mentioned before that every Wednesday a Parkinson Clinic is held in the Neurological Out-Patient Department at the Massachusetts General Hospital. This clinic has been in operation since 1948, which is now fifteen years. At the present time two doctors spend the morning in this clinic: Dr. Morris E. Chafetz, who is a psychiatry consultant to the Parkinson Project, and Dr. Albert C. England, Jr., who has been with this project for over ten years. He is an associate of the undersigned in this project and is a neurologist on the staff of the Hospital. Our nurse, Mrs. Helen Tewksbury, is in attendance during the entire morning, and at regular intervals Mrs. Sylvia Walker, who is retired from active work at the Hospital, comes in to help us out in the clinic on Wednesday mornings.

Approximately eighteen patients, sometimes as many as twenty, have appointments to attend the clinic on Wednesday. The results of an abbreviated form of routine tests, including the ergogram and some speed circles, and, of course, the patient's weight, are obtained from each patient. It is in this group of patients that we have a most extensive testing of new drugs and compounds. New patients who are suspected of having Parkinson's disease are referred to the clinic for consultations, but the majority are patients whom we have followed, in some instances, for as long as twenty years.

It would be appropriate at this time to say something about these Parkinson patients who comprise our out-patient and private list, because they are a remarkable group. Their loyalty to the Hospital and to the clinic is phenomenal. Their faithfulness in attending the clinic, even when the weather is wretched, is very noteworthy. It must be recalled that patients with Parkinson's disease have great difficulty in traveling on public transportation. Many of them are unable to drive their own cars and have to be driven in to the Hospital or take taxis, and yet it is very unusual for any patient to miss his appointment, regardless of the conditions of weather or traffic. It is always amazing, on a blustering day in midwinter, to see an elderly Parkinson patient brought in by his devoted family, sometimes from many miles away, and appear on time and eager to face whatever new drug or test is in store for him. These patients well know that many of the therapies we try are not only failures in their ability to help them, but many of them produce undesirable side effects, such as dizziness, nausea, excessive dryness of the mouth, and so on, which will add to their burden and to their misery. Yet they understand the importance of careful drug testing and evaluation of these compounds so that others besides themselves may benefit if they are of any value. Therefore, they carefully follow the instructions to the letter and report faithfully and as objectively as they can about the good or bad effects of such compounds. We regard some of these patients as sophisticated, experienced subjects for such drug testing. They are not fooled by the fact that they are getting a new compound or that any suggestion implied by such a new compound will make them feel better. They try desperately to be honest, and they know perfectly well that if they report failures over and over again, these reports are just as important to the physicians and that there is absolutely no advantage to them to turn in an optimistic or false report on any therapy.

The same devoted loyalty and faithfulness applies to the private Parkinson patients we see in our office. They put up with this large battery of testing, the trial of new drugs, and the necessity, very often, of being delayed in their return home, because they feel that they are part of a joint effort in this Parkinson Project and that the goal is to work out better and more effective therapy for this disease. We are proud to be able to report that annually these devoted and grateful patients contribute a total sum of $10,000 to the Parkinson Project, to continue its investigation and therapy. In 1962, for example, nearly three hundred of our total patient population contributed to this fund. Of course, many of the gifts are small because these people have extremely limited economic means and many of the drugs they have to take are very expensive.

In conclusion I am afraid we have to inject a somewhat pessimistic note. In spite of fifteen years of coordinated intense effort in working with patients who have Parkinson's disease, we have not come up with any type of therapy which restores our patients to a normal performance, such as insulin does in diabetes. In

Dr. Morris E. Chafetz, Associate Psychiatrist
Director of the Alcohol Clinic and Acute Psychiatric Services

about one-fifth of the patients who have been operated on, the results have been spectacularly good. In the remainder, the results have been good to satisfactory, which is about the same as reported from other centers.

In the ninety percent of patients who have not had any surgery and for whom we feel the operation would be of little or no value, we have been limited to the use of drugs, physiotherapy, and, in some patients, psychotherapy and general supportive measures. It is hard to assess or give any percentage of benefit to a group as large as this, but we do not think we have helped significantly more than one-third of our patients. We have helped slightly, perhaps, another third, and we have been unable to do anything at all for the remaining third of this group. This certainly does not add up to any triumph, and the successful therapy for the prevention of progress in this disease still remains one of the greatest challenges today.

Robert S. Schwab, M.D.,
Neurologist

Dr. Michael H. Bell, Assistant Resident in Orthopedic Surgery — born in Vancouver, British Columbia, September 30, 1934; M.D., University of British Columbia, Vancouver, 1959; Intern and Resident in General Surgery, Montreal General Hospital, Montreal, Canada, 1959-61; Resident in Accident Surgery, Radcliffe Infirmary, Oxford, England, 1961-62; Resident in Orthopedic Surgery, Princess Margaret Rose Hospital, Edinburgh, Scotland, 1962.

Dr. Robert J. Boyd, Assistant Resident in Orthopedic Surgery—born in Detroit, Michigan, July 1, 1930; A.B., Harvard College, 1952; M.D., McGill Medical School, Montreal, Canada, 1956; Intern (rotating), Stanford Service, San Francisco General Hospital, 1956-57; military service: MC, USA, Germany, 1957-59; Resident in Surgery and U.S.P.H. Research Fellow in Surgery, Stanford Medical Center, Palo Alto, California, 1959-61; Assistant Resident in Orthopedics, Children's Medical Center, Boston, Massachusetts, 1962; married.

New addresses:

Dr. A. Robert Arnstein (*M.* 1956), Henry Ford Hospital, Detroit 2, Mich.
Dr. Richard M. Barry (a.r.p. 1957), 464 Ocean Ave., New London, Conn.
Dr. Earl Bloomer (*E.S.* 1917), 500 173d Ave., St. Petersburg 8, Fla.
Dr. James E. Breslin (*C.M.* 1938), Yacht *Noa Noa,* Dinner Key Marina, Miami 33, Fla.
Dr. Joan W. Flacke (a.r.p. *An.* 1963), 1 Emerson Place, Boston 14, Mass.
Dr. David C. Mitchell (a.r.s. *Or.* 1963), Henry Ford Hospital, Detroit 2, Mich.
Dr. Grace L. Murphy (r.p. *D.* 1930), 601 S. Bowman Ave., Merion Station, Pa.

Brief bits:

Dr. Bradford Cannon returned recently from a 4-weeks' tour of the Marshall Islands as a consultant for the Atomic Energy Commission. The purpose of this visit was to continue the studies on the Marshallese who were exposed to radioactive fall-out in 1954. During his visit several cleft lips unrelated to the fall-out and deformed hands from burns were treated.

During the past six months Dr. Benjamin Castleman conducted a Clinicopathological Conference at the Connecticut Clinical Congress in New Haven, was the guest speaker at the Annual Meeting of the Associacion Mexicana de Patologos in Mexico City, participated in a Symposium on Colonic Polyps at the New Jersey Gastroenterological Society in Newark, spent a few days as Consultant and Lecturer to the Department of Pathology at the Meharry Medical College in Nashville, gave the Phi Delta Epsilon Annual Lecture at Baylor University College of Medicine in Houston, and delivered the Alpha Omega Alpha Lecture at the Downstate Medical Center of the State University of New York.

Dr. Oliver Cope was in Phoenix, Arizona, from April 3 to 5, for the meeting of the American Surgical Association. Dr. Cope is the President of the Association. The subject of his Presidential Address was "On balance".

Dr. Arthur S. Spangler gave a talk on "Biochemical changes in papular dermatitis of pregnancy" at the University of Miami Medical School, Miami, Florida, on February 7.

Dr. C. C. Wang and Dr. Henry P. Pendergrass were awarded the degree of Fellowship in the American College of Radiology at its annual meeting held in Chicago on February 8.

Dr. Lawrence K. Lunt (*W.M.* 1916), our "singleton" in Santa Fe, New Mexico, has sent us this most alluring letter, although he thinks he hasn't anything of interest to tell us about:

As it is some 15 years since I retired from practice, there is nothing to say about my professional activities.

There is plenty of "local color", however, in this most colorful part of the United States —colorful in the indescribable beauty of much of its physical character, and colorful because of the three "cultures" that exist here: the original inhabitants (Pueblo, Navajo, Apache Indians); the first white interlopers (the Spanish, who have many direct descendants here); and, third, we "Anglos".

There are far too many citizens of the United States who haven't the slightest conception of what their country contains.

I'm sorry I have nothing of real interest for you.

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THE NATURE OF A TEACHING HOSPITAL

Each of us has a personal philosophy which guides us in our personal conduct and everyday life. It is our mental compass—our distillate of wisdom—our feelings about human nature, about morality, about life, about reality. Some of these feelings were taught us in childhood, and some we developed ourselves. With some we are vague and inarticulate, but with others definite in the way we show them in discussions and in decisions.

So, too, the teaching hospital has a guiding philosophy which expresses its distinctive personality and nature. It is shown in the conduct and everyday life of the hospital, but it is seldom discussed because it is a deceptively simple philosophy based solely on the spirit and act of GIVING.

When this concept of total commitment to GIVING is recognized, it provides clearer meaning to the work, the conduct, and the individual natures of those involved in patient care, teaching, and research. Furthermore, it can be used intellectually in determining organizational decisions and plans, the selection of leaders, the pattern of organizational hierarchy, the intellectual climate, and the relative priority of goals.

But is this philosophical concept in keeping with our changing culture? Will it and its subsidiary principles push a teaching hospital forward to keep pace with the future needs of a changing community?

In discussing the philosophy and nature of the hospital and community, I will try to use only my observations of those everyday situations in the home or hospital which are familiar to you through your own participation in one way or another.

For future guidance, we must look first to the past for a reference point to establish our original motivation and direction. For this, I need only briefly remind you that the members of religious orders in our own and other civilizations conceived and developed the first hospitals. These hospitals were modified temples, churches, or hotels which served as refuges for sick and weary strangers and outcasts. What little there was to offer in the way of therapy was secondary to the giving of food and sanctuary to those who would otherwise die of starvation and exposure. With so little known about disease and infection, epidemics flared within hospital walls and decimated those who gave care as well as those who received it. But the giving never ceased. There were always more who continued their giving because they intuitively believed or were led to believe by religious or moral principle that "each man is his brother's keeper".

The visionary men of good will who conceived the idea of the Massachusetts General Hospital and its teaching function also planned the M.G.H. as a refuge for the sick or injured social outcast and stranger to the Port of Boston. Parenthetically, our present intensive effort to help alcoholic patients suggests that we have not forgotten this resolve of a century and a half ago to help the social outcast who is ill.

Looking back over the sixty years of this century should produce still better reference points from which to chart our course. This period has been one of continuous change in our national society. All of us have either seen the changes for ourselves or have heard the changes discussed by our parents. I would like to examine only three of the many changes which affect the hospital and its future course.

The first of these is the rapidity with which new knowledge has been discovered and spread. All of us are familiar with the claim that the knowledge accumulated by man before this century has been doubled already in this century and, furthermore, that it may well be redoubled in the next twenty years or so. The impact of this can be felt best by the simple expedient of talking to any reasonably intelligent ten-year-old child. The comparison of that child's conceptual and factual knowledge with your own at that age should provide both understanding and shock.

This increase in knowledge has also led to a better spread of knowledge. Teachers have obviously exploited the research work of the social scientists and have put it to good use. And although the invention and exploitation of television as a mass communication medium has not made our young people more articulate, it has certainly contributed to this astonishing spread of conceptual and factual knowledge.

Keeping this in mind, you can understand these inferential statements:

1. Those who are in teaching and executive work must continuously learn, accept, and use new social and scientific concepts and facts in order to avoid the intellectual scrap heap to which young people are so prone to assign their elders.

2. Each new generation of students and workers has a more sophisticated set of concepts than had the previous generation. Because a hospital should be thought of as a group of persons rather than a group of buildings, it is the responsibility of the existing group not only to orient the new member to the concepts of those already there but also to orient themselves to the concepts of those who join now and those who join in the future.

This implies a guiding principle: Any teaching hospital which hopes to remain a pioneering organization must anticipate the concepts and reality of the future community far enough in advance to provide the time necessary for the changes to take place and to be in readiness.

3. In the complicated organizational patterns of a hospital with its many hazards for the inexperienced, it is naturally difficult for the older established person to give the younger unestablished person an opportunity to experiment with unsolved problems—particularly those located at the interface of multiple disciplines. You often hear the sentiment: "The brash youngster succeeds only because he doesn't know that the problem can't be solved." Perhaps this is true to a point, but it is also possible that he knows more than does his elder of the contributions made by the social scientists in the areas of group dynamics and communications.

4. We should be wary of harsh criticism of the occasional student nurse or student physician who appears in some way to be unaware of the patients' needs or who appears to show irresponsible apathy by failure to match the dedication of the group primarily responsible for the patients' care. Perhaps we and the vast increase of knowledge are equally at fault. The amount of factual material a student must absorb in a limited time increases annually. And a student's security and rewards depend on his absorption powers—that is, his ability to take. Certainly, we shouldn't assume that a person's "giving" propensities must automatically match his "taking" propensities. At present we can only select students whose taking abilities are shown by their previous grades and hope that all the candidates for selection have the intuitive judgment to have selected themselves for these giving professions because of their own need to give.

There has been a second change in the last sixty years which affects the course of the teaching hospital, and that is the change in the understanding of social responsibility. At the turn of the century, it was a generally accepted view that everyone was his brother's keeper, but its meaning was something different from what it is today. It meant that if there was a sudden catastrophy, such as fire, neighbors would house, feed, and clothe the dispossessed on a temporary basis. Community giving was more intimate, local, and temporary.

Now you need only look to your taxes to understand the change in meaning. In the local community, you provide, through your government, a livelihood for the older person or invalid who cannot work, or for, perhaps, the deserted wife whose children you feed, clothe, and educate until maturity. You do this across the nation, and each year you increase the number of those whom you feel worthy of your support. And after the Second World War you set new standards of national giving by not looting your defeated enemies but by giving generously to them. To almost every nation in need you have been giving not only capital, food, and tools, but also knowledge through the Point 4 Program.

All of you may not agree with this, but your legislators here and in Washington represent fairly well the social understanding of the majority. They give as you wish them to give. And the trend toward assuming greater responsibility, as shown over the past half century, indicates no sign of slowing or changing direction.

This major change provides both reference points and guidelines for the teaching hospital. There are direct implications of the method and degree of giving to be assumed by the community in medical care, and there are indirect implications of the impact to be felt by the teaching services of the hospital.

Teaching services and charity care may no longer be synonymous, and the open ward with its social connotations may become an anachronism in tomorrow's society. But society will demand well-educated doctors and nurses from the teaching hospital; and this means that the teaching hospital must look carefully to its traditional concept that teaching is possible only in conjunction with the gift of "free" medical care.

And now I come to the last of three major changes which affect the course of the teaching hospital. To me it is the most important, because it implies so much in organizational patterns and in the personal conduct, attitudes, and relationships of all of us who contribute in one way or another to the total functioning of the hospital.

I refer now to the revolutionary change in the basic organizational structure upon which our entire society rests—the FAMILY. You cannot help but be familiar with the American family's many changing aspects if you read any of the popular magazines. Articles entitled "What has happened to the American wife?" or "What has happened to the American man?" or "Why our children go wrong" are on the continuous bill of fare and are primarily devoted to the problems created by this change in family relationships and conduct. None of the articles is calculated to make us more tranquil!

Sensational as these articles may be, they nevertheless do serve a useful purpose. We are all in the position of being unable to see the individual trees around us because we are so deep in the woods. And these articles often focus our attention on the singular aspects of this cultural revolution.

Some of these changing aspects also affect the organizational structure and conduct of the hospital. I would like to focus your attention on the how, the where, and the why of their effect. To do so will require that I use a common tool of an administrator—the organizational chart, for my purpose here an imaginary one. This tool will allow me to sketch the more simple of the relationships within the family and within the hospital and to compare them currently as well as at the turn of the century.

Before doing so, I would first like to point out that a hospital, like a nation, is an organization created of people, by people, and for people. This is its greatest protection, because the hospital is only an instrument of our society; and its growth, its usefulness, and its life must depend on how well it fits our society and its needs. Fortunately, society provides new patients and new participating members to test this. If they are uncomfortable, they express it in words or actions. If those who make up the organization are sensitive enough and flexible enough, the necessary changes in relationships and atmosphere occur.

The basic organizational unit of society —the family—is, of course, the training ground for the new participating members and patients of the hospital. It is here that they develop most of their abilities for relating with other humans and their individualized preferences and concepts. And it is to the changing nature of these relationships in the American family and the consequential changing relationships in the hospital that I would like to address myself.

The American family at the turn of the century had a structure easily understood by all. There was no question that the father was the head of the family. In a subsidiary position was his wife, who had promised in their marriage ceremony to love, honor, and obey him—and in that era very likely meant every word of it!

And then, in the most subsidiary position, came the children. The aphorism of that day, "Children are better seen than heard", provides the best clue to assessing their situation. Orders went down this structure to the children. Any discussion of these orders by the children was apt to be considered "back-talk", requiring a "summary court martial" on the spot! Articulate, imaginative children in those days were considered undisciplined brats and probably brought more shame than praise to their parents. And, furthermore, the children of the average American family completed their schooling in the fourth grade. From that point on, whether in the city or rural area, the children worked in some way and contributed to the welfare of the family. How this contribution was to be utilized by the family was largely determined by the father.

With this as the structure of the basic organizational unit in society, it shouldn't come as a surprise to find the structure of other organizations in the same society bearing a marked resemblance.

In the hospital of that era, as in the hospital of today, the nursing service provided the most readily identifiable hierarchy of the hospital. Its easily observable authority structure also provided strength, cohesiveness, and a communications system from top to bottom. For these reasons, I would like to use it to represent the more complex and less easily understood total hospital structure.

Like all women executives of her day, the director of nursing service and school naively assumed that success and strength in her position lay in her absolute imitation of male executives. She played the role of "Captain of the Ship" both in and out of the hospital. Any friendliness or intimacy with her subordinates was forbidden in this role because it might lead to disrespect and contempt. She designed her speech and action so as to create awe; and she intentionally won the desirable title of "The Old Battle-axe".

She also distrusted information coming from her subordinates and, therefore, devoted much of her time to detailed inspection of her ship. Everything had to be in exact order! And this included the posture and appearance of patients as well as nurses and students. There was no excuse for individual variations, partly because individuality was frowned upon and partly because an excuse had to be verbalized and this was tantamount to "back-talk". Her communication system, in short, went only from top to bottom and then only in writing so that subordinates who did their own thinking and speaking could be spotted and terminated.

Her resemblance to the classical "father" of the era is easily seen. And her immediate subordinates, teachers and supervisors, gave her honor and obedience, if not love. In turn, they were vigorous and demanding in their approach to their subordinates.

The head nurses—more likely third year students—thought and acted like all students of the era. They learned and repeated again and again in word action exactly what they had learned from the teacher or supervisor. Individual or imaginative thinking was the exclusive prerogative of age and position. Any student who might be inclined toward a research-pattern of thinking was rigorously reoriented, so the student went to work quickly and contributed maximally to the welfare of the organization.

The patients were the subordinates of all subordinates. No matter how dignified by age, they were usually called by their first names. So little was required in conversation from the patient that a complete foreign language barrier presented few problems. Textbooks of nursing care were devoted primarily to the patient's physical care, which could be well regularized. Little effort was wasted by the authors on the care of the patient's emotional problems other than by their solution through the use of physical restraints. The apocryphal story of the little old non-English-speaking man who accompanied a friend to an outpatient department and was finally returned to his grieving family three weeks later, after surgery, speaks volumes—whether or not it actually happened.

I now want to call your attention to the family structure which I think is evolving today in our society and which I think is affecting the hospital in many ways. If you are either mothers or fathers with growing children, you will immediately recognize a symbolic representation showing the children in the top echelon, with the father and mother below.

With all the "scare" articles in the popular magazines, you are well prepared for this. The articles devoted to the father state that he has abrogated his traditional authority by his venturing into diaper-changing and dishwashing; that his role in the eyes of his sons is so neutral as to produce young men with no interest in young women; or that he is a corporate executive, living on an expense account and giving so little emotional support to his children that they become the delinquents of the suburbs and exurbs! Obviously, this corporate executive of today has replaced the minister or psychiatrist of yesteryear in his ability to produce delinquent sons.

The articles about today's mothers are still more deprecating. She is out of her home and working, and that's bad. Or she is at home wasting her intelligence and education, and that's bad. Or when she isn't buying ready-to-bake cakes or using an automatic dishwasher, she is busily inventing new ways to destroy her husband's ego—all of which is worse.

The children are treated more sympathetically in these articles. Although most of them would appear to be delinquents, their faults are happily blamed entirely on their badly motivated parents, their modern teachers, or those violent Western morality plays on television. With modern teaching, which requires articulate and responsive students, and television, which does not encourage conversational development, it is only natural that many of these articles resolve the conflict by recommending the junkheap for one or both. Fortunately, fathers and mothers are still considered useful.

But amid all this terrifying cacophony there is one melodic phrase which appears again and again: The primary responsibility of parents is to give their children understanding and love. No longer is there much discussion of providing for the physical needs of the children. This is a rich country. And other than giving vitamins for unobservable and indeed non-existent vitamin deficiencies, the parents must worry only about their lack of restraint in giving too many calories and too many convertibles to their teen-age children. And in a society which prefers thinking about Freud and psychiatry to thinking about Einstein and the atom bomb, parents are becoming relatively sophisticated about the giving of love and understanding to their children. They can easily differentiate firmness and consistency of policy and emotion from the physical disciplining of bygone generations.

And, furthermore, they usually do understand the ideal of equal and mutual support by both mates.

In a schematic way, I have tried to represent in this last imaginary chart the organizational structure being built by the current American family. Because "understanding" means "standing under", the position of the parents under the children has meaning in the reality of family life. The idealistic situation is where there is *equal* mutual support between mates. However, if you will analyze your friends' marriages or your own—if you are inclined toward dangerous undertakings, you may discover in each case that one mate gives most of the emotional support in the family—to the other mate as well as to the children. The chart of the family may, therefore, be modified to show the children in the top bracket with Mate I below and Mate II below Mate I.

Incidentally, the giving mate (Mate II) may be either the husband or wife and, strangely enough, may not be the "boss" who makes most of the family's decisions. This person is the one, however, who "carries the family"; and it is to this person that troubled members of the family first turn for emotional support and decisions. The growing climate for the children probably also depends on the emotional reservoir and understanding of this person.

If the family is involved in so radical a reorientation, what is happening in our society's less important organizations, such as the hospitals? Certainly the doctors, nurses, employees, executives, students, and patients are affected by their family lives, consciously or unconsciously. Their thinking, their behavior, their expectations must have some perceptible effects on the direction taken by the hospital, whether it be personnel policy, organization, medical care, teaching, research, or whatever.

Having come this far with organizational charting, it seems anticlimactic to chart the nursing service as it may well be developing—an upside-down organization in which the patients are at the top and the nursing director is at the bottom, with assistant directors, supervisors, head nurses, graduate nurses, practical nurses, floor secretaries, aides, ward-helpers, and the student nurses arranged properly inside a massive organization.

In her position at the bottom of this inverted pyramid representing the total nursing service, it is obvious that the present director of the service must be a much stronger woman and executive than was her counterpart at the turn of the century. Nothing so foolish as imitating male executives ever enters her head, for she knows full well that the equality of men and women resembles the equality of apples and pears—both equally valuable but totally different.

In her supportive role she works mostly with four or five immediate lieutenants, each of whom, in turn, does the same. This seems to follow throughout the organization, with the bedside nurse on the day shift ideally caring for four or five patients. This pattern of support resembles that of the family chart in which one person supports a mate and the current average of three or four children, bringing the total to four or five.

In addition, this director at the bottom of the heap must be a reasonably good "applied social scientist". She must know how to build and maintain a fast and accurate two-way communications system within her organization. The information coming now through her lieutenants must provide her with the necessary clues to the most minor fluctuations in individual or group attitudes and efforts. She must also be sophisticated enough to analyze the information properly and redirect or strengthen these attitudes and efforts without jarring her organization. Her strength as a woman and an executive is constantly tested.

Let's skip now to the top of our imaginary chart and look at the patients. The quite important and mature corporate executive who comes in for surgery may reveal something. Why is it that before the operation he will look to a young graduate or student nurse for reassurance when he is so accustomed to calling only for the professional services of other equally important persons, such as the surgeon who is to operate on him shortly? Why is he so upset when he hears the nurses or doctors joking among themselves as they go about their work? Why is it that, although he is going nowhere for the next ten days he must ask the nurse what time it is and then get upset if she isn't definite about the time? And why does he call for the nurse in the middle of the night although he has no evident need?

You, of course, know the answers to these questions. He is doing what all "good" patients do. He becomes as dependent as a child and manifests the same characteristics. He unconsciously places doctors and nurses of all ages in the role of parents. Naturally, like any child, he is upset that such important people may be joking among themselves and laughing at each other. And, moreover, he expects such individuals to be definite about everything, including the time. He calls for the nurse in the middle of the night, of course, for the same reason that a child calls his mother for a glass of water—simply to be sure that she is there.

But after the operation all this will gradually change as he pursues an upward road from dependency to maturity. His demanding ways will diminish. He will start to see the doctors and nurses as men and women rather than fathers and mothers. And, consequently, he will start joking with the nurses. Unfortunately, we still tend to evaluate physical condition rather than emotional condition and we will, therefore, probably discharge him before he has regained his former maturity and ability to give his family and subordinate executives their customary support. We must upset and disorganize a lot of families and commercial corporations in this way.

This man represented well the "good" patient who immediately falls into a "taking" posture when admitted. We also know of the patient who refuses to take and who, through true courage or foolhardiness, is determined to brazen out the entire preoperative and postoperative periods. For some reason he tends to a rocky postoperative period with more chance of physical and emotional complications and a longer stay in the hospital.

The best "givers", be they doctor, nurse, or hospital executive, all seem to fall into the category of bad patients. Perhaps they are so used to their own "giving" roles in this same environment that they have difficulty assuming the necessarily dependent and "taking" role of the good patient.

We will now move down our imaginary chart to those who give the care to the patients by first scrutinizing the statement heard so often from patients: "I had such an understanding nurse". Certainly none of us would assume that these patients considered their nurses to be psychoanalysts, well trained to understand the emotional conflicts and problems of the patients. They simply meant that their nurses stood under them and supported them emotionally during their crises. The equal distribution of praise for the understanding of both nurses and doctors bodes well for both professions and their future social images.

What I have done so far is point out that the nursing service organization can be a magnificent method for providing emotional support and care from one end of it to the other. It is not perfect, however, because the head nurse position is almost untenable in this new turnabout. She alone of all the executives in the hospital is expected to support an unlimited number of others. She should be working with a few doctors and teamleaders. But, in actuality, dozens of doctors, nurses, patients, relatives, and individuals from other departments approach her directly at the tested rate of more than thirty an hour. If she is also in an emotionally-trying situation in her private life, it is inevitable that her emotional reservoir will be drained. As she becomes less able to give, her ability to make decisions diminishes and her absenteeism increases.

When this happens, everyone around starts to shield her by giving to her. During this period of breakdown, which may be lengthy, the organization devoted to giving is short-circuited at her level. At this point, both patients and doctors note the change of atmosphere and lack of care at the bedside.

Fortunately, there is often a supervisor, floor secretary, or physician who heads off this eventuality by a quiet, unostentatious daily ministration of support to the head nurse. The physician's help is worth noting because it represents the most natural and most easily given support—that of support between the two sexes. This natural support, so taken for granted, may be basic to some of our successes and failures, and may possibly explain the occasional impasse in relationship which occurs between physician and nurse.

Have you ever wondered why we are so successful in gaining the appreciation of male patients of all ages? Or why it is that we fail so often in giving sufficient personal care to please the elderly woman? I once pondered the possibilities that either younger women were intolerant of older women or that younger women were unsuccessful in maintaining a mother role with older women. But my detailed questioning of both patients and nurses revealed that the women patients received as much or more care than did the men patients. Could it simply be that a few minutes of support of one sex by the other sex is equivalent to an hour's support of one sex by the same sex? This is probably so; and particularly so in the case of the elderly woman who has so many unfulfilled emotional needs. And with so many more women than men supplying care, she has much less chance of being satisfied.

The occasional impasse between doctor and nurse may often be based on a similar situation in reverse. The situation may be familiar to you. It appears to start when a physician in or near a nursing station complains that the nursing profession has reached a sorry state of affairs, that nurses have become cold and interested only in paper work, and that the schools of nursing are turning out chemists rather than nurses. The response is inevitable. A verbal defense may not be forthcoming, but the action is surely forthcoming. He is given the "deep-freeze" treatment! Frigid cooperation—just one step above no cooperation at all—serves only to aggravate him more and apparently prove his point. Rapid communication insures the same treatment for him on other floors until he is pushed to the point of retreating to his own office or going to the office of either the hospital administrator or nursing director to denounce the nursing profession.

Questioning of the original nurses involved brings forth the following defense: The doctor was a boor who insulted the nursing profession without provocation, and was guilty himself of over-ordering tests, medications, and repetitive checking of his patients—all of which is responsible for excessive paper work.

Investigation of this familiar situation makes me believe that the complaints of both physician and nurses leading to this impasse were incorrect. I would like to suggest, instead, that something far simpler occurred in the following manner.

First, let me say that almost all doctors and nurses are "giving" people who frequently go beyond their endurance not only in the hospitals but in their homes as well. The demands of their mates and children compete with the demands of their patients. It's natural that they occasionally forget that they must each give support to the other when it's needed—just as must the two parents in the "typical family".

In this instance, it's quite possible that the physician, after having been up late caring for a patient, was vigorously reminded by his wife that she and the children needed more of his time and attention. It's understandable that he arrived at the hospital with a headache and feelings of oppression and depression. It's possible that he entered a nursing station and wandered about disconsolately before he was interrupted with the question: "Would you like to give some orders, Doctor?" This may have been a perfectly businesslike, courteous question which befitted the environment, but it was not fitted to his mood. He was in no mood to give anything, including orders. His answer and perhaps his facial expression should have provided a clue to the nurse that he was in as much need of solicitude as any patient under care. Apparently, however, she failed to respond. And perhaps because she and his wife, as women, failed in giving, and because the members of the nursing profession are mostly women, he arrived on the next floor with his commentary on the nursing profession!

Had the first nurse offered only a few minutes to his care, perhaps the whole impasse would have been averted. Had she asked him whether he had a headache and then offered sympathy or two aspirin tablets, she might have given the necessary support. Apparently this mechanism functions properly in most instances if I am to believe the television commercial which claims that 99% of all doctors use aspirin regularly.

This discussion, so far, has been devoted to the changing forces affecting the teaching hospital in the past and the present. It has also included some examples of the ways in which GIVING plays a role and gives meaning to the work, the conduct, and the individual natures of those involved in patient care.

But what about those in teaching and research? Does GIVING also play a role there? It will not be necessary to go into the detail given to patient care because I think that almost everyone feels that the good teacher's relationship to the student is the same relationship borne by the parent to the child and the physician or nurse to the patient. As was mentioned before, this relationship has changed in our culture gradually from an authoritarian and demanding one to an understanding and encouraging one. Perhaps the metamorphosis of the schoolmaster in the famous novel *Good-bye, Mr. Chips* best exemplifies this change in role.

In the role of the student at the turn of the century, the youngster of unusual sensitivity and imaginative thinking ability rapidly developed the habit of repressing his aberrant thinking to avoid personal destruction—a sorry pattern for the development of sensitive and imaginative physicians and nurses. Those students made of sterner material often suffered the consequences of rebellion and were forced to finish their education under their own tutelage. Fortunately, most students survived this jungle, and had enough originality and sensitivity left to become the great researchers, teachers, doctors, and nurses of the past half century. How many students were "stifled" or totally lost can only be surmised.

In the medical world where completion of a formal education has been a basic requirement and rebels have been irretrievably lost, the medical world has been particularly fortunate in having a select group of individuals who were naturally equipped to provide the understanding or supportive teaching that has only recently been given in the non-medical disciplines. The Flexner report earlier in the century also did much by eliminating those medical schools which gave too little to their students. And our present accreditation standards for hospital residencies and schools of nursing lead to excellency in teaching by setting a constantly rising minimum standard for this giving.

If I am not overly optimistic about the improved teaching in the teaching hospital, there should be an ever-increasing number of young individuals whose trained minds retain conceptual originality and thereby qualify them for careers in research. The increasing flow of such young candidates indicates some grounds for my optimism. And their dedication to providing a gift of knowledge to us all puts them in a special category of giving.

We have been talking primarily about those who are directly involved in the patient care, teaching, and research of the teaching hospital. We must also touch briefly on those whose responsibility and privilege it is to provide the proper "growing climate" and environment for those who are so directly involved. This responsibility belongs to the individual in any position of leadership, whether it be that of a trustee, a department or service chief, a hospital administrator, or someone serving on a committee.

This leadership must provide an environment which fosters the creativity and change so necessary to the pioneering function of the teaching hospital as well as its three primary functions. Such an environment is one in which a new idea is capable of exciting individuals and groups throughout the organization. It is one in which the leadership, in a risk-taking spirit, stretches the organization to the limit of its capacities to effect the implementation of an idea.

This environment is one in which the individual's right to think and act in an unorthodox fashion is defended and encouraged whenever possible; in which rules are flexible, not restrictive; in which errors of commission are not considered in the same light as errors of omission.

This environment is one in which the relationships among all professions, skills, and ranks are fluid, respectful, and easily maintained; and ideas are quickly communicated back and forth formally and informally so as to make cross-pollination of thinking a matter of casual routine.

This environment is one in which the tradition most respected is the tradition of constant change and improvement. It is the type that cannot be ordered into being, but must be nurtured by an understanding and spirited leadership.

Leadership of this type can be successful over a long period of time only if it is aware of the teaching hospital's total commitment to GIVING. If it accepts the primacy of GIVING in the work, the conduct, and the individual natures of those involved in patient care, teaching, and research, this leadership may well use certain principles subsidiary to the central GIVING concept in guiding the hospital forward in keeping with the future needs of the community. Of the many possible subsidiary ideas, I would like to suggest only four:

1. The striving for excellence in every area, no matter how minor, is essential to the idea of giving to the utmost.

2. Patient care should have or should appear to have priority over teaching and research in order to maintain the sanctity of the individual patient to whom so much must be given now and for whose future care so much education and research must be provided. Assigning priority to teaching activities or research activities suggests that the patient of the future is more important than the patient of today—a suggestion that the patient of today naturally finds unreasonable, even though he may be the patient of the future. As long as he and his care are more important than the learning going on about him, he is comfortable in his proper role. With any reversal of that role, he may appear to be the giver and those around him the takers—a possible distortion of care and of teaching discernible to both the patient and the student.

3. The self-sacrificial nature of greatness in man or institution poses a constant threat of over-extension and self-destruction for the man or institution aspiring to maximal contribution. However, the mediocrity that comes from moderate effort is a quality which the teaching hospital can ill afford to show in policy, in action, or in goals.

4. As greater insight into man and his illnesses is gained, this insight must be put to use for the benefit of not only the patients but those who care for the patients as well. This means, when put into practice, that an understanding leadership by its very nature comes to constantly greater understanding and gives more and more to those who give.

These four principles, with the others mentioned earlier, may also serve the teaching hospital as guidelines in meeting the changing needs of our society—a society whose direction of evolutionary change in some ways may be predicted from analysis of its recent past. The nature of the teaching hospital in its present development provides reason for believing that these needs will be well met.

Ellsworth T. Neumann, M.D.,
Administrator

* * *

Dr. Henry K. Beecher has received the German Medical Prize from Bonn, Germany. This includes not only a citation but a $2000 award, and is in general recognition of his work in anesthesia and especially for his pioneer work on quantitative studies of the effect of drugs on the mind. Other recipients have been George Beadle, Georg von Hevesy, and Arne Tiselius.

* * *

Dr. Arthur L. Watkins has received the Meritorious Service Award for "furthering rehabilitation of the physically handicapped" from the National Rehabilitation Association—Massachusetts Chapter.

The Board of Trustees, at their meetings on March 29, and April 12 and 26, voted:

To accept the resignation of Dr. Roman W. DeSanctis, Clinical Assistant in Medicine at McLean Hospital, effective April 1;

To accept the resignation of Dr. George F. Kwass from the position of Assistant in Pathology and to appoint him as Clinical Assistant in Pathology, beginning April 1;

To reinstate Dr. Herman Turndorf as Assistant Anesthetist, for the period March 19 through May 31.

To promote:

Dr. Arthur J. Cain from Assistant Psychiatrist to Associate Attending Psychiatrist at McLean Hospital, effective April 26;

Dr. James A. Haycox from Assistant Psychiatrist to Associate Psychiatrist at McLean Hospital, effective April 26.

To reappoint:

Dr. Jane M. Berman as Clinical Fellow in Psychiatry at McLean Hospital for one year, beginning July 1.

To appoint:

Dr. Michael A. Ashworth as Assistant Resident in Orthopedic Surgery for one year, beginning July 1;

Dr. Nelson E. Bailey as Intern in Dental Medicine for one year, beginning July 1;

Dr. Bob Bullwinkel as Assistant in Anesthesia, beginning July 1;

Dr. Laurent Descarries as Clinical and Research Fellow in Neurology, beginning July 1;

Dr. Maria L. Dufau as Clinical Fellow in Medicine, beginning September 1;

Dr. John T. Dunn as Clinical and Research Fellow in Medicine, beginning July 1;

Dr. Harold F. Dvorak as Clinical and Research Fellow and Acting Intern in Pathology, beginning July 1;

Dr. Robert E. Evans as Intern in Dental Medicine for one year, beginning July 1;

Dr. James M. Gibson as Clinical Fellow in Pathology, beginning July 1;

Dr. Graeme L. Hammond as Third Assistant Resident in Surgery for one year, beginning July 1;

Dr. Joshua Hollander as Clinical Fellow in Neuropathology, beginning July 1;

Dr. Henry I. Kohn as Consultant in Radiobiology in the Department of Radiology;

Dr. Paul L. Kornblith as Third Assistant Resident in Surgery, for the period July 1

through December 31, and as Assistant Resident in Neurosurgery for one year, beginning January 1, 1964;
Dr. Alfred Leitner as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Geraldo A. Medeiros-Neto as Clinical and Research Fellow in Medicine for one year, beginning September 1;
Dr. Guillermo H. Merino as Clinical Fellow in Radiology, beginning July 1;
Dr. Roger H. Morris as Assistant in Anesthesia, beginning July 7;
Dr. Walter J. O'Donohue, Jr. as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Shyam S. Pant as Clinical Fellow in Neuropathology, beginning July 1;
Dr. David W. Parsons as Clinical Fellow in Medicine for one year, beginning May 1;
Dr. Joseph G. Pittman as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Ruick S. Rolland as a member of the Courtesy Staff of McLean Hospital, beginning April 26;
Dr. Takahiro Sakai as Research Fellow in Medicine for one year, beginning September 1;
Ralph G. Semon, Ph.D. as Associate Psychologist at McLean Hospital, beginning March 18;
Dr. Patricia R. Sexton as Assistant Resident pro tempore on the Children's Service;
Dr. Edward P. Sirois as Exchange Assistant Resident on the Children's Service, for the term April 10 through May 22;
Dr. Robert E. Sweat as Second Assistant Resident in Surgery for one year, beginning July 1;
Dr. Arthur Taub as Clinical Fellow in Neurology, to act as Assistant Resident, beginning July 1;
Dr. John McL. Tew as Assistant Resident in Neurosurgery for one year, beginning July 1, 1965;
Dr. Howard A. Trachtenberg as Assistant in Anesthesia, beginning June 30;
Dr. John T. Truman as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Guillermo Urrutia as Clinical and Research Fellow in Medicine, beginning July 1;
Dr. Paul G. Walfish as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Robert R. Young as Assistant Resident in Pathology, assigned to Neuropathology, for one year, beginning July 1.

The Trustees voted to appoint the following Interns on the Surgical Service, to begin July 1;

Dr. Douglas M. Behrendt
Dr. Richard F. Brubaker
Dr. Joseph M. Civetta
Dr. Preston H. Gada
Dr. Gerald N. Gold
Dr. Donald P. Griffith
Dr. Miles J. Novy
Dr. Joseph B. Philipson, Jr.
Dr. Robert E. Steele, Jr.
Dr. Clinton D. Vermillion
Dr. Andrew L. Warshaw
Dr. Dennis R. Whitlow

The Trustees also voted to reappoint the following Residents in Psychiatry at McLean Hospital for one year, beginning July 1;

Dr. John H. Backman
Dr. Robert M. Chalfin
Dr. Robert W. Farkas
Dr. Miroslav M. Kovacevich
Dr. Richard Sens
Dr. Emmett Wilson, Jr.

At their meetings on March 20, during April, and on May 1 and 8, the General Executive Committee voted:

To change the appointment of Dr. John B. Blennerhassett from First Assistant Resident to that of Resident in Pathology for one year, beginning July 1;
To change the appointment of Dr. Jónas Hallgrímsson from Clinical Fellow to that of Resident in Pathology for one year, beginning July 1;
To accept the resignation of Dr. Charles M. Lapiere from the position of Research Fellow in Medicine.

To promote:

Dr. Sheldon S. Baddock to the position of Third Assistant Resident in Pathology for one year, beginning July 1;
Dr. Francisco Civantos to the position of Second Assistant Resident in Pathology for one year, beginning July 1;
Dr. Norman G. P. Helgeson to the position of Second Assistant Resident in Pathology for one year, beginning July 1.

To reappoint:

Dr. John A. Bolzan as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Jack Braunwald as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Stanley E. H. Brooks as Clinical Fellow in Pathology, for the period February 1 through June 30;
Dr. Stanley Cohen as Clinical and Research Fellow in Pathology for one year, beginning July 1;
Dr. John R. Collins as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Arthur W. Duff as Clinical Fellow in Pathology for one year, beginning July 1;
Dr. Norton J. Greenberger as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. John W. Harthorne as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Dr. Lore G. Hopff as Clinical Fellow in Medicine, assigned to Cardiology, for one year, beginning July 1;
Elton P. Katz, Ph.D. as Research Fellow in Orthopedic Surgery for one year, beginning April 28;
Dr. Norman S. Lichtenstein as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Austra Likais as Clinical Fellow in Medicine for one year, beginning June 1;
Dr. Kilmer S. McCully as Research Fellow in Medicine for one year, beginning July 1;
Dr. Gordon K. MacLeod as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Hans B. Nevinny-Stickel as Clinical Fellow in Medicine for one year, beginning July 1;
Dr. Richard W. Sagebiel as Clinical and Research Fellow in Pathology for one year, beginning July 1;
Dr. Lewis Sasse as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Robert L. Scheig as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Jeremiah E. Silbert as Clinical and Research Fellow in Medicine for one year, beginning July 1;
Dr. Hubert J. Wolfe as Clinical and Research Fellow in Pathology for one year, beginning July 1.

To appoint:

Douglas N. Butler, Ph.D. as Research Fellow in Neurosurgery for one year, beginning October 1;
Mr. Csaba J. Horvath as Research Fellow in Chemistry, assigned to Medicine, for one year, beginning July 1;
Dr. Jan-Gerrit Rausch-Stroomann as Research Fellow in Medicine, for a period of six months, beginning September 1;
Dr. Clement B. Sledge as Research Fellow in Orthopedic Surgery, on leave of absence, retroactive to January 1;
Ivan Spuzic, Ph.D. as Research Fellow in Medicine for one year, beginning September 1;
Mr. Peter R. Taylor as Research Fellow in Medicine for one year, beginning July 1;
Mr. Douglas H. Thomson as Research Fellow in Medicine for one year, beginning July 1;
Ralph W. Turner, B.Sc. as Research Fellow in Neurosurgery for one year, beginning October 1.

STAFF PUBLICATIONS

Titles of the latest publications by members of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary staffs, as received in the office of THE NEWS, appear in each issue of this paper. The purpose of this listing is to report, as soon as possible, titles of all recent articles or books written by our staff members, so that our readers may keep up to date on Massachusetts General and Eye and Ear literature. This purpose is defeated when authors or departments postpone the reporting of titles. Therefore we ask that you send *promptly* all titles of your latest publications to Cora F. Holbrook, Editor of THE NEWS, together with 1) *classification of material,* 2) title of article, 3) title of publication in which it appears, together with the volume and page numbers. For books, give the publisher's name and address.

PLEASE REMEMBER TO INCLUDE THAT CLASSIFICATION. It causes your editor unnecessary time and trouble when you omit it. Your title should be classified with respect to the subject matter and not under the name of the hospital department with which you are affiliated.

The following new titles have been received:

Biochemistry

Schmid, K., and Kamiyama, S.
Studies on the structure of α_1-acid glycoprotein. IV. Optical properties.
Biochem. 2:271.

Schmid, K., and Mazzone, H. M.
Determination of the particle weight of spherical viruses.
Nature, London 197:671.

Biology

Drabikowski, W., and Gergely, J.
The role of sulfhydryl groups in the polymerization and adenosine triphosphate binding of G-actin.
J. Biol. Chem. 238:640.

Cardiology

Currens, J. H.
Clinical trial with two potent thiazide diuretics: Polythiazide and cyclothiazide.
Current Therapeut. Res. 5:202.

Segall, H. N.
Cardiovascular sound and the stethoscope, 1816 to 2016. The twenty-fifth Louis Gross Memorial Lecture.
Canad. M. A. J. 88:308.

General Medicine

Schapiro, R. H., and Isselbacher, K. J.
Benign recurrent intrahepatic cholestasis.
New England J. Med. 268:708.

Otolaryngology

Kelemen, G.
Hemorrhage: A specific poison to tissue of ampullar cupulae.
Arch. Otolaryng. 77:365.

Psychiatry

Benda, C. E.
Aspects of endocrine disorders in mental retardation.
In Proceedings of the Second International Congress on Mental Retardation, Vienna, August 1961. New York/Basel, S. Karger, pt. I:278, 1963.

Radiology

Bohrer, S. P.
Recurrent right lower lobe disease.
J.A.M.A. 184:229.
Carter, G. B., and Tanner, J. W.
Anterior mediastinal mass.
J.A.M.A. 183:1031.
Pendergrass, H. P.
Retroperitoneal radiography: Roentgen techniques to demonstrate pheochromocytomas and other retroperitoneal masses.
Radiol. Clin. North America, April 1963:195.
Webster, E. W.
Discussion. U.S. Public Health Service Symposium, Session on fluoroscopy and cinefluorography, March 6, 1962, Murray L. Janower, Editor, 1963.
In Technological needs for reduction of patient dosage from diagnostic radiology. Springfield, Ill., Charles C. Thomas, p. 329.

BOOKS RECENTLY ADDED TO TREADWELL LIBRARY

The library call number is given, within parentheses, for each item.

Abercrombie, M., and Brachet, J. (Editors)
Advances in morphogenesis, vol. 2.
New York, Academic Press, Inc., 1962.
(2Am)
Allen, R. M.
Psychological evaluation of the cerebral palsied person.
Springfield, Ill., Charles C. Thomas, 1962.
(19E)
Barton, W. E.
Administration in psychiatry.
Springfield, Ill., Charles C. Thomas, 1962.
(19S)
Benzaquin, P.
Holocaust! The shocking story of the Boston Cocoanut Grove fire.
New York, Henry Holt and Company, 1959.
(23Z)
Boorman, K. E.
An introduction to blood group serology, ed. 2.
Boston, Little, Brown and Company, 1962.
(14Am)
Cori, C. P., and others. (Editors)
Perspectives in biology.
New York, Elsevier Publishing Company, 1962.
(2A)
Farnsworth, P. R. (Editor)
Annual review of psychology, vol. 14.
Palo Alto, Annual Reviews, Inc., 1963.
(19L)
Gibbon, J. H. (Editor)
Surgery of the chest.
Philadelphia, W. B. Saunders Company, 1962.
(23Q)
Green, M.
Pediatric diagnosis, ed. 2.
Philadelphia, W. B. Saunders Company, 1962.
(26D)
Hall, V. E. (Editor)
Annual review of physiology, vol. 25.
Palo Alto, Annual Reviews, Inc., 1963.
(4A)
Herrick, C. J.
Neurological foundations of animal behavior.
New York, Hafner Publishing Company, 1952 (reprinted 1962).
(19Lc)
Merritt, H. H.
A textbook of neurology, ed. 3.
Philadelphia, Lea & Febiger, 1963.
(19A)
Moore, F. D., and others.
The body cell mass and its supporting environment.
Philadelphia, W. B. Saunders Company, 1963.
(5Am)
Sunderman, F. W., and Sunderman, F. W., Jr.
Evaluation of thyroid and parathyroid function.
Philadelphia, J. B. Lippincott Company, 1963.
(14K)
Warburg, O. H.
New methods of cell physiology.
New York, John Wiley & Sons, Inc., 1962.
(2Am)
Weinstein, I. M. (Editor)
Mechanisms of anemia.
New York, McGraw-Hill Book Company, Inc., 1962.
(14C)
Wilson, T. H.
Intestinal absorption.
Philadelphia, W. B. Saunders Company, 1962.
(16C)

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REPORTS FROM RECIPIENTS OF GRANTS

THE BLOOD BANK

The generous gift which the Massachusetts General Hospital has received from the Hood Dairy Foundation for a new Blood Bank will enable us to carry out the program for improvement of our quarters and thereby our service to the Hospital and its patients.

The new Blood Bank will be located in the new North Building, which is at present in the planning process. This gift from the Hood Foundation will be used for equipment, such as refrigerators, freezers, laboratory instruments, etc., as well as for the decorative improvements of donor rooms, offices, and such.

With the still-increasing work load on our present facilities, it is indeed a consolation to know that we now have the necessary funds available for a new Blood Bank which will be able to fulfill the future needs of the Massachusetts General Hospital.

Morten Grove-Rasmussen, M.D.,
Director, Blood Bank and Transfusion Service

You recently requested me to supply you with some information regarding the research work for which we recently received a grant from the Medical Foundation, Incorporated. I am enclosing herewith a brief summary of the article which was prepared by this Foundation. This is to be printed in their annual report, but may serve as some background information.

For many years my laboratory has been interested in various phases of pancreatic research. Last summer I had the idea of attempting to establish an isolated dog pancreas, maintaining the organ artificially by means of a heart lung machine. This was an exciting prospect, not only because it had never been accomplished but because such a preparation would offer almost unlimited possibilities for investigations into both the endocrine and exocrine aspects of pancreatic pathophysiology. I suggested such a preparation to Dr. Jacobus Greep, a United States Public Health Research Fellow from The Netherlands and Mr. Charles McCrae, a first year Harvard Medical student, both of whom are working in my laboratory. They spent last summer devising the anatomical and mechanical techniques necessary for such a perfusion, and in the fall of 1962 we had our first successful perfusion of a totally isolated dog pancreas.

At this stage we applied for and received support from the Medical Foundation to pursue this work on a more intensive basis. We are currently doing a weekly perfusion in the Vascular Laboratory. With the invaluable help of Dr. Gerald Austen we have been able to apply numerous sophisticated analytical techniques to our research. Drs. Donald Fawcett and Atsushi Ichikawa at the Harvard Medical School have been doing electron microscopy studies in the course of the perfusion. Their anatomical findings, when correlated with the enzymatic studies of Mr. Donald Chambers in our laboratory, will provide a most valuable correlation of pancreatic structure and function. I believe that as time goes on we will be able to make many interesting and original observations on the physiology, pathology, and cellular structure of the pancreas with the cooperation of numerous investigators of both the Hospital and Medical School.

George L. Nardi, M.D.,
Associate Visiting Surgeon

The summary of the article prepared by the Medical Foundation, mentioned above, follows.

STUDIES OF THE VIABILITY OF THE PERFUSED ISOLATED DOG PANCREAS

After five hours of complicated surgery, Doctor Nardi is ready to remove the pancreas from a dog. He has only an additional five minutes to connect the organ to mechanical devices that will keep the pancreas alive outside the body. His successful conclusion marks the first time that anybody has accomplished such a feat. Now the fundamental biochemical and physiological processes of the living pancreas can be studied independent of the body.

While the pancreas works within the body, it interacts with other organs, making it difficult to distinguish its own unique functions. Dr. Nardi's surgical accomplishment allows an investigation of the basic action of the gland as it produces digestive juices, as it manufactures insulin, and as it secretes other proteins. With the pancreas isolated from the body, the effects of drugs and the course of diseases such as pancreatitis can be correlated to the tissue changes noted and perhaps to human illness.

Stimulated by an idea from Dr. Nardi, a medical student cooperated with a research fellow from The Netherlands to devise the surgical procedure. The first time they tried the operation, it was a total failure; the third time, the pancreas was kept alive for 90 minutes; now they have managed to maintain the gland for as long as 5 hours.

PSYCHOLOGICAL RESEARCH IN THE STANLEY COBB LABORATORIES

Just over three years ago, shortly after the experimental research laboratories of the Department of Psychiatry had moved over to the Warren Building to become the Stanley Cobb Laboratories, I tried to define for THE NEWS my thoughts about psychological research in a general hospital(1). Our program in the intervening years has proceeded along the course outlined on that occasion, expanding in scope but also focusing more closely on certain problems. As so much current research in a medical setting, most of our work has been conducted with the support of the Public Health Service for specific projects. Some of our research, however, has been sponsored by other organizations, such as the Medical Foundation of Boston, which has recently helped us to set up a pilot study on the effects of electroconvulsive shock therapy on cognitive function.

This pilot project fairly illustrates the manner in which we attempt to discharge our duty and to take advantage of the opportunities that arise in the general hospital setting. About a year ago, arrangements were made to include electroconvulsive shock therapy in the treatment program of the Psychiatry Service. This treatment is given primarily to patients with severe depression, a group with which we have not been directly concerned in the research activities of our laboratory. We have, however, become involved in a number of problems of remembering and forgetting. Our study of amnesic patients has, in time, led to various experiments in the short term memory of healthy persons. One of these has confirmed the finding made by others that most of us are quite likely to forget a message of no more than three unrelated letters in as short a time as 6 to 12 seconds, if we are not allowed to repeat and rehearse the message during that time.

Normally, of course, if I want to remember a telephone number while waiting for the line to be free, I repeat it silently over and over again. If I have in front of me a list of six items that I want to discuss over the telephone and I turn my attention to these as soon as I have looked up the telephone number in the directory, my chances of remembering the number when I reach the end of the list are distinctly poor. It may be better to repeat the number a few times before looking at the list, and better still to repeat it after every item, if I do not want to look for it in the book again. What does this predicament at the telephone show? Information, in order to be retained and recalled, takes some time to sink in. Remembering after 12 seconds seems, of course, a very different activity from remembering something after twelve years or even twelve hours, and probably different processes are involved in the two feats. Remembering a sequence of consonants or a telephone number also appears to be something quite different from remembering the morning news or whatever you may have read in a textbook in your student days, though not so very different from remembering your son's birthday. It is obvious, though, that whatever one forgets in 6 or 12 seconds he is unlikely to remember a day or ten years later. The laws that govern or describe long term remembering may be entirely different from those that apply to immediate memory, but if some circumstance interferes with immediate remembering there will not be much to show in long term memory.

Now, interference with the process of consolidation is just one of those circumstances that may account for very rapid forgetting. If newly received information must undergo a process of consolidation in order to be remembered, then undoubtedly there are conditions that can interfere with this process. The trouble is that consolidation is the kind of explanatory concept that many of us believe in so as to make sense of certain observations. Not every psychologist believes that consolidation is a necessary process for remembering. The only way we can demonstrate that consolidation takes place is to think of a condition that would interfere with it if it did take place, set it up experimentally and test our prediction. If we succeed, of course there might be other explanations that account for our finding. If we fail, we try to set up a better experiment.

It is difficult to believe that we are apt to forget quite simple messages in a space of 3 to 15 seconds, but this is what the Petersons(2) have demonstrated in their experiment, and others have confirmed it, using the same or a similar method. Sequences of three consonants, preferably those that do not remind you of a natural word or of the initials of a public person or institution, are read out and followed immediately by a number of three digits. The subject's instruction is to try to memorize the letter sequence, but as soon as he hears the number he is to start subtracting by threes at a steady rate, until he receives a signal to stop and repeat the three letters. Trials are repeated with intervals of varying length, though always of less than 20 seconds.

In the Petersons' experiment most trials were successful after an interval of 3 seconds occupied by subtraction, but only a third of the answers were correct after 9 and rather less than a tenth after 15 seconds. In our own experiment the slope of forgetting was not quite so steep; nevertheless, fewer than half the responses were correct after 9 seconds. When strings of four or five letters were to be memorized the proportion of correct answers dropped further still—down below one-fifth. We also allowed for a condition in which the subjects repeated the number, though not the letters, before subtraction, and that considerably improved their performance. In an ongoing study they repeat both letters and number, and that makes for still more correct responses. This finding is, at any rate, consistent with a consolidation process.

All this brings me back to our pilot study with electroshock therapy patients. In addition to its more lasting effects in relieving depression, this therapy also causes some retroactive amnesia, i.e., patients are liable to forget whatever they had been told, whatever they had experienced shortly before treatment. Since, apart from the effects of depression, at that time before treatment they would be functioning quite normally, and since they will never recover those lost memories, it is reasonable to blame the electric shock for interfering with the process that turns those experiences, converts that information into memories. This, of course, is the process of consolidation, and if it can be disrupted 10 or 15 minutes after it had begun its course, it must be a process extended in time far beyond the duration of the original impressions. One of our interests in electroshock patients is to explore the range of the consolidation process.

Most of our current work with these patients is done at the Boston State Hospital, where we greatly benefit from the cooperation of the Superintendent, Dr. Barton, and his staff, as we did earlier in our study of Korsakoff's psychosis. Another extramural project of our laboratory is at the Lemuel Shattuck Hospital where, in collaboration with Dr. Timberlake, Chief of the Neurology Service, we are studying certain effects on cognitive and motor function of drugs given Parkinsonian patients to alleviate their movement disorder. Still another joint venture of our laboratory is concerned with the effects of aging on the selection and immediate retention of visual and auditory information. This project originated as one of several branches in a research program on the normal aging process, directed by Dr. James Cummins at the Boston V.A. Clinic. We started with a group of veterans of the Spanish-American War, and have now worked our way through to the younger age groups. Other collaborative enterprises have been with investigators in our own Hospital. These include psychopharmacological experiments conducted jointly with Dr. Gardner Quarton, Director of the Stanley Cobb Laboratories; investigations of the effects of large and smaller doses of alcohol on manual skills and attention in conjunction with Drs. Jack Mendelson and James Muller of our Psychiatry Service, and carried out at the Bridgewater Correctional Institution; studies of certain brain surgical patients in association with Drs. Mark and Kjellberg of the Neurosurgery Service and Dr. Ervin of our own Department. The very foundation of our research program was a collaborative research project; our work with Korsakoff patients was initiated by Drs. Adams and Victor in the Neurology Service.

This survey of our current activities is likely to convey an image of multiplicity in research objectives, in which the common strands that run through the several projects are lost from sight. In all our research we study the processes by which man makes sense of his environment, orders the information he receives, makes it available for future reference, and recovers it. In other words, all our research ventures are directed toward certain problems in perception, attention, and memory. We study the effects of drugs, of certain diseases and treatments, of brain damage or of the normal aging process, for the lessons they can teach us about these processes. Cognitive function is systematically changed by several of the conditions we study, but also a clearer understanding of the cognitive processes helps to explain how a patient deals with a disease, how man reacts to drugs or to the gradual changes characteristic of aging. In our pursuit of a better understanding of the cognitive processes, we also accumulate a good deal of ordered information on the diseases, treatments, and conditions that are represented in our experimental samples. Since for most of our studies we also must establish control norms, our research produces maps of the areas in which, and measures of the extent to which the disease, treatment, or condition investigated can be expected to alter the mental function or behavior of the human organism.

It is very puzzling that some patients, who seem to behave with such perfect composure and in full command of the more elementary social graces, should be unable to remember the interviewer's name or the date of the day for three minutes. The knowledge that, under certain conditions, any one of us is liable to forget information quite as rapidly may have taken us a step or two closer toward the solution of this puzzle.

George A. Talland, Ph.D.,
Psychologist

REFERENCES

(1) Talland, G. A.: The role and function of psychological research in a general hospital, The News *190*: 1-3, 1959.

(2) Peterson, L. R., and Peterson, M. J.: Short-term retention of individual verbal items, J. Exp. Psychol. *58*: 193-198, 1959.

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VOLUNTEER GROUPS

Distaff Club

Now that the end of the year is drawing near, we feel it would be appropriate to summarize our activities to date and tell about our plans for the next few weeks.

Last summer we gave our usual July tea for new members of the house staff and their families. To further help them to feel at home, we held area parties and published our annual directory, as well as the first of our four Newsletters.

In the fall, we were fortunate in having Judge Jennie Loitman Barron speak to us and, on another occasion, we honored our visitors from other lands with a program of wood-wind music.

On Halloween we gave a party for the children in Burnham, which we probably enjoyed quite as much as they!

The winter months found us busy with wrapping gifts for the Hospital Christmas party and decorating the penthouse for our own holiday cocktail party. A bake sale then fattened our treasury enough to enable us to entertain the patients in Burnham on Valentine's Day. A hayride on a beautiful winter evening proved exciting, too.

Early spring brought with it two stimulating programs: one, a meeting at which Dr. Knowles spoke; another, an evening with Dr. Evelyn Goodenough Pitcher, Director of the Eliot-Pearson School, as our guest. In the meantime, we were busy meeting in area groups to make mobiles for the children in the Hospital.

We are presently looking forward to the Spring Dance, a joint meeting with the Service League, the annual Memorial Day picnic, and a final general meeting.

MGH Service League

In addition to the Annual Meeting, the Service League held a joint meeting with the Distaff Club on May 8, from 3 to 5 P.M. The final social activity for this group was the annual picnic, held in Lincoln on May 30, at the home of Dr. and Mrs. Bradford Cannon.

The Annual Meeting of the Massachusetts General Hospital Service League was held on May 14 at Walcott House. Following morning coffee, reports of the various committees were presented by means of illustrated posters.

The meeting opened with the election of officers for the coming year. Following this, Mr. David C. Crockett, Deputy to the General Director, spoke on "Accomplishments of the 150th Anniversary Program".

Reporting for the Reception Center, where visitors register upon arrival at the Hospital, were the co-chairmen—Mrs. Avery D. Weisman and Mrs. H. Peter Mueller.

Mrs. Grant V. Rodkey reported that every international professional visitor to the M.G.H. this year has been entertained in the home of a staff member. International visitors number approximately 200, from 44 countries.

Mrs. C. Miller Fisher reported that 223 tickets to the Boston Symphony Orchestra concerts and other cultural affairs were donated to the Reception Center and given to professional visitors at the Hospital.

Mrs. John F. Burke and Mrs. Nathaniel Adamson reported that, through the furniture exchange, 330 pieces of furniture were distributed to 31 families from 16 different countries. Mrs. Alfred Kranes and Mrs. Philip R. Dodge reported that 147 families and individuals have been helped with housing. Mrs. Perry J. Culver, in charge of the International Visitor List, reported that there were 96 new arrivals at the Hospital this year.

Mrs. Nathan B. Talbot reported on the concerts which were held in the Hospital Chapel. From October 15 through May 15, 11 concerts were presented by outstanding artists of this area.

Other chairmen carrying on special projects during the year were: Mrs. John W. Cass, Jr., who reported for the Information Desk in the Brick Corridor of the Hospital, and Mrs. Francis M. Ingersoll for the Clinics Information Desk. Mrs. John M. Head and Mrs. Robert F. Tilley edited the Service League Newsletter; Mrs. Joseph S. Barr was in charge of Membership; Mrs. George L. Nardi, Teas; Mrs. Kurt J. Isselbacher, Legal Consultant; Mrs. Robert Wolff, Resource File; Mrs. Alexander Leaf, Schedules; and Mrs. Lawrence Ring, Supplies.

1811

THE McLEAN HOSPITAL RESEARCH LABORATORY ✓

The McLean Hospital Research Laboratory occupies a building immediately north of the Administration Building. The Laboratory Building, a 175 x 47 feet two-story structure, was built in two stages: the western half in 1945 and the eastern half in 1959-60. It provides over 16,000 square feet of floor space which is occupied by laboratories and by general research facilities, including a research library. These facilities are divided into four roughly equal divisions, devoted to the chemistry of tissue structural components, to metabolic studies, to quantitative histochemistry, and to biophysics. The first two divisions are under the supervision of Dr. Jordi Folch-Pi, the third under Dr. Alfred Pope, and the fourth under Dr. J. David Robertson. The work of the Laboratory is reviewed yearly by an Advisory Committee which consists of Dr. Raymond D. Adams, Chairman, and Drs. Walter Bauer, Fritz A. Lipmann, R. Lorente de No, Alfred H. Stanton, and Donald D. Van Slyke.

The construction of the Laboratory in 1945 was indicative of the continuation of a long tradition of research at McLean Hospital. This tradition goes back to 1888-1892, when research in the cause and treatment of mental illness was initiated by the establishment of three laboratories—physiological, biochemical, and psychological—under the direction of Dr. Hoch, who had been trained in Germany in experimental psychology. The biochemical laboratory, from which the present laboratory is the lineal descendant, gathered momentum in 1900 when it came under the direction of Dr. Otto Folin, who, during the seven years of his tenure (until 1907, when he moved to Harvard), started at McLean many facets of his monumental work on practically all aspects of biochemistry. Among Folin's successors, two are worthy of special mention—namely, Dr. J. Whitehorn who, from biochemistry, moved gradually into a career in psychiatry that was to take him to the highest leadership in the field, and Dr. E. Stotz who, in 1942, moved from McLean Hospital to occupy the Chair of Biochemistry at the Rochester University School of Medicine.

Thus the decision in 1945 to establish the new Research Laboratory was only a reaffirmation by the Trustees of a resolve of long standing to maintain at McLean Hospital an active center of research pertinent to the understanding of the nature of nervous and mental disorders. Toward this goal, the assigned task of the new Laboratory was the study of the nervous system in health and in disease by the tools of the basic medical sciences. From a two-year-long survey of the field encompassed by this assignment, it was decided that the most promising approach to follow was the study of the "chemical anatomy" of the nervous system—that is to say, the establishment of the distribution of tissue components in relation to histological structure. A corollary of the program was to apply any results that might be obtained to other experimental and clinical problems as early as it appeared possible to do so. In outline, the contemplated study required from the very beginning two different lines of work—namely, (1) the isolation and identification of the structural tissue components, i.e., of the compounds that constitute the structure revealed by microscopic and ultramicroscopic examination, and (2) the actual work of correlation of the distribution of components with histological structure. To implement such a dual attack, the first appointment to the staff was that of Dr. Alfred Pope, a young physician with training in neuropathology and extensive experience in biochemistry. The continuation of this dual approach attracted biochemists, neuropathologists, and clinical neurologists to the staff. As a natural evolution, the program was expanded in 1956 to comprise (3) metabolic studies, specially directed to the elucidation of the biosynthetic mechanisms involved in the synthesis of tissue structural components. Finally, in 1960, (4) biophysical studies were added to the program under the direction of Dr. Robertson, as a necessary adjunct to the other three lines of work. From this gradual evolution there are now at McLean four different groups of specialists working independently but complementarily toward the common goal of establishing the components and the forces that nervous tissue uses to develop and maintain its purposeful tri-dimensional patterns. The staff has grown from your reporter, in 1946, to 16 professional people and 23 in other capacities in 1962.

The work carried out during these 16 years has followed the general outline formulated in 1946. The study of the chemistry of the structural components of the nervous tissue, which has been the special concern of your reporter, in collaboration at various times with L. L. Uzman, J. A. Meath, M. Lees, F. N. LeBaron, G. H. Sloane-Stanley, G. Webster, and others, consisted originally of the development of procedures of isolation of tissue components, with an emphasis on the use of mild manipulations of tissue and of tissue fractions, so as to allow the separation from the tissue of "native" components—that is to say, of components in a condition as close to their state in the living tissue as possible. A number of procedures were thus developed, and they permitted the isolation of various components which clearly would have been destroyed by earlier, more drastic procedures. The components thus recognized, and partly purified and identified, were generally large molecular weight substances and belonged mainly to the group of lipoproteins. These are compounds consisting of the combination of a protein part with a lipid part. The nature of the link that holds together the constituent parts or "moieties" is poorly understood, partly because the fragility of lipoproteins limits severely the conditions under which they can be studied. The results of our work justified the assumption that the bulk of proteins and of lipids in nervous tissue are combined with each other in various forms of lipoproteins. Two such lipoproteins appeared to be of particular interest—namely, the *proteolipids,* which are lipoproteins soluble in organic solvents and insoluble in water (other lipoproteins are either soluble in water and insoluble in organic solvents, or wholly insoluble) and the *phosphatido-peptides.* The proteolipids are clearly related to myelin and hence lend themselves to correlative biochemical and morphological studies. The phosphatidopeptides are, strictly speaking, not lipoproteins, but the lipid moiety of an insoluble lipoprotein fraction which is related to classical neurokeratin. Not the least important of their features is that they contain, as an integral part, one or more phosphoinositides, i.e., lipid moieties having inositol as a constituent. Besides lipoproteins, an apparently macromolecular form of gangliosides has also been isolated: *strandin.* This lipid-carbohydrate complex substance appears to be only part of a greater aggregate that has not yet been identified and which appears to be destroyed even by the mild procedures now used. All these macromolecular species underlie the structural detail discernible by electron microscopy, by X-ray diffraction, and by other methods of ultrastructural observation. These studies constitute a most active continuing line of work. They have been strengthened further by the recent addition of an Organic Chemistry Laboratory under Dr. Pierre J. Stoffyn.

In parallel with these studies, the group under Dr. Pope had been analyzing nervous tissue directly by the ultramicro methods developed by the Danish School of Linderstrøm-Lang and Holter. In these methods, serial histological sections are used alternatively for chemical analysis and for histological examination. Thus it is possible to correlate with great certainty the chemical structure with the histological picture. Dr. Pope, who was joined by Dr. Helen H. Hess in 1951, carried out a series of investigations on the intralaminar distributions of enzymes in the somatosensory isocortex of the albino rat. Partially overlapping these studies were a parallel series upon the enzymatic architecture of the human frontal isocortex obtained as biopsy specimens during the era of psychosurgery. In recent years this work has been continued on autopsy specimens. The program had broadened gradually to include the distribution of tissue components other than enzymes, specially the macromolecular species that had been recognized and partially identified by the parallel work of the group under your reporter. This gradual growth has evolved into a broad program which includes five major divisions: I) development of ultramicroanalytical methods for analysis of tissue samples of 10-100 μg fresh weight; II) surveys of regional neurochemistry in rats and man; III) studies in ultramicrochemical neuropathology, both experimental (as exemplified by Dr. Pierre M. Dreyfus's work on deficiency diseases in rats, etc.) and naturally occurring in man (diseases of the cerebral cortex, brain tumors, etc.); IV) special emphasis given to studies on the nature and enzymatic properties of brain ATPases and related enzymes; and V), as a central problem, the elucidation of the ultramicrochemical architecture of mammalian isocortex, particularly that of man. The eventual construction of an elementary, but orderly, chemoarchitecture that is the reasonable eventual result of such an enterprise will permit correlations with cortical anatomy and physiology and will provide a framework for comparative studies upon cortical diseases. It will also permit the establishment of the microchemical counterpart, if any, of the psychopathological reactions in the patients from whom specimens have been obtained.

The metabolic studies which were made possible, starting in 1956, by a grant from the Ford Foundation, have gained strength by the contributions of Drs. Mudlagiri K. Gaitonde, George P. Hauser, Lewis C. Mokrasch, and Joseph Dobkin. The rationale of their inclusion in the program has been abundantly justified by the progress made toward the elucidation of biosynthetic mechanisms of the various macromolecular species the Laboratory is specially interested in. Thus, it has been found that phosphorus in the phosphoinositides constituent of phosphatido-peptides exhibits a remarkably active rate of turnover, that proteolipids differ markedly from other proteins in their metabolic activity, that the site of their synthesis appears to be in mitochondria, rather than in microsomes. These are only a few highlights of a very active program, justice to which could be made only by devoting to it the whole of this review.

The biophysical studies inaugurated three years ago were also justified as a necessary part of an evolving program. The rationale in this case is that with the increased resolution of methods for study of ultrastructure and the increasing ability to handle macromolecular tissue components, a common ground has been reached in the sense that the latter are potentially recognizable as discrete features in the ultrastructural picture. As in the other aspects of the over-all program, the biophysical studies proceed on their own momentum and with their own emphasis, and collaboration with other disciplines is only a development to be hoped for, not to be enforced or in any way engineered. In fact, such collaboration is already taking place in the form of a combined ultrastructural and ultramicrochemical study of the outer ends of retinal rods, now being jointly pursued by Dr. Robertson and Dr. Hess.

In implementation of the basic corollary of applying our findings to other clinical and experimental problems, a substantial part of the laboratory work has dealt at all times with pathological and clinical problems. This work is in no way applied work, but partakes of the same conceptual and technical rigor that is inherent in the other studies mentioned above. The scope of this review does not allow its detailed discussion. Let it only be stated that besides the studies on the chemoarchitectonics of cortices of patients with various forms of mental illness carried out by Dr. Pope's group, and already referred to, studies have been carried out on the state of copper in Wilson's disease (a line of work being most successfully pursued by Dr. Huntington Porter in his present position at the New England Center Hospital), on the chemical nature of the antigen in experimental allergic encephalomyelitis, on the chemical composition of pathological brains, and on many other experimental and pathological problems.

This brief description of the activities of the Laboratory would not be complete without mentioning its very important function as a training center for neurochemical studies. From its inception, almost as many trainees as regular staff members have contributed to the work of the Laboratory. Such trainees have consisted of graduate students from the Division of Medical Sciences of Harvard University, of medical students on short-term projects, and, mainly, of postgraduates—either biochemists or neurologists. Those in the last two groups have been numerous, and it has been a source of gratification to see that almost without exception the clinical neurologists, trained here in neurochemistry, have continued to be active in neurochemical research upon their return to clinical neurology, and have made contributions of significance. The names of L. L. Uzman, N. Allen, H. Porter, P. Dreyfus, H. Moser, and E. Lewin, among others, attest to the fact.

Throughout this short review, the attempt has been made to show the unity of thought that underlies the over-all program of the Research Laboratory, and to emphasize that the various and, at times, widely differing projects the Laboratory has embarked on, represent, indeed, parts of a broad effort aimed at a better understanding of the function of the nervous system in health and in disease.

As a final comment, it should be stated that the whole staff of the Research Laboratory is looking forward to the healthy growth of the present program of research in psychiatry and the social sciences, with the conviction that such growth will be a source of strength to the Hospital and that both research programs will benefit from constant interchange of ideas and information.

Jordi Folch-Pi, M.D.,
Director of Scientific Research,
McLean Hospital

[The above describes only one of the many facets of research going on at McLean Hospital. The News plans to publish articles in the future on such subjects as research in clinical physiology, in the behavioral sciences and psychiatry, and other related activities. —— *Editor*]

New addresses:

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Dr. Carl N. Brownsberger (a.r.p. 1957), University of Washington School of Medicine, Seattle 5, Wash.
Dr. Frank M. Buckley (a. psychol.), Assumption College, Worcester, Mass.
Dr. George H. Collins (a.r.p. *Path.* 1959), College of Medicine, University of Florida, Gainesville, Fla.
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Dr. Laszlo Ormandy (*Or.* 1943), 3109 10th St., North, Arlington, Va.
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Dr. Joseph K. Surls (*Or.* 1920 & *E.S.* 1922), Box 44, Gracie Sq. Station, New York 28, N. Y.
Dr. Donald W. Sutherland (*M.* 1958), 2455 N.W. Marshall St., Portland, Oreg. (after Aug. 1)
Dr. Kunio Suwa (clin. fel. *An.* 1963), Tokyo University Hospital, Motofuji-1, Bunkyo-ku, Tokyo, Japan (beginning July 1)
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Brief bit:

Dr. Oliver Cope participated in Surgical Grand Rounds at the Malden Hospital on May 1, and gave a talk on "The place of surgery and the various types of thyroid disease".

THE PLASTIC CLINIC

This year marks the 84th birthday of our distinguished colleague, Dr. V. H. Kazanjian. The Plastic Clinic at the Massachusetts General Hospital was founded in the twenties by Dr. Kazanjian and has continued to draw patients

DR. ELLSWORTH T. NEUMANN, ADMINISTRATOR

in increasing numbers during the years since then. At one time this was a joint MGH and Massachusetts Eye and Ear Infirmary clinic—an arrangement that was discontinued after World War II when the Eye and Ear group withdrew to their own quarters at the time when Dr. Kazanjian retired as chief of both clinics. Certain obvious advantages were lost with the change, the most important of which was the opportunity for each group representing different points of view to profit by association with the other. A reunion of these groups, in adequate quarters, might again prove profitable.

About two years ago the picture in the Plastic Clinic changed with the assignment of members of the house staff from both the East and West Services to Plastic Surgery and the announced intention of Dr. John D. Constable to concentrate in the field of Reconstructive Surgery. A continuity of care was thus possible, not only at the visit level as originally insisted on by Dr. Kazanjian, but also at the house staff level. A very obvious change in the variety of problems and the number of patients has occurred with the broader clinic coverage. The referrals from the house and other clinics, in turn, have increased significantly. In fact, the number of patients seen at each biweekly clinic has increased to such an extent that a weekly session would be desirable if space were only available.

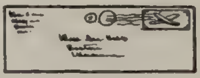
What is the scope of Plastic Surgery? Many physicians and laymen consider that the plastic surgeon is concerned solely with cosmetic or aesthetic surgery. This is not the case at the Plastic Clinic. In fact, the members of the Clinic have discouraged patients with purely cosmetic defects from seeking help through this channel. On the other hand, cosmetic defects resulting from trauma or valid congenital anomalies are accepted without question. The majority of patients who present themselves have varying degrees of functional disability, often from trauma such as an injury from automobile accidents or burns; but a significant group seeks repair following surgical eradication of malignant disease.

Members of the Clinic are always on call for consultation on the house services in other surgical areas. Since Plastic Surgery is a specialty of methods, there are frequent requests for advice in methods of closing wounds, appropriate means of preparing a wound for grafting, etc. The acutely injured extremity is often the object of these consultations. An adequately protected fracture with good skin covering providing an abundant blood supply will usually heal without complication of infection, non-union, etc. Without adequate care and blood supply the convalescence may be prolonged for months or years. The chapter on "Soft tissue repairs" in the Fracture Book entitled *Fractures and other traumatic conditions,* edited by Dr. Edwin F. Cave in 1958, had its origin in cooperative experiences of the Plastic and the Fracture Clinics in dealing with the complex problem of the healing of open or compound fractures of the extremity. In the same volume, the chapter on "Facial injuries" was compiled from the combined experiences of the Plastic Clinic at the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary.

The prospect of establishing a center for the care of the burned or injured child as a part of the MGH imposes a heavy obligation on the members of the Plastic Clinic. Few of the senior staff will forget the disruption of the normal functioning of the Hospital at the time of the Cocoanut Grove fire in 1942, and few of the junior staff will forget the arduous tasks involved by the arival of one or more burned patients in the Emergency Ward or any other area of the Hospital. There is the constant check of the adequacy of the fluid therapy. There is the puzzling decision about the depth of the burn. There is the arduous care of the wound itself—a task which increases in its demands until healing is complete. And there must be a calm, unruffled, gentle tolerance of the emotional outbursts that accompany the burned state in most seriously burned patients. The opportunity for study of the problem of the burned child is a challenge. The staff of the Massachusetts General Hospital is well equipped to accept this challenge and to continue to make important contributions to it.

The members of the Plastic Clinic look forward to inviting qualified surgeons to join the group for specialized training here and at allied hospitals in the Boston area. Opportunities for a varied experience are available when suitable integration of several programs is established.

Bradford Cannon, M.D.,
Visiting Surgeon



Dr. Witold Drabikowski (res. fel. *M.* 1962), now at the Nencki Institute of Experimental Biology, 3 Pasteur St., Warsaw 22, Poland, sends us this message:

> I am now back in my fatherland, but the nice time which I spent at the M.G.H. is still vivid in my memory and will never be forgotten.
>
> I hope I shall be able to visit the Massachusetts General Hospital again some day.

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The News

No. 224 Boston, Massachusetts October 1963

A New Kind of Community Center for Rehabilitation

McLean Rehabilitation Center to be Dedicated

Clinical Symposium and Dinner on October 18

Another significant project supported by the 150th Anniversary Program of the Massachusetts General Hospital comes to fruition on Friday, October 18. On that day the new McLean Hospital Rehabilitation Center will be dedicated at an all-day Clinical Symposium, followed by an evening dinner. The modern concepts of psychiatry underlying the Center are implicit in the theme of the Symposium: "The Individual and the Community—Current Perspectives in Rehabilitation."

It is expected that over 500 physicians, nurses, social workers, auxilians, volunteers, and friends of the Hospital will attend. The Symposium will include one morning session and two afternoon sessions. The Center will be open for inspection and guided tours during luncheon and prior to the dinner.

Mr. Ralph Lowell, member of the Board of Trustees and Chairman of the McLean Hospital Committee, will preside at the dinner. The Right Reverend Robert P. Barry, also of the Board of Trustees and a member of the same committee, will give the invocation. The principal speaker will be Dr. Dana L. Farnsworth, Director of the University Health Services and the Henry K. Oliver Professor of Hygiene, Harvard University. The toastmaster will be Dr. Erich Lindemann, Chief of the Psychiatric Service, MGH, and Professor of Psychiatry, Harvard University.

The Rehabilitation Center is the first new building in many years to be built for the use of patients at the McLean Hospital. It was designed by the architectural firm of Shepley, Bulfinch, Richardson, and Abbott. Its cost is somewhat over one million dollars, of which about $384,000 was obtained from the federal government under the Hill-Burton Construction Act. The remainder came from contributions made to the 150th Anniversary Program of MGH. The Ground Breaking Ceremony was held on May 4, 1962, and the cornerstone was laid on October 15, 1962. The building was ready for occupancy the following June.

Architecturally the new Center retains an identity of its own. Its proximity to other units of the Hospital makes it readily accessible to inpatients and facilitates efficient servicing. The main floor consists of modular structural units 33 feet square, arranged in series and occupying about 22,000 square feet. The architectural keynote is flexibility; the building can accommodate about 200 patients daily, and can be expanded by the addition of more modular units.

The Village Green

The Rehabilitation Center provides facilities for the Day Care Center, psychiatric outpatient clinic, occupational therapy, library, music rooms, offices, and the Civic Center. The latter, which is housed in the central unit under a large skylight, consists of a coffee shop, store, beauty salon, barber shop, laundromat, and two meeting rooms, all arranged around the "Village Green." Community living is thus the leitmotiv of the Civic Center. The Village Green symbolizes the new concepts of psychiatry.

Dr. de Marneffe explains this dramatic departure from conventional institutionalism:

"The patient convalescing from a serious mental illness often has to relearn some elementary activities, for example, how to make an appointment with the hairdresser, how to make a phone call, how to buy things. The patient's sense of strangeness often creates a serious problem when he returns to the community. Providing opportunities within the hospital, in a setting unlike the traditional institution but quite like a small community center, we believe, will make it possible for him to retain the ability to do those things for himself. The Village Green may help patients learn new social and vocational skills which will benefit them after discharge."

Dr. de Marneffe adds: "The Rehabilitation Center will not only expand the present treatment program at McLean, but to some extent will change its character. In the clinical, research, and training areas it will make possible an integrated approach to the patient's treatment. For inpatients it will provide, to a greater extent than we have been able to offer before, an environment like that commonly found in the community. For pa-

(*Continued on Page* 7)

Dr. Soutter Becomes Chairman of MGH Committee on Teaching

Dr. Lamar Soutter, upon rejoining the MGH family after a decade at the Massachusetts Memorial Hospitals and the Boston University School of Medicine, was immediately appointed Chairman of the Committee on Medical Teaching and Education. This is a subcommittee of the General Executive Committee and was created in 1962 to coordinate and improve the varied medical teaching activities at MGH, including those relating to Harvard.

Dr. William V. McDermott served as its first Chairman until his recent departure to become Director of the Sears Laboratory for Surgical Research at the Boston City Hospital and Professor of Surgery at the Harvard Medical School.

In announcing the new appointment Dr. John H. Knowles, General Director, stated: "Dr. Soutter's activities on this committee will be concerned broadly with our relationships with the community hospitals, particularly as regards the sharing of education and teaching opportunities. In this context, we will be actively exploring the possibilities of television as a medium for interhospital communication and teaching, as well as joint conferences, speakers' bureaus, interhospital seminars, joint house training programs, etc."

In 1942 Dr. Soutter, then an Assistant in Surgery, established the MGH Blood Bank in the basement of the Moseley Building, and it was largely the availability of plasma that enabled this hospital to convert the Cocoanut Grove fire disaster into an episode of extraordinary MGH achievement.

During the following decade (with time out for military duty) Dr. Soutter served MGH in a dual role as member of

(*Continued on Page* 6)

Editorial

On the Support of House Officers

THE forerunner of the present-day house officer was the doctor's apprentice in colonial times. In return for a year or two of training at the hands of the practicing physician, he helped with the care of patients, collected herbs and composed medicinal concoctions of dubious therapeutic value, took care of his preceptor's horse, and even cooked meals and waited on table.

Patients were cared for at home, or sometimes were taken into the doctor's house so that they could be provided with close attention. Hospitals, including the ones that existed in Boston in the eighteenth century, were pest houses, or asylums, where the old, the maimed, the insane, the contagious, and the incurable could be filed away at public expense, out of the sight of the community.

The creators of the Pennsylvania Hospital (1752) introduced the novel concept of using such an institution for curing the sick. They also conceived of a more formal apprenticeship for the student in which he spent a year in the hospital working under several doctors, instead of just one. These apprentices were called pupils, and were expected to serve under a practicing physician after completion of their training. It is not unlikely that these students paid for the privilege of serving a year in the hospital. They certainly paid each lecturer (in the College of Philadelphia, later known as the University of Pennsylvania) for the privilege of listening to his discourse, and they paid another fee to each professor whose examination they passed successfully.

During the two hundred years that hospital training has been in vogue it has altered considerably, becoming more complicated, more formal, and more prolonged, particularly since the advanced period of residency training was brought to this country from Vienna by the Johns Hopkins Hospital. Not only is hospital training longer, but the time spent at medical school, which was originally but one year, reached four years at the turn of the century, and thanks to the Flexner Report, four years of college became more or less mandatory between secondary school and medical school—an idea which was undreamed of a century ago.

*

In this country and in England the main source of medical school applicants was for generations the professional and other well-to-do families, who could well afford the expense of the long program of education and training which preceded the time of earning a livelihood. According to the Bane report (1959), this trend is probably still persisting to some extent, as 40 per cent of medical school students come from the top 8 per cent of the population financially, and only 20 per cent come from the lower half.

How much this trend is influenced by the economics of medical education is hard to say. The average doctor is from 28 to 32 years of age before he begins to earn his living. Very few parents can afford to support their children so long, let alone pay the high tuition rates of the private colleges and medical schools. Students with medical ambitions but little or no income have recourse to three methods of gaining support: to earn money in their spare time, to obtain a scholarship (funds for which are very meager at most medical schools), or to borrow money. The problem of the married student is even more grave, unless his wife has a lucrative job or can otherwise support him in style. Over one half of senior medical students are married, as are most house officers. This is biologically far sounder than the enforced celibacy of the past generations of house officers, but it costs money.

According to the Bane report, 11 per cent of single senior medical students and 21 per cent of married ones already had debts in excess of $5,000. It should not be necessary for a student to have to go through a period of privation and debt in order to obtain medical education or good hospital training. In a democracy these opportunities should be available to talented and willing students regardless of their economic background. Such opportunities are available in Russia, and they are, through grants, in England. The pool from which able doctors may be drawn is much larger, comparatively, in those countries than here because of the financial barriers placed in the way of American medical aspirants.

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THE NEWS

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Dr. Lindsay Appointed Administrator of MGH Research Program

Dale R. Lindsay, former Chief of the Division of Research Grants at the National Institutes of Health, joined the MGH Staff on August 1 as Deputy to the General Director for Research Administration. This is a new, full-time position which combines a number of functions that previously had been distributed as part-time activities among several administrative officers and scientific members of the Staff.

One of Dr. Lindsay's duties, for example, will be to serve as Executive Secretary to the Committee on Research, a post recently relinquished by Dr. Adelbert Ames, III, Associate Biochemist in Neurosurgery.

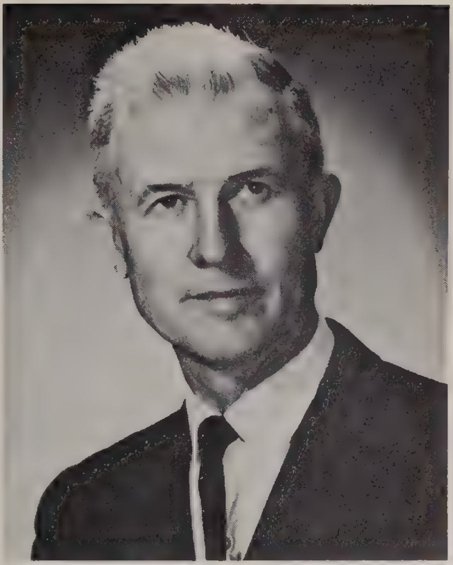
The research program that Dr. Lindsay will administer has expanded rapidly since 1935, when the yearly cost was only about $50,000. The separately budgeted research program at MGH now amounts to more than $7,000,000 annually, about one half of which comes from the National Institutes of Health. The research budget at MGH is nearly one-fourth of the total budget.

Statement of Policy

The following policy with respect to the research program is now guiding the Administration:

"The General Director and the Board of Trustees have recognized an obligation to provide an administrative setting which will help ensure proper relationships within the hospital complex of responsibility for patient care, for optimum advancement of medical science, for scientific freedom for the investigators, and for probity and prudence in the expenditures of funds provided from both private and public sources. The primary objective is not necessarily to enter into more research endeavors, but to assure the maximum productivity of investigators within the limited space and facilities which the Hospital can utilize for this purpose.

"The new position of Deputy to the General Director for Research Administration will provide additional management resources to the MGH research staff. The incumbent will be responsible directly to the General Director for certifying that good research grant and contract management procedures are utilized throughout the Hospital; that all requirements of sponsoring organizations and agencies are met; that the scientific freedom of investigators is maintained within the overriding responsibilities of the medical care program; and that constant surveillance of research objectives is maintained in order to permit the General Director, with the advice of the Committee on Research, to periodically refocus the entire institutional research program."



Dr. Dale R. Lindsay

Dr. Lindsay enjoys describing how he entered the hospital field through the pursuit of entomology. At the University of Kansas he had actually completed a major in economics in preparation for a legal career, before heeding the call of biology. He then changed his major to entomology and went on to earn the A.B. and M.A. degrees. He worked at Iowa State University for the Ph.D. degree. He became a teacher and a research worker in crop entomology, operating under a grant from the Department of Agriculture.

During World War II he entered the Public Health Service Commissioned Corps and developed interests in medical entomology and epidemiology. From 1945 through 1953 he was engaged in studies of arthropod vectoring of certain pathogens, particularly of the role of flies in the dissemination of diarrheal diseases. He was working at field stations in the lower Rio Grande Valley of Texas, among Indian pueblos in New Mexico, and in several communities in southwest Georgia.

Joins NIH

In 1953 he joined the staff of the Division of Research Grants at the National Institutes of Health. He served successively as Scientific Director, Assistant Chief, and Chief of the Division. Finally, after more than 20 years as a Regular Corps Officer, USPHS, he retired from the Service on July 31, 1963. He now resides with his family in Sherborn, Mass.

Dr. John H. Knowles, General Director, states: "Dr. Lindsay's unique combination of experience in both biological science and research administration should certainly prove useful as he takes up the role of MGH research administrator."

MGH and Harvard to Cooperate in New Clinical Curriculum

For some time a study of a new curriculum has been under way at the Harvard Medical School. Last spring the general outline of the curriculum was agreed upon and the affiliated teaching hospitals were asked to make plans to implement it.

The new curriculum is set up to cure a number of the ills of the former one. It begins with a three month period in the third year called Introduction to the Clinic, which will serve to strengthen the student's understanding of history taking and physical examinations, prior to actual work on the wards. During this period the students will also be exposed to a multidisciplined study of the clinical aspects of the pathophysiology of disease.

Then follows a twelve month period known as the Principal Clinical Year. During this time the student body will be divided into four sections. Each will spend twelve weeks in Medicine, twelve weeks in Surgery, and twelve weeks split among Obstetrics, Gynecology, and Pediatrics. In the final twelve week period, six weeks will be devoted to Psychiatry, two to Neurology, and one each to Dermatology, Ophthalmology, Otolaryngology, and Orthopedics. Certain courses such as Preventive and Legal Medicine will be covered by afternoon lectures.

The final period of five or six months in the curriculum will be devoted to tutorial and elective courses, selected by the student under the guidance of a tutor.

This program provides a stimulating change. The transition from preclinical to clinical subjects will be much better. The year of clinical work will be less fragmented than the present third and fourth years. There will be less travel involved and a better allotment of time to the basic disciplines rather than the specialties. The tutorial and elective period is a highly desirable feature, which the students should find attractive and challenging. The general trend is towards more of a graduate program of study providing closer student-faculty relationships.

The actual implementation will depend largely upon the staffs of the individual hospitals. They will have the opportunity for more interdisciplinary exercises, for more stimulating methods of introducing various subjects, and, hopefully, for the designing of programs which will inspire the students to pursue their studies with more enthusiasm.

As in all new curriculums, there will be some degree of trial and error before a final, workable form can be achieved. Nevertheless, the chances are very good that much can be accomplished at MGH to implement the new plan, which will be stimulating to the Faculty as well as to the students.

Hartford Foundation Aids Two Units:

Cardiorenal

The John A. Hartford Foundation, of New York City, has awarded a grant of $241,442 to the Cardiorenal Unit for a three year study of the mechanisms of fluid and electrolyte transport by living cells and tissues. This project will be under the direction of Dr. Alexander Leaf, Chief of the Unit. The Foundation has given previous support to this project.

The announcement of the award was made recently by Mr. Ralph W. Burger, President of the Hartford Foundation. With regard to the significance of this project, Dr. John H. Knowles, General Director, commented in a release to the press:

"Each of the several billions of cells in the human body is enclosed within its individual cell membrane. This membrane is approximately 4 billionths of an inch thick, and yet it serves to retain within the cells those substances which are necessary for normal cellular function and to exclude those substances which would be potentially harmful to the cell. Furthermore, the composition of the cell is very different from that of the surrounding fluid in which it lives. This means that the cell membranes are continually controlling the traffic of molecules which enter and leave the cell so as to preserve the normal composition of the cell. We know that certain hormones regulate the rate at which specific substances can cross cell membranes.

"In health all these complicated processes proceed with miraculous precision. In certain disease states, however, disturbances in transfer of substances across cell membranes may occur which may seriously jeopardize the life of the cell and of the whole patient.

"Dr. Leaf and his associates have been studying the mechanisms by which substances cross cell membranes and how hormones affect this transport. Their findings have special pertinence to certain diseases of the kidneys and of the heart. From a better understanding of these basic cellular processes, we can expect a more rational and effective treatment for these conditions."

* * *

Dr. Kurt J. Isselbacher, Chief of the Gastrointestinal Unit, has been selected the Roger Morris Lecturer and appointed to serve as Visiting Professor of Medicine at the University of Cincinnati School of Medicine in November 1963.

Can you identify a STAT call over the MGH loudspeaker system? Do you know how to respond to it? If you don't, then call Miss Evelyn Dunn, Communications Coordinator, or check with your supervisor or the Chief Resident of a service.

Gastrointestinal

The Gastrointestinal Unit, under the direction of Dr. Kurt J. Isselbacher, Chief, is the recipient of a grant of $123,297 from the John A. Hartford Foundation of New York City. This grant will support a comprehensive investigation of the biochemical, metabolic, and immunologic derangements which occur in the liver and in the body as a whole following injury to the liver, such as that produced by the hepatitis virus, by drugs, and by other toxic substances.

In general, the research to be undertaken under the support of the Hartford Grant may be considered under five broad categories.

- (1) The role of immunologic (antigen antibody) reactions in the causation of chronic liver disease will be studied. Experiments of an immunologic nature are planned to determine what role allergic processes have in converting an acute hepatitis episode into one of a subacute chronic nature.

- (2) The effects of hormones in the causation and evolution of liver disease will be studied. A considerable body of information has been obtained in laboratory animals that sex hormones influence the severity of processes such as the development of fatty liver and of hepatitis. Clinically, it is evident that women, especially young women, frequently have more severe forms of chronic liver disease.

- (3) The investigation begun by the Gastrointestinal Unit of the effects of alcohol on the liver will be continued. It would appear that in the chronic alcoholic subject seen in this hospital the cirrhosis is due, in all likelihood, to a combination of poor nutrition plus the direct toxic effects of alcohol on the liver.

- (4) Hormonal and other factors which may influence the process and rate of liver regeneration in the experimental animal will be investigated. With the increasing efforts, especially by the Surgical Service of this hospital, to resect portions of the liver for cancer, it is important to obtain more information about liver regeneration.

- (5) The final group of studies will be directed toward finding further clues to the causation of hepatic coma, one of the clinical end stages of liver disease. Although Dr. William V. McDermott and his associates have emphasized the importance of ammonia in the causation of hepatic coma, it is becoming evident that more than ammonia is involved.

It is hoped that the studies carried out by the Gastrointestinal Unit under the support of the Hartford Foundation will lead to a more rational approach to the treatment of liver disease in general.

Dr. Ropes Is First Woman Elected to Presidency of ARA

Dr. Marian W. Ropes of the MGH Arthritis Unit has become the first woman president of the American Rheumatism Association. At the annual meeting of the Association last June at Atlantic City, she accepted the gavel from the outgoing president, Dr. Ephraim P. Engleman, of San Francisco.

Three other staff members from MGH attended the meeting: Dr. Charles L. Short, Dr. John A. Mills, and Dr. George Fostiropoulos.

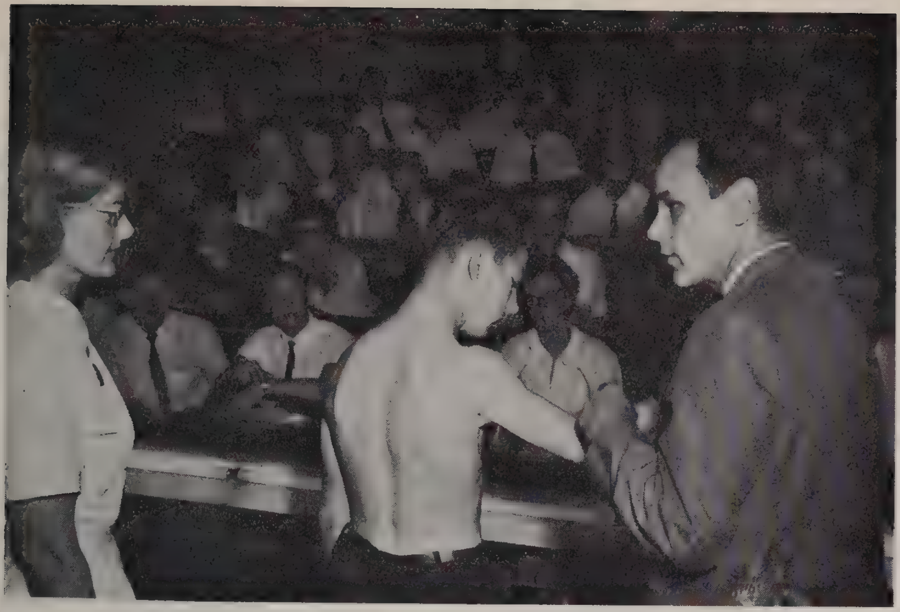
Dr. Ropes is a Physician on the Visiting Staff and Associate Clinical Professor of Medicine at the Harvard Medical School. Her earlier studies led to the concept that certain changes in joint fluid could be utilized to differentiate major groups of joint disease from joint trauma. Currently Dr. Ropes is reviewing the past 30 year experience at MGH with disseminated lupus, dermatomyositis, and other types of connective tissue disease. She is studying the therapeutic and toxic levels of aspirin and the form in which aspirin is carried in the blood. She is also investigating the effect of ascorbic acid on the level of Congo red retention in the blood of patients with rheumatoid arthritis.

In 1959 Dr. Ropes received an Elizabeth Blackwell Citation from the New York Infirmary for "outstanding contributions as clinician and investigator in internal medicine."

* * *

The book of MGH-Lowell Institute Lectures conceived and edited by Dr. Henry K. Beecher, and published in 1960 by the Harvard University Press under the title of *Disease and the Advancement of Basic Science,* has been selected for inclusion in The American University Presses' Project. This is a collection of scholarly books to be sent by the Agency for International Development, Department of State, to about 100 AID offices and national libraries in Asia, Africa, and Latin America. The thesis of this lecture series was that some types of conceptual science, i.e., science concerned with the discovery of new and basic concepts. can be initiated only at the bedside of the patient.

At the 88th Commencement Exercises of the MGH School of Nursing on September 13 at John Hancock Hall, 105 nurses joined the ranks of more than 5,000 alumnae. A reception was held afterwards on the Bulfinch lawn.



Swedish Medical Students Meet Everett Knowles

A group of medical students from the University of Gothenburg, Sweden, visited MGH on July 19 during their two week tour of American medical centers. In honor of our guests, the flag of Sweden was flying above the main entrance to the George R. White Memorial Building. The feature of the day was a clinical session in the Bigelow Amphitheater, during which Surgeon John M. Head presented patient Everett Knowles, Jr., whose severed right arm was successfully reattached at MGH on May 23, 1962. The nerves were rejoined on September 11, 1962.

Repeat Performance of History-Making Feat

Lightning sometimes does strike twice in the same place; and on September 6, 1963, Fate decreed that the MGH should perform the second reattachment in history of a traumatically severed human limb—after having performed the first such operation less than 16 months ago.

The victim was Mr. Lennart Turnquist, a 44 year old machinist of Reading, who is the father of seven children. His unconscious body was found beside a B&M railroad track in Wakefield, with the severed right arm lying nearby. At the Melrose-Wakefield Hospital, Dr. Harry Schwartz applied a pressure bandage to the stump, packed the limb in ice, and dispatched both to the MGH.

At the end of an 11 hour operation by a team of nine surgeons and five nurses, circulation had been restored in the reattached arm. Realignment of the bone was effected by the insertion of an intramedullary nail. During this procedure three main nerve trunks were rejoined. There was considerable loss of skin owing to the trauma of the accident. This was compensated for by the use of skin grafts and a flap of skin from the abdominal wall. Mr. Turnquist is making a very good recovery. The circulation in the arm is excellent; his hand is warm and of good color. He should continue to progress well.

Dr. Austen: Markle Scholar

Dr. W. Gerald Austen, Chief of the Surgical Cardiovascular Research Unit, MGH, and an Associate in Surgery, Harvard Medical School, is the recipient of a five year, $30,000 scholarship grant from the John and Mary R. Markle Foundation, of New York City. This foundation conducts a "Scholar in Academic Medicine Program" designed to support the development of young medical faculty members who plan careers in research and teaching. The grant is made formally to the medical school, and may be used in any way the school and its Markle Scholar select.

Dr. Austen plans to use part of his grant in studying cardiovascular techniques at medical centers in England, Switzerland, Italy, and Scandinavia. He has already contributed significantly to better understanding of the physiology of various cardiac lesions.

The Markle Scholars are selected annually through a complicated procedure. This year 59 medical schools in America and Canada nominated one candidate apiece, and then the candidates traveled to New York and underwent four days of intensive interviewing. As a rule, about one third of them pass this test successfully. Dr. Austen is the first surgeon ever to have been nominated by Harvard for this honor.

Dr. Kalckar Awarded Saunders Fellowship

Dr. Herman M. Kalckar, the Henry S. Wellcome Research Biochemist at MGH and Professor of Biological Chemistry at the Harvard Medical School, has been awarded a $15,000 writing fellowship by the W. B. Saunders Company of Philadelphia. A formal presentation of the award will be made at the November meeting of the American Philosophical Society. A Saunders writing fellowship has also been granted to Dr. Paul B. Beeson, Ensign Professor of Medicine at Yale.

Dr. Kalckar plans to write a series of articles (which may appear later in book form) on what he likes to call "ektobiology." This deals with the metabolic and molecular basis for the biosynthesis of complex polymers on the surface of the cell, within the cell membrane or wall.

These units manifest themselves as antigenically active substances (surface antigens), as blood groups, or as receptor sites for viruses. Manifestations of sex in microorganisms (including bacteria) or of histocompatibility in higher organisms are probably related to ektobiological units. Sequences of various sugars tied to protein or to lipids are the major constituents of "ektopolymers." The sequences of sugars form the molecular basis for the "language" of these specific ektopolymers; perhaps lipids and peptides will also prove to be endowed with ektobiological specificity.

One of the most important sugars of these ektopolymers is galactose, which is made from glucose by a specific enzyme, related to a racemase. Mutants lacking this metabolic enzyme may lose one or more of the ektobiological units, such as surface antigens or virus receptor sites. Dr. Kalckar has found that several types of tumors show a defect in the glucose galactose conversion. This defect is not directly hereditary but is an imposed feedback-inhibition attributed to the high aerobic glycolysis of these cells. He would like to encourage more study of the biosynthetic pathways in the belief that these substances are crucial in the normal and pathological development of organisms (differentiation, controlled and uncontrolled growth, and especially the selective advantages of malignant tumor cells).

Mr. John L. Dusseau, Vice President and Editor of the W. B. Saunders Company, publishers, comments as follows on Dr. Kalckar's earlier publications: "I have found them altogether fascinating and they suggest to me that the book you write will need by no means be a detailed research report, but rather may be a medium for the broad interpretation and analysis of many of the advances of modern medicine which rest on a new understanding of molecular activity. In fine, I look upon your projected book as illumination rather than recapitulation."

Miss Holbrook Retires After Two Decades As Editor-Archivist

For nearly two decades *The News* prospered under the firm guidance of a lady possessed of fine editorial skill and endowed with poetic sensitivity. The personality of this lady and the personality of her publication appeared to blend as one. To her intimate friends—poets, artists, teachers—she is known as "Cody"; the future historians of the Massachusetts General Hospital will speak in terms of greatest respect toward Miss Cora F. Holbrook, Editor-Archivist from June 1944 until her retirement in June 1963.

The News was started in 1942 by Miss Helen Boyer, the first Editor-Archivist, primarily as a medium of communication between the Hospital and the staff members and personnel who were serving overseas in the Armed Forces. So successfully was this function carried out, first by Miss Boyer and then by Miss Holbrook, that at the end of World War II, when the question of continuing *The News* was raised, this announcement appeared in the issue of December 1945:

"Yes, *The News* is going to continue. As one who is very well known by every MGH-er put it the other day, 'Why, I believe our Staff and alumni would rise in protest—almost to a man—if we should suggest such an idea as stopping *The News*.' "

In the 100th issue of *The News* (April 1951) Dr. James Howard Means (now Honorary Physician, MGH) stated: "On this occasion . . . all members of the hospital family can take great satisfaction that our hospital possesses such a worthy and excellent organ."

On September 26, 1963, one day before the current issue of *The News* went to press, two distinguished gentlemen paid separate visits to the News and Archives Unit. The first was Dr. Nathaniel W. Faxon, Director Emeritus, who praised Miss Holbrook's editorship in warm terms. The second was Dr. Means, whose remarks were equally flattering toward Miss Holbrook. Dr. Means said that when she began her duties as Editor-Archivist she was "like a breath of refreshing air" to MGH writers who needed her help.

Dr. Means also pointed out that although Miss Holbrook had never been a professional journalist, *The News* possessed under her editorship an air of quiet dignity.

Her successor is likewise not a professional newspaper worker. However, he is fortunate in having the support of something that Miss Holbrook never had—an Editorial Board. The members of this newly appointed Board hope the "new look" of *The News* will achieve no less dignity than it did under Miss Holbrook's devoted care. *G. H. J.*

The stone on the desk is dressed Chelmsford granite removed from a wall of the historic Bulfinch Building, the oldest structure at MGH. In a recent ceremony Surgeon M. A. Razek (center) of the new Maadi Military Hospital in Cairo, Egypt was presented the stone by Dr. John H. Knowles, General Director (right), and Dr. Paul S. Russell, Chief of the General Surgical Services. Dr. Razek has completed an MGH training course in cardiac surgery and will bring the stone to his hospital in Cairo.

Apologia

The News greatly regrets the omission of much material prepared for this issue, which was originally planned to be a 10 or 12 page issue. Budgetary limitations (and also the arrival of the deadline) made it mandatory to stop at Page 8. The cost of publishing *The News* far exceeds its income from subscription fees and contributions. However, staff authors of recent articles and books are urged to continue reporting them to the editorial office; these references are a measure of MGH achievement, and will be published in *The News.*

* * *

Dr. Werner Mueller, retired Director of the Mosher ENT Pathology Laboratory in the Massachusetts Eye and Ear Infirmary, made a recent pilgrimage with his wife Emma to his native land, Germany—after an absence of 50 years. He will soon present at the Infirmary a showing of the Agfachrome slides he took on his tour. Your Editor has viewed them all, and commends them highly.

The News requests staff members and personnel to submit photographs of their own taking which they think show merit and which relate in some way to MGH. It is planned to reproduce one such photograph in each issue. Mr. Stanley Bennett, head of the Photo Lab, will serve as consultant in the judging of these pictures.

Dr. Soutter . . .

(*Continued from Page* 2)

the Surgical Staff and Director of the Blood Bank. Subsequently he became Visiting Surgeon at the Massachusetts Memorial Hospitals, Professor of Surgery and Dean of the Boston University School of Medicine, and Area Chief of Surgery for the Veterans Administration Area Medical Office. He retained his ties with MGH in the status of Clinical Associate in Surgery.

A grant from the Rockefeller Foundation in 1955 enabled Dr. Soutter, as member of an interdisciplinary committee at Boston University, to study and inaugurate a new six year program of undergraduate medicine and liberal arts, designed to broaden the student's education.

A delegation of MGH surgeons attended the 20th Congress of the International Society of Surgery held recently in Rome. Dr. Claude E. Welch is treasurer of the North American Section.

House Officers . . .

(*Continued form Page* 2)

The house officer, if he does not receive enough support from his salary to permit an adequate existence for himself or his family, has three recourses. First, he can incur or enlarge a debt by borrowing, which is something that he may be very loath to do. Second, he can find jobs in his off-time hours, which is referred to as "moonlighting." This can be illegal if he is practicing medicine without a regular license. It is physically exhausting if he already has a full schedule, and it can make him too tired to do his regular work well or to study. Third, he can, and often does, apply for training at a hospital which does not have a strong program but pays well; or else he limits his period of training to a bare minimum, which severely curtails his choice of a medical career. All of these alternatives are bad for him, bad for his family relationships, and particularly bad for medicine. Prolonged training with little or no pay is one of the deterrents to young men and women who consider a career in medicine.

*

If we agree that house officers should receive adequate support, how do we define what is adequate? This is quite difficult and has been interpreted in a variety of ways. One practical approach to the problem has been that of the State of New York in considering house officers' salaries in Brooklyn. There the cost of an average apartment for three in East Flatbush for one year was ascertained. This figure was multiplied by four, in planning an intern's salary, on the grounds that only one fourth of a person's income should be spent on rent. The resulting figure was a little over $4,000. Increases in pay for each year of training are included. Certainly the planning of house officers' salaries should provide for all basic needs, insurance, coverage for illness, vacations, and other accepted necessities of life.

The sources of funds to provide adequate salaries are varied. The most common, of course, is that of hospital funds. As most hospitals have little or no endowment, this means that the cost is borne by the patient. The problem which concerns trustees is: just how much do patients benefit from the attentions of house officers, and how much therefore of their bill should cover the item of residents' salaries. This riddle has no easy answer.

At some hospitals, residents are paid for teaching, either of medical students or of nurses and technicians. This is a helpful contribution toward their support, and encourages them to devote attention to teaching. Federal grants are available in certain "scarce" specialties to encourage house officers to enter those fields. Psychiatric and radiologic residents may obtain them. This program is not apt to be extended beyond the scarce categories because most legislators fail to recognize the financial hardships of medical students and house officers, and think of doctors only as being affluent.

At some hospitals the staff has established a fund under its control into which various contributions are made and out of which money is paid to the house staff on the basis of seniority—and regardless of their service or help in earning the money. This is a difficult matter to work out, as some doctors object to it for financial or other reasons. It does, however, indicate recognition by the hospital staff to the fact that the residents are helping the doctors care for their patients, a service which they would have to pay for if there were no residents. It also can make available third party payments of fees by insurance companies and welfare agencies, which at present are not collected for ward cases. The mechanism of collection is a somewhat difficult problem, as a doctor in training may not receive such a fee and only a practicing physician who actually performs a service to a patient may collect it. As most of the fees are for surgical procedures, such a procedure might cut down to some extent the amount of operating done by the house staff.

All of these sources of additional revenue need to be studied in an effort to provide adequate financial support for house officers.

There are many other problems concerning residency training with which the medical profession should be concerned, such as the time involved, the opportunities for study, the amount of exposure to a variety of teachers, the quality of the training, and the need for formal teaching exercises. Stipends are but part of an over-all but continuing problem which warrants our serious attention.

L. S.

REFERENCE: F. Bane, *Physicians for a Growing America.* U. S. Public Health Service 524154, October 1959.

* * *

Dr. Thip Pholpoke of the Phramongkutklao Hospital in Bangkok, Thailand, paid us a social call recently. He was a graduate student assistant in surgery here in 1952.

The Harvard Medical Chorus welcomes to membership all MGH doctors and personnel. Weekly rehearsals are held on Tuesdays at 6 p.m. in the auditorium of the Boston Lying-in Hospital.

Dr. Paul C. Zamecnik, Director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital, was recently awarded the Lucy Wortham James Award of the James Ewing Society in New York for his contributions to basic research in the field of cancer.

The next issue of *The News* will contain obituaries of two members of the Honorary Staff, Dr. Donald S. King and Dr. George G. Smith.

McLean Center . . .

(*Continued from Page* 1)

tients living in the community it will provide psychiatric and other facilities which only a mental hospital can provide —and to the extent required by the patient's clinical condition. We believe that the Rehabilitation Center will bring the hospital closer to patients living in the community and the community closer to patients living in the hospital."

The Program

The program for the Clinical Symposium and Banquet is as follows:

Chairman: Francis de Marneffe, M.D., Director, McLean Hospital.

10:a.m. - 12:00. Participants:

Alfred H. Stanton, M.D., Psychiatrist in Chief, McLean Hospital: "The McLean Hospital Rehabilitation Center: Development of a New Clinical Program."

Samuel Silverman, M.D., Director of Clinical Psychiatry, McLean Hospital: "The Restitutional Process in Psychosis."

Rose Farkas, M.S.S., Director of Activity Therapies, McLean Hospital: "The Other Hours."

12:00 - 2:00 p.m. Luncheon. Tours of the Rehabilitation Center.

2:00 - 4:00 p.m. Participants:

Donald W. Winnicott, M.D., F.R.C.P., Physician, Paddington Green Children's Hospital, London, England: "Hospital Care Supplementing Intensive Psychotherapy in Adolescence."

Daniel A. Blain, M.D., Director of Commission for Psychiatric Services, Institute of the Pennsylvania Hospital, Philadelphia, Penn.: "Rehabilitation in the Context of Emerging Trends in Psychiatric Services."

4:15 - 5:45 p.m.

A discussion group meeting for patients and their families, on "The Significance of the Rehabilitation Center for the Hospital's Treatment Programs." Participants:

Samuel Silverman, M.D., Director of Clinical Psychiatry, McLean Hospital.

Stephen L. Washburn, M.D., Assistant Psychiatrist, and Psychiatrist in charge of the Day Care Center, McLean Hospital.

Rose Farkas, M.S.S., Director of Activity Therapies, McLean Hospital.

4:00 - 6:00 p.m. Rehabilitation Center open for inspection.

7:00 p.m. Dinner.

* * *

Another step in staff reorganization at the McLean Hospital was the recent appointment of Dr. Samuel Silverman as Director of Clinical Psychiatry. This position is a new one designed to enable the Psychiatrist in Chief, Dr. Alfred H. Stanton, to allot more of his time to the development of the research program at McLean. Dr. Silverman has also assumed responsibility for the residency training program in psychiatry.

Ether Day — 1846

Who were present at the first public demonstration of ether anesthesia on October 16, 1846, in the surgical amphitheater of this hospital? There will probably never be complete agreement among medical historians on the answer to this question.

One answer has been provided in a pamphlet entitled *Hinckley's Who Was Who on Ether Day.* It was written in 1962 by Dr. Henry R. Viets, Honorary Physician, MGH, and Curator of the Boston Medical Library. The above halftone illustration reproduces a color plate in this pamphlet, showing the famous oil painting of the event together with a line drawing of numbered heads that serves as a key to the identities of the men depicted.

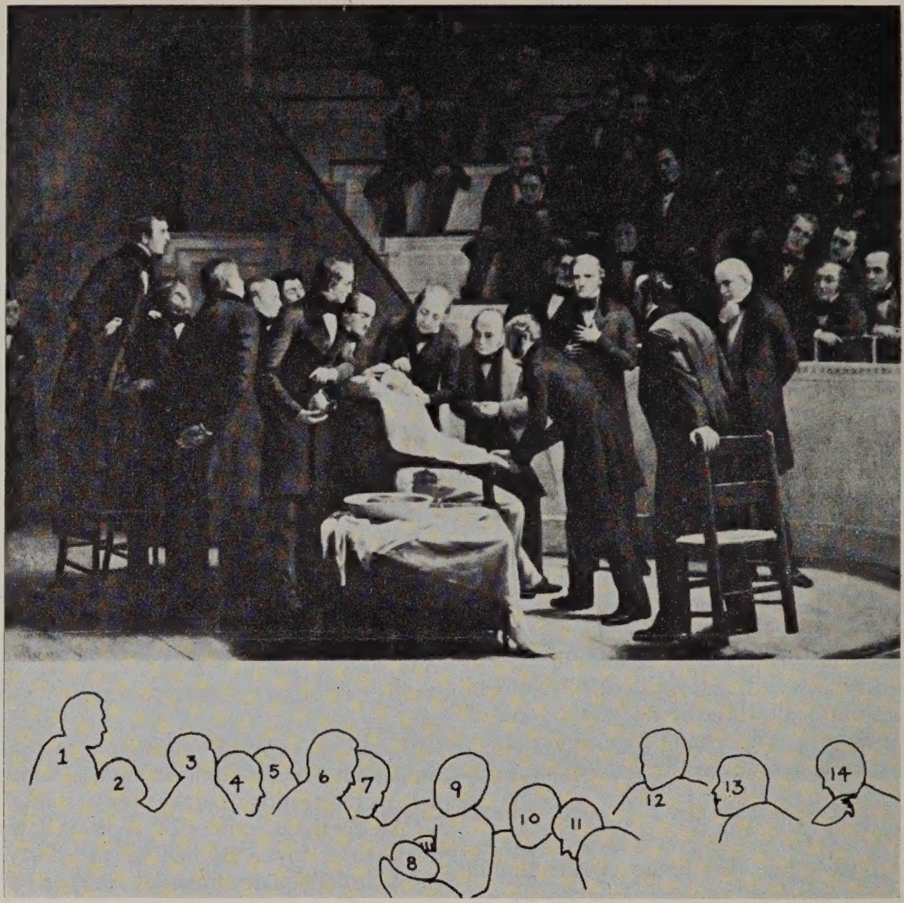
Robert Hinckley (1853-1941), originally a Bostonian, executed this painting in the 11 year period 1882-1893. It is now the property of the Boston Medical Library. It was loaned to MGH last August and will hang above the stage in Moseley Auditorium until the new Countway Library of Medicine (a joint venture of the Boston Medical Library and the Harvard Medical Library) is ready to receive it.

Like the ether episode itself, the Hinckley painting has been a subject of controversy. Some people are said to have been displeased at the attitude in which Dr. Bigelow was portrayed. Many people were shocked to find in the painting two surgeons (Mason Warren and Lawrence Peirson) who were positively known *not* to have been present at the historic operation. Dr. Viets took special note of this in his booklet.

Many people will naturally wonder why this painting was not purchased by MGH when Hinckley offered it for sale. One reason is that in the 19th century a charitable institution was supposed to refrain from buying "luxuries." The painting stood unwanted in Hinckley's studio for many years. In fact, Hinckley was about to cut it up to reuse the canvas when his friend, Dr. James Read Chadwick, then librarian of the Boston Medical Library, persuaded him to donate it to the Library (1903).

It is hoped that the healing powers of Time will eventually dispel the acrid vapors of controversy that still float over both the ether episode and the Hinckley painting. Artists and those who appreciate art recognize the principle of artistic license: the painter need not adhere to literal truth so long as he seeks to interpret the essential truth inherent in his subject. Mason Warren and Lawrence Peirson played essential roles in the early development of ether anesthesia. As Dr. Viets wrote: "We can forgive Hinckley's artistic license in view of his realistic and warm painting, so vividly portraying the memorable occasion."

G. H. J.



Key Prepared by Dr. Henry R. Viets

1. Newspaper "reporter."
2. John Call Dalton, medical student.
3. William W. Wellington, M.D.
4. A. Lawrence Peirson, M.D., Consulting Surgeon, MGH.
5. Charles H. Hildreth, student.
6. William T. G. Morton, anesthetist.
7. J. Mason Warren, M.D., Visiting Surgeon, MGH.
8. Gilbert Abbott, patient.
9. John C. Warren, M.D., Chief Surgeon, MGH, operating.
10. Eben H. Frost, merchant, who had tooth extraction under ether on Sep. 30, 1846.
11. Charles F. Heywood, M.D., House Surgeon, MGH, taking pulse.
12. Henry J. Bigelow, M.D., Visiting Surgeon, MGH.
13. Augustus Addison Gould, M.D.
14. Solomon Davis Townsend, M.D., Visiting Surgeon, MGH.

(By courtesy of Boston Medical Library)

Ether Day — 1963

This year the traditional observance of Ether Day at MGH will be held in the Moseley Auditorium on Wednesday, October 16, at 3 p.m. Mr. Elliot L. Richardson will bring the greetings of the Board of Trustees. Dr. John H. Knowles, General Director, will deliver an address entitled "MGH—Present and Future."

At the customary Service Pin Ceremony Mr. Henry J. Murphy, Associate Director, will present the Candidates to Dr. Knowles, who will award the pins. The first Service Pin Ceremony took place in 1945, and since then well over 2,000 pins have been awarded.

Dr. Madhukar A. Pathak, Assistant Biochemist in Dermatology, participated in the Second International Congress of Pharmacology held recently in Prague, Czechoslovakia. In the Symposium on Drugs and Enzymes, Dr. Pathak spoke on "Photosensitivity to Drugs."

The Vincent Memorial Hospital is now enjoying its coffee party season. In September the Board of Managers entertained the fifty doctors attending the Harvard postgraduate course in gynecology at MGH. On Thursday, November 12, the Board will hold its 16th annual birthday party in honor of the opening of the Vincent Building in 1947.

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